

1. TITLE: Amendments to the Larimer County Land Use Code regarding Oil and Gas Regulations
- REQUEST: To amend the Larimer County Land Use Code by:
1. Modifying the definition of Oil and Gas Drilling and production as found in Section 0.1.;
 2. Modifying Sections 4.1.1. through 4.1.23., and the Zoning Table in Section 4.0. by changing the procedure for Oil and Gas Drilling and production from (R) to (SR);
 3. Updating the use description of Oil and Gas Drilling and production in Section 4.3.; and
 4. Adding Section 17.0. Oil and Gas Facilities.
- APPLICANT: Community Development Department
- STAFF CONTACTS: Matt Lafferty, AICP, LGD (Local Government Designee)
- FILE #: File #20-CODE0245
- BCC HEARING: March 23, 2020
- NOTICE GIVEN: Newspaper publication 14 days prior to the hearing in two newspapers of general circulation
- PLANNING COMMISSION HEARING: February 19, 2020
- LCPC RECOMMENDATION: Approval with specific changes by a vote of 8 to 1.

BACKGROUND - PLANNING COMMISSION HEARING:

On February 19, 2020, the proposed Oil and Gas Regulations were presented to the Planning Commission. At the hearing, staff outlined the project and reviewed the highlights of the regulations being proposed. The video transcript of the Planning Commission hearing is located at <https://fortcollinstv.viebit.com/player.php?hash=YfKFU2ePZYRf>, and the unofficial written minutes are provided for reference in Attachment B.

Before opening the hearing for public comment, the Planning Commission queried staff for clarification of several aspects of the proposed regulations. During the public hearing portion of the hearing the Planning Commission received testimony from 30 attendees'. Topics discussed including, but not limited to impacts of oil and gas facilities on public health safety and welfare, wildlife and the environment, setbacks, air and water quality, transparency of process, notification, and the impact of such regulations on the industry.

Following the public testimony, the Planning Commission asked further clarifying questions of staff. In their deliberation of the regulations the Planning Commission chose to discuss and vote on specific amendments to the regulations, before making a recommendation on the regulations in their entirety. The following are the items discussed and the vote results of each discussion:

1. Commissioner Choate recommended that clarifying language be added to Section 17.3.C.1., to read as follows:

17.3.C.1. **An Air Quality Report and Plan** shall be submitted with all O&GF applications. The report/plan shall include baseline air quality data and demonstrate how the development and operation of the facility will avoid and/or mitigate adverse impacts to air quality and demonstrate compliance with an implementation of standards in Section 17.3.C and 8.11 of this Code.

After discussion with staff regarding the difficulty in attaining baseline air quality data at a certain location for a future point source, Commissioner Barnett seconded the motion and the Planning Commission voted 6 to 3 in favor of the motion.

2. Commissioner Wallace recommended that the notification area for O&GFs be ½ mile (2,640 feet) from the boundaries of the property for the application, which would result in the following additional language to the proposed regulations:

17.2.C. Notification: All O&GF applications shall have a minimum APO notification boundary of ½ mile (2,640 feet) for all referral, neighborhood meeting and public hearing notices, as outlined in Section 12.2.4. and Section 12.3. of this Code.

Commissioner Choate seconded the motion and the Planning Commission voted 8 to 1 in favor of the motion.

3. Commissioner True recommended that posting of the application site include signage along all road frontages that the property fronts upon.

The Planning Commission discussed the request and Commissioner Choate seconded the motion and the Planning Commission voted 7 to 2 in favor of the motion.

Review of the Code since the Planning Commission hearing reveals that posting of the application along all street frontages that the application property abuts is already required. Therefore, this motion did not require any modifications to the regulations as proposed.

4. Commissioner Johnson recommended that a condition of approval be added to the Planning Commission recommendation requiring that 60 days after the COGCC has completed its rulemaking, that the County staff perform a comparative review of the State rules and the County regulations to identify any discrepancies between the two that should be brought to the attention of the PC and BCC. Chairman Dougherty offered a friendly amendment, that was accepted, to extend the time from 60 days to 120 days. Commissioner Barnett seconded the motions and the Planning Commission voted 9 to 0 in favor of the motion.
5. Commissioner Johnson recommended that a condition of approval be added to the Planning Commission recommendation that 2 years after the approval of the O&GF regulations that the staff evaluate the opportunity for an administrative review process and report the findings at a joint work session of the Planning Commission and Board of County Commissioners. Commissioner Jensen seconded the motion and the Planning Commission voted 9 to 0 in favor of the motion
6. Commissioner Johnson recommended that clarifying language, as suggested in the public comments by the King Operating Corporation, be added to Section 17.3.L.6. to read as follows:

17.3.L.6. The requirements of this Section 17.3.L shall not prevent discharges ~~and~~ or beneficial uses of water reviewed and permitted by the CDHE Water Control Division ~~and the Environmental Protection Agency (EPA)~~ or another agency with jurisdiction.

Commissioner Miller seconded the motion and the Planning Commission voted 9 to 0 in favor of the motion.

7. Commissioner Wallace recommended that the proposed regulations should have a specific setback for the siting of O&GFs.

The Planning Commission had a lot of discussion about different types and widths of setbacks that could be considered, but ultimately decided to only add setbacks relating to “building units” as follows:

17.3.B. **Setbacks:**

1. Setbacks for O&GFs shall be 1,000 feet from building units, including high occupancy building units, or as required by the rules of the COGCC, whichever are greater. All other setbacks from natural and manmade feature as required by the rules of the COGCC shall apply. Setbacks for O&GFs shall conform to Section 604. SETBACK AND MITIGATION MEASURES FOR OOI AND GAS FACILITIES, DRILLING, AND WELL SERVICING OPERATION of the 600 Series Safety Regulations of the COGCC Rules and Regulations.
2. To achieve the objectives of Section 17.1.C., the Board of County Commissioners may, on a case by case basis, require setbacks greater than required by 17.3.B.1. above by the COGCC.
3. The Board of County Commissioners may, by request ~~appeal~~, allow a reduction of the ~~COGCC~~ setbacks required by 17.3.B.1. above when it has been determined that the applicant has adequately demonstrated that the setbacks prohibit access to the mineral interests being sought, and/or the reduced setbacks will achieve and mitigate to the extent necessary the objectives of this code or the expectations of the Board of County Commissioners.

Following a second to the motion by Commissioner True, the Planning Commission had extensive dialogue on the issue. Ultimately the Planning Commission voted 5-4 in favor of the motion.

Commissioner Barnett recommended that the staff consult further with the Flood Plain staff to determine if Section 17.3.F.4. sufficiently represents the Flood Plain regulations.

The Planning Commission discussed the request and a second was made by Commissioner True, the Planning Commission voted 7 to 2 to not support the motion.

Following discussions on numerous amendments, the Planning Commission made a final motion to recommend approval of the Oil and Gas Regulations as proposed by staff with the amendments as discussed by the Planning Commission. The recommendation passed by a vote of 8 to 1.

Since the Planning Commission meeting, staff has made two additional changes to the proposed regulations.

The first change is at 17.1.C.2. where the language seemed a bit harsh and thus has been modified to read as follows:

2. Provide for the managed development, installation, modification, reclamation and removal of O&Gs, while acknowledging the interests of ~~without unreasonably discriminating against~~ oil and gas developers and operators, or mineral interest owners.

The other change was made at 17.3.G.2., which language was a bit ambiguous and has been made more specific and reads as follows:

2. An Emergency Response Plan shall be provided that includes evacuation plan and routes, inventory of emergency response supplies, and notification requirements. The plan shall include what training opportunities that will be provided ~~As part of this plan it is recommended that an annual open house training be conducted~~ for emergency services personnel to become familiar with the site.

BACKGROUND – PRIOR TO PLANNING COMMISSION HEARING:

In late 2018, oil production figures published by the Colorado Oil and Gas Conservation Commission (COGCC) showed Larimer County to be the 2nd highest oil producing county in the state, up from 10th in just three years. This spike in production rates, along with Proposition 112 (ballot initiative to increase statewide setbacks for the siting of new oil and gas operations) evoked discussions between the Board of County Commissioners (BOCC) and the Community Development Department as to whether or not the County should develop land use regulations focusing on oil and gas development. Acknowledging that the County has no regulations and defers decision making on such uses entirely to the state, the BOCC agreed that the County should develop local regulations.

In March of 2019, the Board of County Commissioners agreed on a charter for the Oil and Gas Regulations Task Force (Task Force) to advise staff in the development of such regulations and began advertising for the Task Force.

While the County was working on assembling the Task Force, the Governor on April 16, 2019 signed into law Senate Bill 19-181. This new law would require the Colorado Oil and Gas Conservation Commission (COGCC) to change its mission from:

Foster responsible, balanced development, production and utilization of the natural resources of oil and gas in the state of Colorado in a manner consistent with protection of public health, safety, and welfare, including protection of the environment and wildlife resources.

to

Regulate the development and production of the natural resources of oil and gas in the state of Colorado in a manner that protects public health, safety, and welfare, including the protection of the environment and wildlife resources.

As the result of this change the COGCC, the Air Quality Control Commission (AQCC) and the Water Quality Control Commission (WQCC) have been, and continue to be, engaged in new rulemaking for oil and gas operations. It is expected that the rulemakings will be completed later this year.

Another significant change within SB 19-181 was the removal of existing land use preemption. The land use preemption prior to SB 19-181 established the rules of the COGCC as the maximum standards required for oil and gas operations, and local governments could not regulate beyond these rules of the state. However, with the land use preemption eliminated local governments are now allowed to regulate above and beyond the state requirements when evaluating the siting and surface impacts of oil and gas operations.

In May 2019, the BCC completed assembly of the 15-member Oil and Gas Regulations Task Force. This Task Force was formed to review and provide input on draft oil and gas regulations developed by county staff and provide a recommendation on the final set of oil and gas regulations. To support the Task Force effort and maintain transparency in the process, a project web site was created so staff could share subject matter information with the Task Force. The project website also served as a portal for the public to review and make comments on the same information that the Task Force received. The webpage is located at: www.larimer.org/planning/oil-and-gas-regulations.

Starting on June 20, 2019 and ending on October 30, 2019, the Task Force held five meetings which generally covered the following:

1. Introduction, purpose and charter, and topics for regulations (June 20, 2019)
2. Introductory presentations and initial list of regulatory topics, (July 18, 2019)
3. Specific standards to include and purpose statement (August 15, 2019)
4. Refined standards and procedures (September 25, 2019)
5. Recommendations for standards and procedures (October 30, 2019)

On October 30, 2019, staff presented the Task Force with a rough draft of proposed regulations. The Task force discussed the proposed regulations and the general understanding leaving the meeting was that the regulations were on the right track and any further refinement should maintain the balanced approach that was already being taken.

Following the last meeting of the Task Force, the Community Development Department posted the draft regulations on the project webpage for public review and comment. The comment period was open through the month of November and included an open house/office hours

session on November 21. The comment period resulted in approximately 100 public comments and 13 formal responses to the draft regulations.

During December 2019, staff refined the draft regulations based upon new information, comments from the Task Force, and comments from the public comment. The resulting draft was posted for public review and comment on January 6, 2020 and was presented at the joint work session of the Planning Commission and Board of County Commissioners on January 8, 2020, along with all the public comments received during the project.

Since the January 8, 2020 work session, staff has made a variety of changes in response to the comments received at the work session. Additionally, on January 23, 2020, the Task Force met one last time share their perspective on the progress made since October 2019. At this meeting the Task Force was asked to indicate whether they believed the regulations in Section to be ready, mostly ready, or not ready for hearings. From the comments at the meeting it was determined that minor modifications throughout the regulations were needed, but the majority believed the regulations to be mostly ready for consideration of adoption.

OVERVIEW OF PROPOSED REGULATIONS AND PUBLIC INPUT RELATED SECTIONS:

The proposed regulations for oil and gas facilities, as amended by the Planning Commission and includes tracked changes, are in **Attachment A** to this report.

In overview, Section 17.0 contains the following eight subsections:

- 17.1. – Intent and Purpose
- 17.2. – Review Procedures and Required Permits
- 17.3. – Standards Required for Oil and Gas Facilities
- 17.4. – Appeals
- 17.5. – Enforcement and Inspections
- 17.6. – Fees and Security for Reclamation
- 17.7. – Termination or Modifications of Use
- 17.8. – Definitions

Subsection 17.1. – Intent and Purpose establishes the basis for having oil and gas facility regulations and sets expectations for the review and consideration of applications for new oil and gas facilities. Some of the language in this subsection stems from Senate Bill 19-181, which bill defines the mission of the COGCC and how their regulations should be administered.

Commentary received regarding this subsection of the regulations indicates a strong preference to model the language in alignment with SB19-181 by regulating to the maximum extent possible new oil and gas facilities. The proponents of such provisions suggest that mitigation of impacts should be a last alternative and that avoidance of impacts should be the primary basis of the regulations. The general opinion of the Task Force was to develop regulations that would allow industry to provide reports and plans that demonstrate how they would comply with the standards of the County or provide acceptable alternatives that mitigate impacts through best available technologies.

Subsection 17.2. – Review Procedures and Required Permits sets the framework for how new oil and gas facilities will be reviewed and permitted by the county utilizing a transparent public

hearing process for the review and consideration of new oil and gas facilities. Additionally, this subsection documents that it is the responsibility of the property owner/applicant to secure all other permits outside of the County's purview.

Comments raised regarding this subsection suggest that the county will not be implementing a transparent public process for new oil and gas facilities. This comment has repeatedly been made throughout the project as the procedure is not in this subsection because Section 4.5 – Special Review is referenced in the regulations, and that Section of the Code addresses the review procedure. **The Planning Commission concurred that the Special Review process was the appropriate public hearing process for O&G applications.**

Additionally, notification has been a topic raised throughout the project. Notice is addressed through Section 4.5 and Section 22 of the Land Use Code and will be consistent with state statutory requirements. Statutory notification requirements involve posting of the application in a newspaper of general circulation. The County Land Use Code requires that notice be mailed to neighboring property owners within 500 feet of the development boundaries and via a sign posted at the site. Mailed notice is provided during the sketch plan process, as part of a neighborhood meeting, upon receipt of the Special Review application and prior to the two-public hearings for the Special Review. **The Planning Commission did recommend changes to Section 17 to require a ½ mile (2,640 feet) mailed notice requirement for O&G applications.**

A tiered approach involving an administrative process versus a public hearing process for some new oil and gas facilities was discussed throughout the project. However, determining an acceptable threshold for these processes was more difficult than thought. Some options discussed to create an administrative review process included size of the well pad, number of wells being drilled and setbacks of the well pad from other uses. Having not settled on an approach and given the limited number of applications anticipated to be submitted annually, staff proposes that, for now, all applications for new oil and gas facilities go through the Special Review public hearing process. **The Planning Commission concurred with the recommendation to not create a tiered process at this time. However, they did add a condition of approval that two years after the effective date of these proposed regulations staff would evaluate the opportunity for a tiered process with an administrative review level.**

Additional criteria for approving a Special Review application for oil and gas facilities was discussed at the PC/BCC work session. Staff has looked at the existing criteria of Section 4.5 – Special Reviews and believes that the criteria ensures that all requirements of the Code must be adhered to or determined to be unnecessary by the BCC if approval is to be granted. Based upon the adequacy of the existing review criteria for a Special Review, no additional criteria are being proposed at this time. **The Planning Commission did not indicate the need for additional review criteria for O&G applications.**

Subsection 17.3. - Standards Required for Oil and Gas Facilities is the heart of the oil and gas regulations, as it sets forth the standards and requirements to be addressed when developing a new oil and gas facility in Larimer County. The regulations proposed focus on site planning, nuisance impacts, and measures to be taken to avoid and/or minimize various impacts generated by oil and gas development activities.

One siting factor raised throughout the project was setbacks. Many participants in the project would like larger setbacks and separation of oil and gas facilities from other land uses (houses, schools and the like), as they believe setbacks to be critical to the protection of public health and safety, environment and wildlife. To this point, recent studies have suggested short term health

impacts associated with the location of oil and gas development. The studies are cautiously viewed by health officials as the study parameters are limited. Because of the uncertainty of what an acceptable setback should or shouldn't be, staff initially recommended that the setbacks of the COGCC be utilized by the county, with the understanding that if new information becomes available causing increased setbacks could be added to the Code. **The Planning Commission recommended that the County at a minimum establish a 1,000-foot setback from "building units". They agreed that all other setbacks from natural and manmade feature/uses would be based upon the COGCC rules.**

The Task Force and community discussed that air and water quality protection are the most pressing issues associated with oil and gas development. Presentations from the state and local health departments provided clarity to what is being done to mitigate such issues, as well as to provide direction on standards and practices that should be employed at oil and gas facilities. Solutions include technology/system improvements, electrification of equipment, leak detection and spill containment and repair, and monitoring and reporting. Many of the participants in the project state that the regulations have not gone far enough on these issues and are looking for 24/7 air quality monitoring, increased setback provisions, and complete bans if avoidance is not achieved. Other participants note that the use of best available technologies and newer standards being required by the state and employed by the industry are working.

Nuisance impacts, such as noise, odor, dust and light, were the focus of many comments received during the project. Many proponents note that these issues are best addressed through avoidance, generally through the application of setbacks. Others state that technology and operational practices can mitigate the nuisances. The proposed standards require report and plans to be submitted with the applications demonstrating the level of potential impacts and how such impacts will be mitigated to alleviate impacts to the surrounding community.

Subsection 17.4. – Appeals identifies where in the Land Use Code to find information on finding appeals either to standards and regulations or to the decisions of authorities in the process. Comments received on the appeals portion of the regulations focused on not allowing appeals to the standards being proposed. No other comments were raised regarding appeals.

Subsection 17.5. – Enforcement and Inspections provides remedies for dealing with operations that fail to follow the approvals granted. No comments were provided on this subsection of the regulations.

Subsection 17.6. – Fees and Security for Reclamation identifies any supplemental fees required by the county for impacts associated with oil and gas facilities.

Comments received on this subsection address the desire to require bonding or other appropriate mechanisms to ensure the successful operation of oil and gas facilities. Many proponents have indicated that the fiscal strength and abilities of some operators are inadequate to ensure protection of the public, environment and wildlife in event of failure or upset conditions. They further emphasize that it would be easier for operators to walk away from a site than correct issues. Staff proposes to handle this issue the financial securities required for the construction activities associated with new oil and gas facilities will be best addressed through development agreements required by the county prior to construction.

Subsection 17.7. – Termination or Modification of Use provides notification the no changes to an approved oil and gas application shall occur without securing further approvals by the county. Furthermore, because the life of a well site can extend for many years this subsection

provide notice that the approved reclamation plan for the approved use shall be implemented upon closure of the site.

Comments received on this emphasize that given the life of a well pad, the reclamation plan, approved with the initial application, may be outdated or inappropriate when the well site is reacclimated. However, most reclamation plans require a site to be returned to a native condition, which condition is usually the same as when approved. If conditions change, the plan can be updated to reflect current conditions.

Subsection 17.8. - Definitions indicates that for consistency in the use of terminologies that the county will use the definitions found in the COGCC rules and regulations. No comments were made on this subsection.

Staff proposes that the requirements outlined in Subsection 17.0. (Attachment A) and Section 8.0 of the Land Use Code along with the rules of the COGCC, CDPHE and other agencies will provide the necessary standards, requirements, reports and plans necessary to evaluate and inform staff, the public, the Planning Commission and ultimately the Board of County Commissioners about the pitfalls and merits of new oil and gas facilities in Larimer County.

REVIEW CRITERIA:

To approve a change in the land use code text, the Board of County Commissioners must consider the following review criteria and find that each criterion has been met or has been determined to be inapplicable:

A. The proposed change is consistent with the Master Plan (Comprehensive Plan) and the intent and purpose of this Code; and/or

Specific principle and policy provisions speaking to this issue are found in Chapter 3 of the Comprehensive Plan under the Infrastructure category as follows:

- 14. Energy Provision - Larimer County collaborates on oil and gas, renewable energy, and gravel extraction to reduce land use conflicts, protect environmental quality and public health, and maintain reliable conventional and renewable energy resources.*
 - 1.4.5. Implement mitigation measures to minimize conflicts with land uses and air and water quality associated with energy development and subsurface resource extraction.*
 - 1.4.6. Assure responsible access to all mineral rights, including sand and gravel resources, through mitigation measures that can enable mining and mineral extraction within different framework categories.*
 - 1.4.7. Acknowledge the impacts associated with development of mineral and sand and gravel resources and use fact-based data to inform decision making regarding continued development of these resources.*
 - 1.4.8. Collaborate with adjacent counties and state agencies to ensure proper protections and environmental standards are met for air, water, noise and reclamation.*

Adding land use regulations to the Larimer County Land Use Code for the review and approval of oil and gas facilities is a change that is consistent with principles and policies of the Comprehensive Plan (Master Plan) listed above. Furthermore, by virtue of SB 19-181 granting local government's authority to regulate surface impacts of oil and gas

operations beyond the scope of the COGCC rules gives credence to the policy directives above, which speak to the need for local regulation of such uses to mitigate and minimize conflicts.

B. The proposed change is necessary to correct an omission or error in the Code.

The proposed code changes will not correct omissions or errors in the Code, thus this criterion should be determined to be inapplicable to this request.

STAFF FINDINGS:

- A. The proposed text changes to the Larimer County Land Use Code pertaining to Oil and Gas Facility regulations are consistent with the Larimer County Comprehensive Plan.

PLANNING COMMISSION AND STAFF RECOMMENDATION:

Commissioner Johnson moved that the Planning Commission adopt the following Resolution:

BE IT RESOLVED that the Planning Commission recommends to the Board of County Commissioners approval of the amendments to the Land Use Code regarding oil and gas facilities, found in File #20-CODE0245 – Oil and Gas Regulations Code Amendments as recommended by staff with modifications to the proposed Section 17.0. Oil and Gas Facilities regulations as identified (in red) in Attachment A, and the following:

1. Modifying the definition of oil and gas drilling and production as found in Section 0.1. as follows:

Oil and gas ~~facility drilling and production~~. Any surface operation intended to discover, develop, recover, collect and/or process oil and/or gas, including any surface operation intended to dispose of production fluids and other wastes associated with the discovery, development, recovery, collection and/or processing of oil and gas.

2. Modifying Sections 4.1.1. through 4.1.23., and the Zoning Table in Section 4.0. by changing the naming and procedure for oil and gas drilling and production as follows:

Oil and gas ~~facility drilling and production (R)~~ (SR) – see section 4.3.7

3. Updating the use description of oil and gas drilling and production in Section 4.3.7.F as follows:

F. ~~Oil and gas facility drilling and production~~. Any surface operation intended to discover, develop, recover, collect and/or process oil and/or gas, ~~excluding refineries~~ including any surface operation intended to dispose of production fluids and other wastes associated with the discovery, development, recovery, collection and/or processing of oil and gas.

1. New oil and gas facilities shall comply with the requirements of Section 17.0 – Oil and Gas Facilities ~~An access permit must be obtained from the county engineering department prior to the commencement of any oil and gas drilling production operation.~~
4. Adding Section 17.0. Oil and Gas Facilities.

See Attachment A

Attachment A

Section 17 - Oil and Gas Facilities

Draft Regulations

As amended by
Planning Commission

Draft Date: February 19, 2020

17.0. – OIL AND GAS FACILITIES**17.1. – Intent and Purpose.**

- A. Intent.** The intent of this section of the Land Use Code is to establish a regulatory framework for new oil and gas facilities (O&GFs) to be located in the unincorporated areas of Larimer County in a manner that acknowledges private property rights and protects the public health, safety and general welfare, protects environment and wildlife, and minimizes adverse impacts.
- B. Authority:** C.R.S. 29-20-104-(1) provides the County authority to regulate and review applications pertaining to the surface development of O&GFs.
- C. Purpose:** These regulations are necessary to:
1. Ensure a comprehensive land use process and transparent public process for the development of new O&GFs, in the unincorporated areas of the County.
 2. Provide for the managed development, installation, maintenance, modification, reclamation and removal of O&GFs, while acknowledging the interests of ~~without unreasonably discriminating against~~ oil and gas developers and operators, or mineral interest owners.
 3. Minimize to the maximum extent possible the nuisance effects of O&GFs through the application of best available techniques and technologies.
 4. Promote and protect the public health, safety and welfare, and protect the environment and wildlife by minimizing the adverse impacts of O&GFs.
 5. Maximize protection of natural and cultural resources and public facilities.
 6. Encourage O&GF's to strategically locate where adverse impacts from such operations can be avoided.
 7. Minimize and mitigate the extent and severity of adverse impacts that cannot be avoided.
 8. Confirm the financial, indemnification and insurance capacities of the oil and gas developer/operator to ensure timely and effective construction, production, removal and reclamation of O&GFs and infrastructure.
- D. Applicability:** These regulations shall apply to all new O&GFs, to be constructed on any property in all zoning districts in the unincorporated portions of Larimer County.
- E. Severability:** If any section, clause, provision, or portion of these regulations should be found to be unconstitutional or otherwise invalid by a court of competent jurisdiction, the remainder of the regulations in this section shall not be affected thereby and is hereby declared to be necessary for the public health, safety and welfare.

17.2. – Review Procedures and Required Permits.

- A. General Requirements.** No person, firm or corporation shall establish, construct, or build a new O&GF, without first having obtained required land use approval(s) and permits as required by this Code. Applications to the County for new O&GFs, may be submitted simultaneously with the Colorado Oil and Gas Conservation Commission (COGCC) permitting process.
- B. County Review Process:** All new O&GFs, in the unincorporated portions of Larimer County shall require approval of a Special Review application for the proposed facility as set forth in Section 4.5 of this Code. Application and submittal requirements for O&GFs are specified in the following Community Development Department application handouts:
1. Sketch Plan Review Application and Submittal Requirements for Oil and Gas Facilities.
 2. Neighborhood Meeting Submittal Requirements and Guidelines for Oil and Gas Facilities.
 3. Special Review Application and Submittal Requirements for Oil and Gas Facilities.
- C. Notification:** All O&GF applications shall have a minimum APO notification boundary of ½ mile

(2,640 feet) for all neighbor referral, neighborhood meeting and public hearing notices, as outlined in Section 12.2.4. and Section 12.3. of this Code.

D. County Permits. Prior to the commencement of any construction activity for an O&GF, all required permits for such facilities shall be approved. Required permits include, but are not limited to:

1. Access permits,
2. Development construction permit,
3. Building permits for all qualifying buildings and structures,
4. Electrical permits, and
5. All federal, state and local permits.

E. Non-County Permits: County approval of an O&GF shall not relieve the landowner or applicant of the responsibility for securing other permits or approvals required by any other applicable County Departments, local fire district, municipalities, or other applicable public agencies.

F. Technical Expert Review: Applications for O&GFs may involve complex technical issues that require review and input that is beyond the expertise of County staff. If such a situation arises, the Community Development Director may commission a third-party review of the relevant subject matter and require the applicant to pay reasonable costs for the third-party review. Selection of a third-party expert(s) to review portions the proposal will be at the discretion of the County.

17.3. – Standards Required for Oil and Gas Facilities.

A. **General:**

1. In addition to the standards and requirements of this Section 17, all other relevant standards and regulations set forth in this Code shall also apply.
2. All applications for new O&GFs, shall meet all applicable federal, state and local standards and regulations pertaining to the development and operation of such facilities.

B. **Setbacks:**

1. Setbacks for O&GFs shall be 1,000 feet from building units, including high occupancy building units, or as required by the rules of the COGCC, whichever are greater. All other setbacks from natural and manmade feature as required by the rules of the COGCC shall apply. Setbacks for O&GFs shall conform to Section 604. SETBACK AND MITIGATION MEASURES FOR OIL AND GAS FACILITIES, DRILLING, AND WELL SERVICING OPERATION of the 600 Series Safety Regulations of the COGCC Rules and Regulations.
2. To achieve the objectives of Section 17.1.C., the Board of County Commissioners may, on a case by case basis, require setbacks greater than required by 17.3.B.1. above. by the COGCC.
3. The Board of County Commissioners may, by request appeal, allow a reduction of the COGCC_ setbacks required by 17.3.B.1. above when it has been determined that the applicant has adequately demonstrated that the setbacks prohibit access to the mineral interests being sought, and/or the reduced setbacks will achieve and mitigate to the extent necessary the objectives of this code or the expectations of the Board of County Commissioners.

C. **Air Quality:**

1. **An Air Quality Report and Plan** shall be submitted with all O&GF applications. The report/plan shall include baseline air quality data and demonstrate how the development and operation of the facility will avoid and/or mitigate adverse impacts to air quality and demonstrate compliance with and implementation of standards in Sections 17.3.C. and 8.11 of this Code.

2. In addition to all federal and state laws, rules and regulations, applications for O&GFs shall demonstrate how exploration, construction and standard operations of a O&GF will comply with the rules and regulations of the Colorado Air Quality Control Commission (AQCC). Information to be provided shall include all appropriate applications of notifications and permits for sources of emissions.
3. Reduced Emission (Green) Completions shall be used for all completions and well workovers. Such completions shall include the use of Best Management Practices including, when available, the following unless an equal or better system exists:
 - a. Closed loop, pitless drilling, completion systems, without permanent on-site storage tanks, for the containment and/or recycling of all drilling, completion and flowback fluids.
 - b. Flaring only allowed during emergencies or upset conditions. When allowed, routing and control of all emissions to a flare or combustor shall provide at least 98% destruction or removal efficiency.
 - c. Zero emission desiccant dehydrators.
 - d. Emission controls of 95% or better for glycol dehydrators.
 - e. Pressure-suitable separator and vapor recovery units.
 - f. No-bleed continuous and intermittent pneumatic devices.
 - g. Automated tank gauging.
4. O&GFs shall be equipped with electric-powered engines for motors, compressors, drilling and production equipment, and pumping systems unless no adequate electricity source is available, or it is technically infeasible.
5. O&GF applications shall include operational provisions to reduce emissions on Air Quality Action Advisory Days posted by the Colorado Department of Public Health and Environment (CDPHE) for the Front Range area. The provisions shall include how alerts are received, outline specific emission reduction measures, and include requirements for documenting the measures implemented. Measures should include:
 - a. Minimizing vehicle traffic and engine idling,
 - b. Reducing truck and worker traffic,
 - c. Delaying vehicle refueling,
 - d. Suspending or delaying use of fossil fuel powered equipment,
 - e. Postponing construction and maintenance activities,
 - f. Postponing well maintenance and liquid unloading that would result in emission releases to the atmosphere, and
 - g. Postponing or reducing operations with high potential to emit VOCs of NOx.

D. Leak Detection and Repair:

1. **A Leak Detections and Repair Plan** shall be submitted with all O&GF applications. The plan shall disclose techniques, methods and protocols that will be utilized at the proposed O&GF to identify, prevent, contain, document, repair and report leaks, and shall demonstrate how it will comply with and implement the standards in this Section 17.1.3.F.
2. Operators shall conduct leak detection and repair inspections at the frequency required by the APCD (Air Pollution Control Division) for the emission source using modern leak detection technologies (infrared cameras, etc.) and equipment. The results of said inspections, including all corrective actions taken, shall be reported to the Larimer County Department of Health and Environment (LCDHE) and County Local Government Designee (LGD) upon request.
3. Repair of verified leaks shall occur within 72 hours of detection. If it is anticipated that a repair

will take longer than 72 hours, the operator shall provide a written explanation to the LCDHE and the LGD as to why more time is required and how the leak will be contained. If a leak is not repaired within 72-hours, the O&GF shall be shut-in until the leak is repaired.

4. Equipment leaks that pose an imminent safety risk to persons, wildlife, or the environment shall undergo emergency shut down and not be allowed to operate until the operator has provided evidence that the leak has been repaired.
5. At least annually, operators shall provide a 2-week notice of a routine leak inspection to the LCDHE and LGD inviting them to attend and observe the inspection.

E. Odors:

1. **An Odor Mitigation Plan** shall be required for all O&GF applications indicating how the operations will prevent odors from adversely impacting the public and wildlife and further demonstrating compliance with the standards in this Section 17.1.3.H.
2. Oil and gas operations shall comply with the CDPHE, AQCC, Regulation No. 2 Odor Emission, 5 CCR 1001-4, Regulation No. 3, 5 CCR 1001-5, and Regulation No. 7, 5 CCR 1001-9 Sections VII and VIII.
3. Proposed O&GFs shall provide protocols for immediate response to odor complaints that include options for ceasing operations, notification of affected residents, and temporary relocation of residents until the source of the odor is identified and resolved.
4. The operator shall communicate the schedule/timing of well completion activities to adjacent and nearby residents which could include an online portal. As part of the application, provide information on how notifications will be communicated to the public.
5. The Odor Mitigation Plan shall include control strategies which shall be implemented upon receipt of an odor complaint(s) or as required by the County depending on the size, location and nature of the facility. These Odor control strategies may include the following:
 - a. Odorants, that are not a masking agent, shall be added to chillers and/or mud systems.
 - b. Additives to minimize odors from drilling and fracturing fluids except that operators shall not mask odors by using masking fragrances.
 - c. Filtration systems and/or additives to minimize, not mask, odors from drilling and fracturing fluids shall be utilized in the drilling and flowback processes.
 - d. Increasing additive concentration during peak hours provided additive does not create a separate odor. Additives must be used per the manufacturer's recommended level.
 - e. Enclosed shale shakers shall be utilized to contain fumes from exposed mud where safe and feasible.
 - f. Drilling activities shall utilize minimum low odor Category III drilling fluid or non-diesel-based drilling muds that do not contain benzene, toluene, ethylbenzene or xylene (BTEX).
 - g. Wipe down drill pipe as they exit the well bore each time.

F. Water Quality and Water Bodies:

1. **A Water Quality Report/Plan** shall be submitted with all O&GF applications. The report/plan shall demonstrate how the development and operations of the facility will avoid impacts to surface and ground waters in Larimer County, identify all private and community permitted water wells within half-mile and demonstrate compliance with and implementation of standards in Sections 17.3.D. and 8.12 of this Code.
2. Baseline and subsequent water source tests, as typically required by and submitted to the COGCC and CDPHE, shall be provided to the LCDHE and the LGD for the life of the facility and

any post-closure assessments, if approved by the owner(s) of the water well.

3. The application shall provide documentation indicating how the COGCC water quality protection standards are being implemented.
4. Locating O&GFs within a Federal Emergency Management Agency (FEMA) designated 100-year floodplain shall not be allowed unless no other location is feasible, and all other appropriate permissions are obtained.
5. The requirements of this Section 17.4.D shall not prevent discharges reviewed and permitted by the CDPHE Water Quality Control Division, the EPA, and the Army Corps of Engineers.

G. Spills and Releases:

1. **A Spill Prevention and Containment Plan** shall be submitted with all O&GF applications. The plan shall disclose techniques, methods, and protocols to be utilized at the proposed O&GF to prevent, contain, document and report any spills or releases, and shall demonstrate compliance with and implementation of the standards in this Section 17.3.G.
2. An Emergency Response Plan shall be provided that includes evacuation plans and routes, inventory of emergency response supplies, and notification requirements. ~~The plan shall include what training opportunities that will be provided. As part of this plan it is recommended that an annual open house training be conducted~~ for emergency services personnel to become familiar with the site.
3. Secondary containment shall be required which is capable of holding 125% of the total capacity of on-site containment vessels and storage tanks.
4. Unloading areas shall be designed to contain potential spills or direct spills into other secondary containment areas
5. Containment systems constructed of steel rimmed berms, or similar impervious surfaces that are equal to or better, shall be used for all secondary containment areas.
6. Any spill or release of unrefined and refined petroleum products, hazardous substances, fracking fluids, E&P waste, or produced fluids of greater than 25 gallons outside of secondary containment areas on an O&GF, including those thresholds reportable to the COGCC, shall upon discovery, be immediately reported to the National Response Center and CDPHE as well as the following Local Emergency Response Authorities in Larimer County:
 - a. Larimer County Sheriff – Public Safety Answering Point (PSAP) (9-1-1)
 - b. Larimer County Department of Health and Environment,
 - c. Local Fire Department/District,
 - d. Local Municipal Police Department if within in mile of a City or Town,
 - e. Larimer County Oil and Gas LGD, and
 - f. Larimer County Local Emergency Planning Committee (within 24-hours).
7. All spills or releases, whether reportable or not, shall be cleaned up immediately and to the satisfaction of the local emergency response authorities, listed in the Spill Prevention Control and Countermeasure Plan.

H. Noise:

1. **A Noise Report and Mitigation Plan** shall be required for all O&GF applications. The plan shall demonstrate how the operations will mitigate noise and vibration impacts to comply with the noise standards contained in this Section 17.3.G. The report and plan shall include the following:
 - a. A five-day (two days being the weekend day) baseline noise analysis.
 - b. Modeled decibel levels for all phases of development shall be presented using contour maps

from the O&GF site (combining noise sources) at 350 feet, 500 feet, 1000 feet, and to the property line of the adjacent properties. Contour maps shall be provided that demonstrate both unmitigated and mitigated decibel levels.

- c. A plan of proposed mitigation measures to be implemented by the O&GF during each phase of development shall be provided to ensure compliance with the maximum permissible noise levels as listed in Section H.2 below.
- 2. Noise generated from O&GFs shall comply with the following maximum permissible noise levels appropriate for the Zone Area Designation of the adjacent land uses as determined by the County. Zone Area Designations are defined by C.R.S. 25-12-102 Noise Abatement and will be used as part of the County’s determination for surrounding land uses and may be different than the County’s zone districts.

<u>ZONE AREA DESIGNATIONS</u>	<u>7:00 am to next 7:00 pm</u>	<u>7:00 pm to next 7:00 am</u>
Residential/Agricultural/Rural	55 db(A)	50 db(A)
Commercial	60 db(A)	55 db(A)
Light Industrial	70 db(A)	65 db(A)
Industrial	80 db(A)	75 db(A)

In the hours between 7:00 a.m. and the next 7:00 p.m., the noise levels permitted above may be increased by ten (10) db(A) for a single period of not to exceed fifteen minutes in any one-hour period. Night-time levels between 7:00 p.m. and the next 7:00 a.m. shall not be exceeded therefore requiring strategic planning of noise-inducing activities to be conducted during daytime hours at the site.

- 3. Sound levels shall be measured at or within 25 feet of the parcel boundary line where the O&GF site is located. When evaluating a noise complaint, the County shall measure sound at or within 25 of the parcel boundary line of the O&GF site and other property boundaries which are more representative of the noise impact.
- 4. O&GF activities shall be operated so the ground vibration inherently and recurrently generated is not perceptible, without instruments, at any point on a boundary line of the property on which the O&GF is located.
- 5. In situations where low frequency noise is a component of the problem, a sound level measurement shall be taken twenty-five (25) feet from the exterior wall of the residence or occupied structure nearest to the noise source, using a noise meter calibrated to the db(C) scale. If this reading exceeds 65 db(C), the County shall require the operator to obtain a low frequency noise impact analysis by a qualified sound engineer, including identification of any reasonable control measure available to mitigate such low frequency noise impact to be implemented by the O&GF. Such study shall be provided to the County for consideration and possible action.
- 6. Construction of O&GFs, including drilling/well completions, recompletions, and pipeline installations, shall be subject to the maximum permissible noise levels specified for industrial zones for the period within which construction is being conducted. Construction activities directly connected with abatement of an emergency are exempt from the maximum permissible noise levels.
- 7. Quiet design mufflers (i.e., hospital grade or dual dissipative) or equal to or better than noise mitigation technologies shall be utilized for non-electrically operated equipment.
- 8. Motors, Generators, and engines shall be enclosed in acoustically insulated housings or covers.

I. Dust:

1. **A Fugitive Dust Control Plan** shall be submitted with all O&GF applications. The plan shall disclose techniques and methods to be utilized at the proposed O&GF to prevent or mitigate fugitive dust generated by the construction and operations of the proposed O&GF and shall demonstrate compliance with and implementation of standards in Sections 17.3.I and 8.11 of this Code.
2. Best management practices (BMPs) for the mitigation of dust associated with on-site operations and traffic activities shall be employed at the facility. The BMPs shall be outlined in the Fugitive Dust Control Plan.
3. Produced water and other process fluids shall not be used for dust suppression unless adequately pretreated so that it does not create odors and has been approved for land application by CDPHE Water Quality Control Division.
4. Safety Data Sheets (SDSs) shall be provided with the application for any proposed chemical based dust suppressants.
5. Unless otherwise approved by the County Health and Engineering Departments, only water will be used for dust suppression activities within 300-feet of the ordinary high- water mark of any body of water.

J. Access:

1. **A Traffic Impact Analysis and Routing Plan** shall be submitted with all O&GF applications. The plan shall disclose routing alternatives and transportation infrastructure improvements proposed for the proposed O&GF to mitigate projected transportation impacts and demonstrate compliance with and implementation of the standards in this Section 17.3.E.
2. Designs for private access drives shall conform to the Local Low Volume cross section found in the Larimer County Rural Area Road Standards and shall include the following:
 - a. The first 50 feet of access drive from the edge of pavement of the adjacent road will be paved, or made of an approved all weather surface, and the remaining portions of the access drive shall be composed of a minimum of 6 inches of compacted Class 5 road base.
 - b. The access drive entrance shall include returns with a 30-foot radius.
 - c. A mud and debris tracking pad shall be located at the end of the paved portion of the access drive.

K. Chemical Handling:

1. **A Chemical and Hazardous Materials Report and Handling Plan** shall be submitted with all O&GF applications. The plan shall disclose the type of hazardous and non-hazardous materials and chemicals that will be used on the site of the proposed O&GF, including how they will be handled to prevent spills and demonstrate compliance with and implementation of standards in this Section 17.3.K.
2. Prior to any hydraulic fracturing activity, the Operator shall provide the County with a copy of the Chemical Disclosure Registry form provided to the COGCC pursuant to the COGCC's "Hydraulic Fracturing Chemical Disclosure".
3. Drilling and completion chemicals shall be removed from the site within sixty (60) days of the drilling completion.

L. Recycle, Reuse and Disposal of Fluids:

1. **A Waste Management and Disposal Plan** shall be submitted with all O&GF applications. The plan shall document the techniques and methods of the proposed O&GF to manage wastes generated on the site and demonstrate compliance with and implementation of the standards in this Section 17.3.L.

2. Drilling, completion flowback, and produced fluids shall be recycled or reused whenever technically feasible.
3. If not to be recycled or reused onsite, exploration and production waste may be temporarily stored in tanks for up to 30-days while awaiting transport to licensed disposal or recycling sites.
4. Produced water shall be recycled or reused or shall be transported by pipeline unless easements are not available.
5. The Operator shall take precautions to prevent adverse environmental impacts to air, water, soil, or biological resources to the extent necessary to protect public health, safety and welfare, including the environment and Wildlife Resources to prevent the unauthorized discharge or disposal of oil, gas, Exploration and Production Waste, chemical substances, trash, discarded equipment, or other oil field waste.
6. The requirements of this Section 17.3.L shall not prevent discharges ~~and or~~ beneficial uses of water reviewed and permitted by the CDPHE Water Quality Control Division ~~and the Environmental Protection Agency (EPA) or another agency with jurisdiction.~~

M. Lighting and Visual Impacts:

1. For all phases of the development of the site, the application shall demonstrate compliance with the visual and aesthetic rules of COGCC and the Larimer County Land Use Code for landscaping, fencing and lighting set forth in Section 8.
2. All O&GFs shall be painted with colors that are matched to or slightly darker than the surrounding landscape, and shall utilize paint with uniform, non-contrasting, nonreflective color tones based upon the Munsell Soil Color Coding System.
3. The location of all outdoor lighting shall be designed to minimize off-site light spillage and glare using best practices recognized by the International Dark-Sky Association. See Section 8.15, Lighting Standards.
4. For all phases of site development, fencing shall be installed for security and visual aesthetics of the use.
5. Sound or screening wall to mitigate for noise during construction and well completion may be required if the O&GF is within 2,000 feet of residential buildings or lots, or if electric requirement is appealed.
6. O&GFs applications shall minimize removal of trees and vegetation on the site.
7. Landscaping and/or fencing for screening and visual quality as viewed from public rights-of-way and neighboring residential areas shall be required within 6 months from the time of well completion and in accordance with requirements for the zoning district.
8. O&GF applications shall demonstrate compliance with weed control requirements of the County Weed District and Forestry Services Department, including for access roads serving the facility.

N. Well Plugging and Abandonment:

1. **A Reclamation Plan** shall be submitted. The plan shall demonstrate how well abandonment and reclamation shall comply with the COGCC rules and shall include the following information:
 - a. Removal of all equipment from the well site,
 - b. Restoration of the site surface to the conditions of the site reclamation plan,
 - c. Notice to the County LGD of the commencement and completion of such activity, and
 - d. Coordinates for the location of the decommissioned well(s), and any associated gathering or flow lines, shall be provided with the notice of the completion of well abandonment.

O. Well Liquids Unloading:

1. Best management practices, including artificial lift, automated plunger lifts and at least 98%

emission reductions when utilizing combustion to control venting shall be employed at all facilities unless technically infeasible.

2. Approved manual unloading shall require on-site supervision of the unloading process.

P. Flammable Materials:

1. The location of flammable materials on site shall conform to all COGCC safety standards and local fire codes.
2. A minimum 25-foot buffer, free of weeds and dried grasses, shall be required around flammable materials or equipment.

Q. Waste Disposal:

1. **A Waste Management and Disposal Plan** shall be submitted with all O&GF applications. The plan shall document the techniques and methods of the proposed O&GF to manage wastes generated on the site and demonstrate compliance with and implementation of the standards in this Section 17.3.Q.
2. Oil and gas facilities shall remain free of debris and excess materials during all phases of operation.
3. Burning of debris, trash or other flammable material is not allowed.
4. Temporary storage of materials (up to 30-days) may be allowed with installation of screening to mitigate from aesthetic impacts from public rights-of-way or if requested by landowner.

R. Removal of Equipment:

1. There shall be no permanent storage of equipment (i.e., vehicles, trailers, commercial products, chemicals, drums, totes, containers, materials, and all other supplies not necessary for uses on an oil and gas location) on the site of an oil and gas facility.
2. When not in use, or if no longer needed for on-site operations, all equipment not being used on the site shall be removed.

S. Maintenance of Machinery:

1. Statewide Best Management Practices shall be used to prevent contamination of soils and stormwater runoff, including equipment and vehicle maintenance and fluid containment.
2. There shall be no maintenance of field equipment involving hazardous materials within 300-feet of a water body.
3. Any fueling on-site shall occur over an impervious surface with a secondary containment berm and sump in case of a spill and shall not occur during storm events.

T. Flow Lines, Transfer Lines, and Gathering Lines:

1. All off-site lines transporting process materials, production wastes, product and any other items used or generated by the facility shall be located to avoid existing or proposed residential, commercial, and industrial buildings, places of assembly, surface waterbodies and designated open spaces. Buried pipelines shall be a minimum of 4-feet deep and shall be of detectable material which could include the addition of tracer wire to ensure detection during buried utility locating.
2. The location of pipelines shall be evaluated on a case-by-case basis, with the determining locational factor being the size and type of pipeline being proposed.
3. Coordinates of all flow lines, gathering lines, and transfer lines shall be provided.

U. Temporary Water Lines:

1. Temporary waterlines shall be used, unless development is not within a water service area.
2. Temporary waterlines shall be buried at all existing driveway and road crossings, or utilize existing culverts, if available.

V. Financial Assurance:

1. The Applicant shall demonstrate the financial capability to reclaim all disturbed areas during each phase of the site development and following termination of the oil and gas operation on the site. This shall include meeting any state requirements, and any additional requirements the County deems necessary to protect the public health, safety, and welfare.
2. The Applicant shall, for the life of the use, carry customary and usual environmental liability insurance.

17.4. – Appeals.

- A. Section 22 of this Code shall provide direction for all appeals to standards, processes and provisions of this Section 17.

17.5. – Enforcement and Inspections.

- A. Applications for O&GFs shall demonstrate compliance with this and all other relevant Sections of this Code. Failure of an Operator to maintain compliance with the County approval of an O&GF may result in the revocation of the approval pursuant to the procedures in Section 12 of the Land Use Code. The County retains the right to seek whatever remedy or redress is legally allowable.
- B. The County reserves the right to inspect the property for compliance.

17.6. – Fees and Security for Reclamation.

- A. The following fees are applicable to oil and gas facilities:
 - a. A Capital Transportation Impact fee.

17.7. – Termination or Modifications of Use.

- A. No modification to an approved O&GF shall be made without obtaining appropriate land use approvals from the County.
- B. Upon termination of use, the O&GF shall be reclaimed pursuant to the reclamation plan provided.

17.8. – Definitions.

- A. Unless otherwise listed herein, the definitions found within the C.R.S. and Colorado Oil and Gas Conservation Commission (COGCC) regulations shall apply.

Attachment B

Public Comments

Received since

Planning Commission Meeting
on February 19, 2020

Draft Date: October 30, 2019

FINAL DRAFT
Comments by Andy
Peterson

17.0. – OIL AND GAS FACILITIES

17.1. – Intent and Purpose.

- A. **Intent.** The intent of this section of the Land Use Code is to establish a regulatory framework for new oil and gas facilities (O&GFs) to be located in the unincorporated areas of Larimer County in a manner that acknowledges private property rights and protects the public health, safety and general welfare, protects environment and wildlife, and minimizes adverse impacts.
- B. **Authority:** C.R.S. 29-20-104-(1) provides the County authority to regulate and review applications pertaining to the surface development of O&GFs.
- C. **Purpose:** These regulations are necessary to:
 1. Ensure a comprehensive land use process and transparent public process for the development of new O&GFs, in the unincorporated areas of the County.
 2. Provide for the managed development, installation, maintenance, modification, reclamation and removal of O&GFs without unreasonably discriminating against oil and gas developers and operators, or mineral interest owners.
 3. Minimize to the maximum extent possible the nuisance effects of O&GFs through the application of best available techniques and technologies.
 4. Promote and protect the public health, safety and welfare, and protect the environment and wildlife by minimizing the adverse impacts of O&GFs.
 5. Maximize protection of natural and cultural resources and public facilities.
 6. Encourage O&GF's to strategically locate where adverse impacts from such operations can be avoided.
 7. Minimize and mitigate the extent and severity of adverse impacts that cannot be avoided.
 8. Confirm the financial, indemnification and insurance capacities of the oil and gas developer/operator to ensure timely and effective construction, production, removal and reclamation of O&GFs and infrastructure.
- D. **Applicability:** These regulations shall apply to all new O&GFs, to be constructed on any property in all zoning districts in the unincorporated portions of Larimer County.
- E. **Severability:** If any section, clause, provision, or portion of these regulations should be found to be unconstitutional or otherwise invalid by a court of competent jurisdiction, the remainder of the regulations in this section shall not be affected thereby and is hereby declared to be necessary for the public health, safety and welfare.

17.2. – Review Procedures and Required Permits.

- A. **General Requirements.** No person, firm or corporation shall establish, construct, or build a new O&GF, without first having obtained required land use approval(s) and permits as required by this Code. Applications to the County for new O&GFs, may be submitted simultaneously with the Colorado Oil and Gas Conservation Commission (COGCC) permitting process.
- B. **County Review Process:** All new O&GFs, in the unincorporated portions of Larimer County shall require approval of a Special Review application for the proposed facility as set forth in Section 4.5 of this Code. Application and submittal requirements for O&GFs are specified in the following Community Development Department application handouts:
 1. Sketch Plan Review Application and Submittal Requirements for Oil and Gas Facilities.
 2. Neighborhood Meeting Submittal Requirements and Guidelines for Oil and Gas Facilities.
 3. Special Review Application and Submittal Requirements for Oil and Gas Facilities.

C. Notification: All O&GF applications shall have a minimum APO notification boundary of ½ mile

(2,640 feet) for all neighbor referral, neighborhood meeting and public hearing notices, as outlined in Section 12.2.4. and Section 12.3. of this code.

C.D. County Permits. Prior to the commencement of any construction activity for an O&GF, all required permits for such facilities shall be approved. Required permits include, but are not limited to:

1. Access permits,
2. Development construction permit,
3. Building permits for all qualifying buildings and structures,
4. Electrical permits, and
5. All federal, state and local permits.

D.E. Non-County Permits: County approval of an O&GF shall not relieve the landowner or applicant of the responsibility for securing other permits or approvals required by any other applicable County Departments, local fire district, municipalities, or other applicable public agencies.

E.F. Technical Expert Review: Applications for O&GFs may involve complex technical issues that require review and input that is beyond the expertise of County staff. If such a situation arises, the Community Development Director may commission a third-party review of the relevant subject matter and require the applicant to pay reasonable costs for the third-party review. Selection of a third-party expert(s) to review portions the proposal will be at the discretion of the County.

17.3. – Standards Required for Oil and Gas Facilities.

A. General:

1. In addition to the standards and requirements of this Section 17, all other relevant standards and regulations set forth in this Code shall also apply.
2. All applications for new O&GFs, shall meet all applicable federal, state and local standards and regulations pertaining to the development and operation of such facilities.

B. Setbacks:

1. Setbacks for O&GFs shall be 1,000 feet from Residential Building Units, including high occupancy building units, or as required by the rules of the COGCC, whichever are greater. All other setbacks from natural and manmade feature as required by the rules of the COGCC shall apply. Setbacks for O&GFs shall conform to Section 604. SETBACK AND MITIGATION MEASURES FOR OIL AND GAS FACILITIES, DRILLING, AND WELL SERVICING OPERATION of the 600 Series Safety Regulations of the COGCC Rules and Regulations.
2. To achieve the objectives of Section 17.1.C., the Board of County Commissioners may, on a case by case basis, require setbacks greater than required by 17.3.B.1. above. by the COGCC.
3. The Board of County Commissioners may, by request appeal, allow a reduction of the COGCC setbacks required by 17.3.B.1. above when it has been determined that the applicant has adequately demonstrated that the setbacks prohibit access to the mineral interests being sought, and/or the reduced setbacks will achieve and mitigate to the extent necessary the objectives of this code or the expectations of the Board of County Commissioners.

C. Air Quality:

1. **An Air Quality Report and Plan** shall be submitted with all O&GF applications. The report/plan shall include baseline air quality data and demonstrate how the development and operation of the facility will avoid and/or mitigate adverse impacts to air quality and demonstrate compliance with and implementation of standards in Sections 17.3.C. and 8.11 of this Code.

Commented [AP1]: Suggest using the same definition as COGCC for consistency

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2. In addition to all federal and state laws, rules and regulations, applications for O&GFs shall demonstrate how exploration, construction and standard operations of a O&GF will comply with the rules and regulations of the Colorado Air Quality Control Commission (AQCC). Information to be provided shall include all appropriate applications of notifications and permits for sources of emissions.
 3. Reduced Emission (Green) Completions shall be used for all completions and well workovers. Such completions shall include the use of Best Management Practices including, when available, the following unless an equal or better system exists:
 - a. Closed loop, pitless drilling, completion systems, without permanent on-site storage tanks, for the containment and/or recycling of all drilling, completion and flowback fluids.
 - b. Flaring only allowed during emergencies or upset conditions. When allowed, routing and control of all emissions to a flare or combustor shall provide at least 98% destruction or removal efficiency.
 - c. Zero emission desiccant dehydrators.
 - d. Emission controls of 95% or better for glycol dehydrators.
 - e. Pressure-suitable separator and vapor recovery units.
 - f. No-bleed continuous and intermittent pneumatic devices.
 - g. Automated tank gauging.
 4. O&GFs shall be equipped with electric-powered engines for motors, compressors, drilling and production equipment, and pumping systems unless no adequate electricity source is available, or it is technically infeasible.
 5. O&GF applications shall include operational provisions to reduce emissions on Air Quality Action Advisory Days posted by the Colorado Department of Public Health and Environment (CDPHE) for the Front Range area. The provisions shall include how alerts are received, outline specific emission reduction measures, and include requirements for documenting the measures implemented. Measures should include:
 - a. Minimizing vehicle traffic and engine idling,
 - b. Reducing truck and worker traffic,
 - c. Delaying vehicle refueling,
 - d. Suspending or delaying use of fossil fuel powered equipment,
 - e. Postponing construction and maintenance activities,
 - f. Postponing well maintenance and liquid unloading that would result in emission releases to the atmosphere, and
 - g. Postponing or reducing operations with high potential to emit VOCs of NOx.
- D. Leak Detection and Repair:**
1. **A Leak Detections and Repair Plan** shall be submitted with all O&GF applications. The plan shall disclose techniques, methods and protocols that will be utilized at the proposed O&GF to identify, prevent, contain, document, repair and report leaks, and shall demonstrate how it will comply with and implement the standards in this Section 17.1.3.F.
 2. Operators shall conduct leak detection and repair inspections at the frequency required by the APCD for the emission source using modern leak detection technologies (infrared cameras, etc.) and equipment. The results of said inspections, including all corrective actions taken, shall be reported to the Larimer County Department of Health and Environment (LCDHE) and County Local Government Designee (LGD) upon request.
 3. Repair of verified leaks shall occur within 72 hours of detection. If it is anticipated that a repair

will take longer than 72 hours, the operator shall provide a written explanation to the LCDHE and the LGD as to why more time is required and how the leak will be contained. If a leak is not repaired within 72-hours, the O&GF shall be shut-in until the leak is repaired.

4. Equipment leaks that pose an imminent safety risk to persons, wildlife, or the environment shall undergo emergency shut down and not be allowed to operate until the operator has provided evidence that the leak has been repaired.
5. At least annually, operators shall provide a 2-week notice of a routine leak inspection to the LCDHE and LGD inviting them to attend and observe the inspection.

E. Odors:

1. **An Odor Mitigation Plan** shall be required for all O&GF applications indicating how the operations will prevent odors from adversely impacting the public and wildlife and further demonstrating compliance with the standards in this Section 17.1.3.H.
2. Oil and gas operations shall comply with the CDPHE, AQCC, Regulation No. 2 Odor Emission, 5 CCR 1001-4, Regulation No. 3, 5 CCR 1001-5, and Regulation No. 7, 5 CCR 1001-9 Sections VII and VIII.
3. Proposed O&GFs shall provide protocols for immediate response to odor complaints that include options for ceasing operations, notification of affected residents, and temporary relocation of residents until the source of the odor is identified and resolved.
4. The operator shall communicate the schedule/timing of well completion activities to adjacent and nearby residents which could include an online portal. As part of the application, provide information on how notifications will be communicated to the public.
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 - b. Additives to minimize odors from drilling and fracturing fluids except that operators shall not mask odors by using masking fragrances.
 - c. Filtration systems and/or additives to minimize, not mask, odors from drilling and fracturing fluids shall be utilized in the drilling and flowback processes.
 - d. Increasing additive concentration during peak hours provided additive does not create a separate odor. Additives must be used per the manufacturer's recommended level.
 - e. Enclosed shale shakers shall be utilized to contain fumes from exposed mud where safe and feasible.
 - f. Drilling activities shall utilize minimum low-odor **Category III** drilling fluid or non-diesel-based drilling muds that do not contain benzene, toluene, ethylbenzene or xylene (BTEX).
 - g. Wipe down drill pipes as they exit the well bore each time.

Commented [AP2]: Category III drilling fluids are not readily available and add approximately \$75,000 per well or \$750,000 per pad, for negligible benefits. There are low odor drilling muds that are not Category III but provide just as much odor protection

F. Water Quality and Water Bodies:

1. **A Water Quality Report/Plan** shall be submitted with all O&GF applications. The report/plan shall demonstrate how the development and operations of the facility will avoid impacts to surface and ground waters in Larimer County, identify all private and community permitted water wells within a half-mile and demonstrate compliance with and implementation of standards in Sections 17.3.D. and 8.12 of this Code.
2. Baseline and subsequent water source tests, as typically required by and submitted to the COGCC and CDPHE, shall be provided to the LCDHE and the LGD for the life of the facility and

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- any post-closure assessments, if approved by the owner(s) of the water well.
- 3. The application shall provide documentation indicating how the COGCC water quality protection standards are being implemented.
- 4. Locating O&GFs within a Federal Emergency Management Agency (FEMA) designated 100-year floodplain shall not be allowed unless no other location is feasible, and all other appropriate permissions are obtained.
- 5. The requirements of this Section 17.4.D shall not prevent discharges reviewed and permitted by the CDPHE Water Quality Control Division, the EPA, and the Army Corps of Engineers.

G. Spills and Releases:

- 1. A **Spill Prevention and Containment Plan** shall be submitted with all O&GF applications. The plan shall disclose techniques, methods, and protocols to be utilized at the proposed O&GF to prevent, contain, document and report any spills or releases, and shall demonstrate compliance with and implementation of the standards in this Section 17.3.G.
- 2. An Emergency Response Plan shall be provided that includes evacuation plans and routes, inventory of emergency response supplies, and notification requirements. As part of this plan it is ~~required~~ ~~recommended~~ that an annual open house training be ~~offered~~ ~~conducted~~ for emergency services personnel to become familiar with the site.
- 3. Secondary containment shall be required which is capable of holding ~~150+~~ ~~25%~~ of the ~~largest~~ ~~single~~ ~~total~~ capacity of on-site containment vessels and storage tanks.
- 4. Unloading areas shall be designed to contain potential spills or direct spills into other secondary containment areas
- 5. Containment systems constructed of steel rimmed berms, or similar impervious surfaces that are equal to or better, shall be used for all secondary containment areas.
- 6. Any spill or release of unrefined and refined petroleum products, hazardous substances, fracking fluids, E&P waste, or produced fluids of greater than 25 gallons outside of secondary containment areas on an O&GF, including those thresholds reportable to the COGCC, shall upon discovery, be immediately reported to the ~~National Response Center and~~ CDPHE as well as the following Local Emergency Response Authorities in Larimer County:
 - a. Larimer County Sheriff – Public Safety Answering Point (PSAP) (9-1-1)
 - b. Larimer County Department of Health and Environment,
 - c. Local Fire Department/District,
 - d. Local Municipal Police Department if within ~~one~~ ~~in~~ mile of a City or Town,
 - e. Larimer County Oil and Gas LGD, and
 - f. Larimer County Local Emergency Planning Committee (within 24-hours).
 - ~~f. National Response Center at 1-800-424-8802 for spills that constitute a sudden threat to public health.~~
- 7. All spills or releases, whether reportable or not, shall be cleaned up immediately and to the satisfaction of the local emergency response authorities, listed in the Spill Prevention Control and Countermeasure Plan.

H. Noise:

- 1. A **Noise Report and Mitigation Plan** shall be required for all O&GF applications. The plan shall demonstrate how the operations will mitigate noise and vibration impacts to comply with the noise standards contained in this Section 17.3.G. The report and plan shall include the following:
 - a. A five-day (two days being the weekend day) baseline noise analysis.

Commented [AP3]: To be consistent with COGCC regs and to minimize required footprint of the facility. Facilities will be unnecessarily large without providing additional protection to the public if containment for all vessels is required. I have never seen more than one tank rupture.

Commented [AP4]: Reporting to the National Response Center is only required for spills that constitute a "sudden threat to public health." Not all spills would trigger this.

Commented [AP5]: Suggest reporting minor spills to the Sherrif's Department on the non-emergency line instead of 911 as this could tie up services and prevent them from responding to a real emergency

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- b. Modeled decibel levels for all phases of development shall be presented using contour maps from the O&GF site (combining noise sources) at 350 feet, 500 feet, 1000 feet, and to the property line of the adjacent properties. Contour maps shall be provided that demonstrate both unmitigated and mitigated decibel levels.
 - c. A plan of proposed mitigation measures to be implemented by the O&GF during each phase of development shall be provided to ensure compliance with the maximum permissible noise levels as listed in Section H.2 below.
2. Noise generated from O&GFs shall comply with the following maximum permissible noise levels appropriate for the Zone Area Designation of the adjacent land uses as determined by the County. Zone Area Designations are defined by C.R.S. 25-12-102 Noise Abatement and will be used as part of the County’s determination for surrounding land uses and may be different than the County’s zone districts.

<u>ZONE AREA DESIGNATIONS</u>	<u>7:00 am to next 7:00 pm</u>	<u>7:00 pm to next 7:00 am</u>
Residential/Agricultural/Rural	55 db(A)	50 db(A)
Commercial	60 db(A)	55 db(A)
Light Industrial	70 db(A)	65 db(A)
Industrial	80 db(A)	75 db(A)

In the hours between 7:00 a.m. and the next 7:00 p.m., the noise levels permitted above may be increased by ten (10) db(A) for a single period of not to exceed fifteen minutes in any one-hour period. Night-time levels between 7:00 p.m. and the next 7:00 a.m. shall not be exceeded therefore requiring strategic planning of noise-inducing activities to be conducted during daytime hours at the site.

- 3. Sound levels shall be measured at or within 25 feet of the parcel boundary line where the O&GF site is located. When evaluating a noise complaint, the County shall measure sound at or within 25 of the parcel boundary line of the O&GF site and other property boundaries which are more representative of the noise impact.
- 4. O&GF activities shall be operated so the ground vibration inherently and recurrently generated is not perceptible, without instruments, at any point on a boundary line of the property on which the O&GF is located.
- 5. In situations where low frequency noise is a component of the problem, a sound level measurement shall be taken twenty-five (25) feet from the exterior wall of the residence or occupied structure nearest to the noise source, using a noise meter calibrated to the db(C) scale. If this reading exceeds 65 db(C), the County shall require the operator to obtain a low frequency noise impact analysis by a qualified sound engineer, including identification of any reasonable control measure available to mitigate such low frequency noise impact to be implemented by the O&GF. Such study shall be provided to the County for consideration and possible action.
- 6. Construction of O&GFs, including drilling/well completions, recompletions, and pipeline installations, shall be subject to the maximum permissible noise levels specified for industrial zones for the period within which construction is being conducted. Construction activities directly connected with abatement of an emergency are exempt from the maximum permissible noise levels.
- 7. Quiet design mufflers (i.e., hospital grade or dual dissipative) or equal to or better than noise mitigation technologies shall be utilized for non-electrically operated equipment.
- 8. Motors, Generators, and engines shall be enclosed in acoustically insulated housings or covers.

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I. Dust:

1. **A Fugitive Dust Control Plan** shall be submitted with all O&GF applications. The plan shall disclose techniques and methods to be utilized at the proposed O&GF to prevent or mitigate fugitive dust generated by the construction and operations of the proposed O&GF and shall demonstrate compliance with and implementation of standards in Sections 17.3.I and 8.11 of this Code.
2. Best management practices (BMPs) for the mitigation of dust associated with on-site operations and traffic activities shall be employed at the facility. The BMPs shall be outlined in the Fugitive Dust Control Plan.
3. Produced water and other process fluids shall not be used for dust suppression unless adequately pretreated so that it does not create odors and has been approved for land application by CDPHE Water Quality Control Division.
4. Safety Data Sheets (SDSs) shall be provided with the application for any proposed chemical based dust suppressants.
5. Unless otherwise approved by the County Health and Engineering Departments, only water will be used for dust suppression activities within 300-feet of the ordinary high- water mark of any body of water.

J. Access:

1. **A Traffic Impact Analysis and Routing Plan** shall be submitted with all O&GF applications. The plan shall disclose routing alternatives and transportation infrastructure improvements proposed for the proposed O&GF to mitigate projected transportation impacts and demonstrate compliance with and implementation of the standards in this Section 17.3.E.
2. Designs for private access drives shall conform to the Local Low Volume cross section found in the Larimer County Rural Area Road Standards and shall include the following:
 - a. The first 50 feet of access drive from the edge of pavement of the adjacent road will be paved, or made of an approved all weather surface, and the remaining portions of the access drive shall be composed of a minimum of 6 inches of compacted Class 5 road base.
 - b. The access drive entrance shall include returns with a 30-foot radius.
 - c. A mud and debris tracking pad shall be located at the end of the paved portion of the access drive.

K. Chemical Handling:

1. **A Chemical and Hazardous Materials Report and Handling Plan** shall be submitted with all O&GF applications. The plan shall disclose the type of hazardous and non-hazardous materials and chemicals that will be used on the site of the proposed O&GF, including how they will be handled to prevent spills and demonstrate compliance with and implementation of standards in this Section 17.3.K.
2. Prior to any hydraulic fracturing activity, the Operator shall provide the County with a copy of the Chemical Disclosure Registry form provided to the COGCC pursuant to the COGCC's "Hydraulic Fracturing Chemical Disclosure".
3. Drilling and completion chemicals shall be removed from the site within sixty (60) days of the drilling completion.

L. Recycle, Reuse and Disposal of Fluids:

1. **A Waste Management and Disposal Plan** shall be submitted with all O&GF applications. The plan shall document the techniques and methods of the proposed O&GF to manage wastes generated on the site and demonstrate compliance with and implementation of the standards in this Section

17.3.L.

- 2. Drilling, completion flowback, and produced fluids shall be recycled or reused whenever technically feasible.
- 3. If not to be recycled or reused onsite, exploration and production waste may be temporarily stored in tanks for up to 30-days while awaiting transport to licensed disposal or recycling sites.
- 4. Produced water shall be recycled or reused or shall be transported by pipeline unless easements are not available.
- 5. The Operator shall take precautions to prevent adverse environmental impacts to air, water, soil, or biological resources to the extent necessary to protect public health, safety and welfare, including the environment and Wildlife Resources to prevent the unauthorized discharge or disposal of oil, gas, Exploration and Production Waste, chemical substances, trash, discarded equipment, or other oil field waste.
- 6. The requirements of this Section 17.3.L shall not prevent discharges ~~and or~~ beneficial uses of water reviewed and permitted by the CDPHE Water Quality Control Division ~~and the Environmental Protection Agency (EPA) or another agency with jurisdiction.~~

M. Lighting and Visual Impacts:

- 1. For all phases of the development of the site, the application shall demonstrate compliance with the visual and aesthetic rules of COGCC and the Larimer County Land Use Code for landscaping, fencing and lighting set forth in Section 8.
- 2. All O&GFs shall be painted with colors that are matched to or slightly darker than the surrounding landscape, and shall utilize paint with uniform, non-contrasting, nonreflective color tones based upon the Munsell Soil Color Coding System.
- 3. The location of all outdoor lighting shall be designed to minimize off-site light spillage and glare using best practices recognized by the International Dark-Sky Association. See Section 8.15, Lighting Standards.
- 4. For all phases of site development, fencing shall be installed for security and visual aesthetics of the use.
- 5. Sound or screening wall to mitigate for noise during construction and well completion may be required if the O&GF is within 2,000 feet of residential buildings or lots, or if electric requirement is appealed.
- 6. O&GFs applications shall minimize removal of trees and vegetation on the site.
- 7. Landscaping and/or fencing for screening and visual quality as viewed from public rights-of-way and neighboring residential areas shall be required within 6 months from the time of well completion and in accordance with requirements for the zoning district.
- 8. O&GF applications shall demonstrate compliance with weed control requirements of the County Weed District and Forestry Services Department, including for access roads serving the facility.

N. Well Plugging and Abandonment:

- 1. **A Reclamation Plan** shall be submitted. The plan shall demonstrate how the above-ground operations of well abandonment and reclamation shall comply with the COGCC rules and shall include the following information:
 - a. Removal of all equipment from the well site,
 - b. Restoration of the site surface to the conditions of the site reclamation plan,
 - c. Notice to the County LGD of the commencement and completion of such activity, and
 - d. Coordinates for the location of the decommissioned well(s), and any associated gathering or flow lines, shall be provided with the notice of the completion of well abandonment.

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O. Well Liquids Unloading:

1. Best management practices, including artificial lift, automated plunger lifts and at least 98% emission reductions when utilizing combustion to control venting shall be employed at all facilities unless technically infeasible.
2. Approved manual unloading shall require on-site supervision of the unloading process.

P. Flammable Materials:

1. The location of flammable materials on site shall conform to all COGCC safety standards and local fire codes.
2. A minimum 25-foot buffer, free of weeds and dried grasses, shall be required around flammable materials or equipment.

Q. Waste Disposal:

1. **A Waste Management and Disposal Plan** shall be submitted with all O&GF applications. The plan shall document the techniques and methods of the proposed O&GF to manage wastes generated on the site and demonstrate compliance with and implementation of the standards in this Section 17.3.Q.
2. Oil and gas facilities shall remain free of debris and excess materials during all phases of operation.
3. Burning of debris, trash or other flammable material is not allowed.
4. Temporary storage of materials (up to 30-days) may be allowed with installation of screening to mitigate ~~from~~ aesthetic impacts from public rights-of-way or if requested by landowner.

R. Removal of Equipment:

1. There shall be no permanent storage of equipment (i.e., vehicles, trailers, commercial products, chemicals, drums, totes, containers, materials, and all other supplies not necessary for uses on an oil and gas location) on the site of an oil and gas facility.
2. When not in use, or if no longer needed for on-site operations, all equipment not being used on the site shall be removed.

S. Maintenance of Machinery:

1. Statewide Best Management Practices shall be used to prevent contamination of soils and stormwater runoff, including equipment and vehicle maintenance and fluid containment.
2. There shall be no maintenance of field equipment involving hazardous materials within 300-feet of a water body.
3. Any fueling on-site shall occur over an impervious surface with a secondary containment berm and sump in case of a spill and shall not occur during storm events.

T. Flow Lines, Transfer Lines, and Gathering Lines:

1. All off-site lines transporting process materials, production wastes, product and any other items used or generated by the facility shall be located to avoid existing or proposed residential, commercial, and industrial buildings, places of assembly, surface waterbodies and designated open spaces. Buried pipelines shall be a minimum of 4-feet deep and shall be of detectable material which could include the addition of tracer wire to ensure detection during buried utility locating.
2. The location of pipelines shall be evaluated on a case-by-case basis, with the determining locational factor being the size and type of pipeline being proposed.
3. Coordinates of all flow lines, gathering lines, and transfer lines shall be provided.

U. Temporary Water Lines:

1. Temporary waterlines shall be used, unless development is not within a water service area.
2. Temporary waterlines shall be buried at all existing driveway and road crossings, or utilize

existing culverts, if available.

V. Financial Assurance:

- 1. The Applicant shall demonstrate the financial capability to reclaim all disturbed areas during each phase of the site development and following termination of the oil and gas operation on the site. This shall include meeting any state requirements, and any additional requirements the County deems necessary to protect the public health, safety, and welfare.
- 2. The Applicant shall, for the life of the use, carry customary and usual environmental liability insurance.

17.4. – Appeals.

- A. Section 22 of this Code shall provide direction for all appeals to standards, processes and provisions of this Section 17.

17.5. – Enforcement and Inspections.

- A. Applications for O&GFs shall demonstrate compliance with this and all other relevant Sections of this Code. Failure of an Operator to maintain compliance with the County approval of an O&GF may result in the revocation of the approval pursuant to the procedures in Section 12 of the Land Use Code. The County retains the right to seek whatever remedy or redress is legally allowable.
- B. The County reserves the right to inspect the property for compliance.

17.6. – Fees and Security for Reclamation.

- A. The following fees are applicable to oil and gas facilities:
 - a. A Capital Transportation Impact fee.

17.7. – Termination or Modifications of Use.

- A. No modification to an approved O&GF shall be made without obtaining appropriate land use approvals from the County.
- B. Upon termination of use, the O&GF shall be reclaimed pursuant to the reclamation plan provided.

17.8. – Definitions.

- A. Unless otherwise listed herein, the definitions found within the C.R.S. and Colorado Oil and Gas Conservation Commission (COGCC) regulations shall apply.

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FINAL DRAFT
Comments by CPC

March 9, 2020

Matthew Lafferty
Larimer County
Community Development Department
200 W. Oak Street, Suite 3100
Fort Collins, CO 80521

VIA EMAIL

SUBJECT: Larimer County Oil and Gas Regulatory Proposal

Good evening Mr. Lafferty,

The American Petroleum Institute - Colorado (“API”) represents all facets of the oil and natural gas industry here in Colorado. API truly appreciates the opportunity to provide written comments regarding your proposed oil and gas regulatory update.

API and our member companies are committed to ensuring a strong, viable oil and natural gas industry capable of meeting the energy needs of our nation and Colorado in a safe and environmentally responsible manner. It is always our goal to partner with local communities to ensure our industry addresses the needs of local residents in a responsible and respectful manner.

API and its member companies have always enjoyed a very positive, collaborative, and engaging relationship with communities across the front range. We sincerely appreciate the county’s desire to utilize its newfound authority under SB19-181, and appreciate the task force the county undertook to ensure all viewpoints were taken into consideration. However, we have a couple of issues we would like to address.

A. Setbacks

While API certainly understands the county is looking for the best way to update its ordinance, we would suggest that the final ordinance accept the recommendation of the task force as opposed to implementing a standardized setback of 1000’ which was proposed with limited discussion or outside input. A ‘one size fits all’ solution, this proposal was neither defined during the planning commission nor did it take into account numerous factors that could make implementation of such a standardized rule difficult, if not impossible. Furthermore, the task force’s recommendation was developed through months of stakeholder meetings and input, which considered numerous scenarios and situational factors before coming to the conclusion that a site by site basis was the best approach for both the county and its citizens. The task force also agreed that deference to the upcoming rules proposed by the state would likely be in the county’s best interest.

Finally, as the development process will remain a Special Review application, county rules stipulate that a public hearing, notice and community outreach requirements, mitigation efforts, and other factors will be considered during each and every application. In addition, the new rules will require site specific BMP’s and

a successful and productive Alternative Site Analysis will ensure any issues surrounding development will be addressed.

B. Alternative Location Analysis

As noted above, we certainly support the implementation of an Alternative Location and Siting Analysis. An inclusive and comprehensive Alternative Location Analysis will be a useful and valuable tool for the staff when evaluating the location of a proposed well and associated operations. Furthermore, such a process would eliminate a need for a specified setback, and ensure that all considerations are evaluated when a well location is proposed.

API would recommend a Analysis that includes the following:

- i. A comprehensive siting rationale for the preferred location;
- ii. An analysis of alternative locations that were evaluated and why those lands were not selected;
- iii. Discussion of best management practices that the operator will implement to minimize and mitigate impacts of development; and
- iv. Discussion of community outreach already conducted or planned.

We would further suggest you look to and, and incorporate, rules that the Colorado Oil and Gas Conservation Commission are currently in the process of updating. These rules could prove to be valuable guidance for the county as you look to find the best way to continue to allow for oil and gas development within your county's borders.

API members have invested billions of dollars in Colorado's oil and natural gas industry and it is our hope that we can continue to do so. Again, we would certainly hope that you will use API and its member companies as a resource. We truly believe we can work together to create regulations that make the county and its residents feel their concerns have been addressed. Again, we appreciate the opportunity to comment and look forward to working with you.

If you have any questions, please do not hesitate to contact me at (720) 878-7688, or mcgownec@api.org.

Sincerely,

Chris McGowne
Associate Director
Colorado Petroleum Council

FINAL DRAFT
Comments by
Gayla Maxwell Martinez

To the Larimer County Commissioners: Comments on the Third Draft of Oil & Gas Regulations for Larimer County

At the Planning Commission Meeting of February 19, following predominantly negative public comment, Mr. Lafferty asked a rhetorical question regarding why the public would prefer no regulations to those proposed.

My answer to Mr. Lafferty would be the following:

1) DUPLICATION OF STATE REGS = NO ADDED VALUE: The proposed regulations in many instances defer to as of yet uncompleted regulations by the state. We don't, at this time, know what we are agreeing to, and in any case, duplication of state regulations gives no added value to county regulations.

2) CEDES AUTHORITY TO OPERATORS THUS FOSTERING O & G: Although the county regulations make mention of public health, safety and the environment in introductory statements, this is not supported by the body of the document. There are repeated statements using words like "minimize" and "mitigate" in regard to public and environmental harm. This wording essentially gives the operators permission to harm the public and the environment making it clear that the economic interests of the industry have priority. In addition, regulations repeatedly defer to the operators to submit their own plans for regulating numerous aspects of the process. This effectively cedes authority to the operators and leaves the public in the dark.

3) LANGUAGE IS VAGUE LEAVING BROAD OPPORTUNITY FOR CONFLICTING INTERPRETATION AND LEGAL LOOPHOLES: The proposed regulations in many places use vague language which hide an alarming lack of understanding on the part of county staff and, once again, offer the industry ample opportunity to make interpretations in its favor and against public interest. In other words, the document is riddled with legal loopholes.

More specific comments are provided in an separate copy of the proposed regulations.

I would ask the County Commissioners to table the adoption of these regulations until such time as the following criteria can be met:

- 1) The rule-making process of the COGCC has been completed.
- 2) Expert input (and that not solely from the oil & gas industry) can be acquired to create regulations that are transparent, specific, and enforceable and that in fact prioritize public health, safety and the environment.

Sincerely,

Gayla Maxwell Martinez

FINAL DRAFT
Comments by
Karen Artell

Comments for Larimer County Draft Oil and Gas Regulations before the Board of County Commissioners regarding setbacks, reciprocal setbacks and wildlife protections.

I appreciate the planning commission members' efforts in addressing the complex issue of oil and gas development. The addition of setbacks for oil and gas facilities to 1,000 feet from building units, including high occupancy building units and a notification boundary of ½ mile (2,640 feet) for all neighbor referral, neighborhood meeting and public hearing notices is appreciated.

Colorado Oil and Gas Conservation Commission (COGCC) Director Robbins has asked but not required operators increase the notification boundary for permit applications. More on the request below.

As you know, setbacks from oil and gas operations are a major concern for communities, neighborhoods and families in Colorado's oil and gas fields. Larimer County can do more to protect its residents and bring regulations in step with State agency and other local government actions. Please see the following examples.

Adams County was the first local government to implement setbacks greater than COGCC setbacks. Commerce City has setbacks in its draft regulations (November 2019) and Broomfield is contemplating setbacks for their draft regulations. Commerce City draft regulations include 1000 foot setbacks from residential property lines, outdoor venues, senior living facilities and sport fields and forbids operations in a flood plain. Reciprocal setbacks are also addressed in the regulations.

The Tri-County Health Department (TCHD) recommendations for Adams County regarding proposed oil and gas regulations recommended setbacks of at least 1320 feet from property lines and 2000 foot setbacks for settings where vulnerable groups are found, such as children in schools and child daycare centers. The TCHD letter was previously provided to Larimer County Commissioners and planning staff members.

State agencies are beginning to address the concerns of Colorado communities and neighborhoods with oil and gas development in residents' backyards including setbacks.

COGCC has yet to address setbacks in its rulemaking but has addressed setbacks in draft rules – more on that below. In May 2019, Director Robbins acknowledged the importance of setbacks with operator guidance and objective criteria which require additional analysis of oil and gas operations permits to ensure the protection of public health, safety, welfare and the environment. The criteria for additional analysis include oil and gas locations within 1500 to 2000 feet from building units or homes, school property lines and outdoor activity areas among other criteria.

Though the Colorado Department of Public Health and Environment (CDPHE) study "Human Health Risk Assessment for Oil & Gas Operations in Colorado" published in October 2019 is dismissed by industry, the COGCC informed operators that "given the health study, the Director will ensure a protective review will occur for all wells under 2,000 feet from well to building unit (i.e. home)."

In January 2020, Director Robbins, "determined it to be in the best interest of the public to ensure that neighbors near proposed oil and gas locations are aware of the health study and its findings. Therefore, as part of the Form 2A, Oil and Gas Location Assessment Permit review, the Director will request the applicant to consider providing additional notice and information to residents within 2,000 feet of the

planned locations.” And, “The request is being made as part of the review of a Form 2A, Oil and Gas Location Assessment or stand-alone Form 2, Application for Permit to Drill.”

Also, “Applicants should be over-inclusive, not exclusive, when determining whether or not to notice. Non-resident building unit owners may also be noticed because the notice is intended to reach the occupants of the nearest homes, even if they are renters. Notice should go to all residents in a subdivision or neighborhood if some of the residents are afforded notice. Additionally, notice should go to relevant homeowners associations and other locally affiliated organizations.”

The COGCC has released draft Mission Change Rules. The series released in February 2020 included 600 series rules. Rule 604. School Facility and Child Care Center Setback states, “No Working Pad Surface will be located 2,000 feet or less from a School Facility or Child Care Center unless the relevant School Governing Body agrees in writing to the location of the proposed Working Pad Surface.”

In its December 2019 rulemaking the Air Quality Control Commission (AQCC) revised the frequency at which owners/operators of natural gas compressor stations and well production facilities must inspect for leaks including quarterly or monthly inspections, based on the tons per year of VOC emissions, of facilities located within 1,000 feet of an occupied area.

As you know, current COGCC rules call for only a 500 foot setback from homes and 1000 foot setback from schools and high occupancy buildings. Hopefully the COGCC will increase setbacks in future rulemakings. As noted above, the COGCC proposes a 2000 foot setback for schools and child care centers in draft rules but there are no proposed setbacks noted for homes, high occupancy buildings, senior living centers, or outdoor activity areas.

Currently, COGCC plans a mission change rulemaking in April and May 2020 with a packed schedule in May. Can the COGCC realistically accomplish mission change rulemaking in that timeframe? The professional commission will be in place in July 2020. Will this change the timing of rulemaking? When will regulations be effective? Is the COGCC leaving setbacks to homes to local governments? I don’t know the answers to these questions.

Without setbacks in place, Larimer County may see a rush of applications before State level regulations go into effect. It is important that the County enact setback regulations to protect Larimer County residents and our environment.

With the direction that local and State governments are taking to increase protections for residents, it makes sense to implement a 2000 foot setback from building unit and home property lines, school property lines, outdoor activity areas and senior living centers. Reciprocal setbacks to existing oil and gas facilities should also be enacted to protect future residents and children at school and daycare centers.

Larimer County is fortunate to have the Thompson and Poudre rivers within its boundaries and numerous lakes, reservoirs, irrigation canals and wetlands. We all depend on these for drinking water, agriculture, recreation, and as wildlife habitat. Setbacks of at least 500 - 1000 feet to water bodies is critical for protecting our water and water ways as is prohibiting oil and gas facilities in floodplains.

I am also interested in wildlife protections included in SB 19-181. The Colorado Parks and Wildlife (CPW) letter submitted December 5, 2019 has some important recommendation for wildlife protections, but Larimer County’s draft regulations have no specific protections for wildlife resources.

CPW noted specific actions oil and gas operators can take to protect wildlife. These include actions that minimize fragmentation and loss of habitat (site specific and cumulative), avoid loss of wildlife movement and migration corridors, reduce the impact of roads and fences across landscape, reduce disturbance of increased human presence at drill site, avoid water contamination and noise contamination, protection of the ecosystem and native plants, and minimize visual effects.

I would like to see specific wildlife protections added by incorporating CPW best management practices into Larimer County oil and gas regulations.

COGCC Objective Criteria May and July 2019

<https://cogcc.state.co.us/sb19181.html#/doc>

COGCC response to CDPHE study. October 2019

<https://cogcc.state.co.us/media.html#/press>

https://drive.google.com/file/d/1pO41DJMXw9sD1NjR_OKyBJP5NCb-AO0I/view

COGCC Notice to operators - Providing notices to residents regarding the CDPHE health study. January 2020

<https://cogcc.state.co.us/reg.html#/policies>

https://cogcc.state.co.us/documents/reg/Policies/NT0_Notice_To_Surrounding_Building_Occupants_20200128.pdf

COGCC Mission Change Rulemaking – Draft Rules - 600 Series Rules

https://cogcc.state.co.us/sb19181_calendar.html#/rulemaking_mission_change

AQCC rulemaking December 2019. Colorado Air Quality Control Commission's 2019 Revisions to Regulation Number 7 – Oil and Gas Emissions and Regulation Number 3 – Permitting and APENs Fact Sheet

<https://drive.google.com/file/d/1b0qXRpFOFayO1r3qF4bdFpG9NPukGJfP/view>

Commerce City oil & gas draft regulations

<https://www.c3gov.com/doing-business/oil-gas-operations>

CPW Raptor Buffer Guidelines

<https://cpw.state.co.us/learn/Pages/LivingwithWildlifeDeveloping.aspx> and COGCC map, select Parks and Wildlife and RSO and SWH https://cogccmap.state.co.us/cogcc_gis_online/

CPW Wildlife Friendly Fencing standards for long term fencing

<https://cpw.state.co.us/learn/Pages/LivingwithWildlifeDeveloping.aspx>

Thank you for your consideration.

Karen Artell

FINAL DRAFT
Comments by
LAHSE



Comments on Larimer County's Proposed Oil & Gas Regulations

Background

LARIMER ALLIANCE FOR HEALTH, SAFETY, AND THE ENVIRONMENT previously made the following two requests of the County:

1. A suspension of well permits until SB 19-181 Rulemaking completed.
2. To wait to create Larimer County O&G Regulations until the state's rulemaking is substantially completed, slated for June 30, 2020.

Both of these simple requests were denied by the County without adequate explanation.

LARIMER ALLIANCE FOR HEALTH SAFETY & THE ENVIRONMENT AND THE LEAGUE OF OIL AND GAS IMPACTED COLORADANS have made numerous oral and written public comments on the previous two drafts of Larimer County Oil and Gas Regulations, including two letters addressing draft one and draft two regulations. In addition, we submitted to the County two letters specifically addressing the legal definitions and implementation of waste and takings in regards to oil and gas extraction in current law. We made public comment at the Feb. 19, 2020 Planning Commission Hearing.

We now submit comments on the proposed Larimer County Oil and Gas Regulations. Included are comments on the February 19 Planning Commission Hearing and their recommendations.

Comments on the February 19 Planning Commission Hearing:

On February 19, the Larimer County Planning Commission held a public hearing on the proposed draft of Larimer County's oil and gas regulations. The Larimer Alliance for Health, Safety and the Environment believe that the proposed regulations largely ignore the public comments staff had received on the first two drafts. Despite extensive comments from the Larimer Alliance, LOGIC, and numerous members of the public, this draft of the regulations is still extremely weak in protecting our county's health, safety and environment; it fails to fully exercise the authority granted to the County by SB181.

The February 19th hearing began with a staff presentation of the draft, and then comments were accepted from members of the public. Each member of the public was given only 2 minutes to speak. Roughly 30 community members spoke. A substantial majority asked the Planning Commission to enact stronger regulations to protect public health and safety. Two oil and gas operators and their attorneys were present to support regulations that made oil and gas operations easier to conduct in the county.

Following public comment, the planning commissioners deliberated for nearly two hours. With few exceptions, these deliberations were obscure. While several of the Planning Commissioners asked concerned questions of the County staff, the responses they received were often unclear, confusing and omitted facts. A couple of the planning commissioners repeatedly stated they did not want to enact "arbitrary" regulations, particularly during the discussion of setbacks, which repeatedly derailed discussion of useful information.

The Larimer Alliance for Health, Safety and the Environment believes that a valuable opportunity for a more beneficial Planning Commission Hearing was lost. However we appreciate that several Planning

Commission members persevered and voted on recommendations such as reinserting setbacks, increasing neighborhood notification, measuring baseline air quality as part of well pad applications, increasing signage, and reviewing Section 17 of Larimer County Oil and Gas Regulations for consistency and compliance with completed State of Colorado Oil and Gas Regulations.

Comments on the Proposed Regulations:

As they stand the Larimer County oil and gas regulations are far too weak, and are riddled with loopholes and prevaricating language. The draft regulations need extensive improvement to truly protect public health, safety, and welfare, the environment, and wildlife resources.

MAJOR ISSUES regarding Larimer County proposed oil and gas regulations:

1. **Ability to deny applications: Current regulations do not assert right to deny or, reject applications outright, or to conditionally approve any permit applications in order to prioritize protection.** (This is a continuation of the County's weak and outdated Waste and Takings legal stand.) Under SB181 Larimer County has the right to deny oil & gas well applications to protect public health and safety, the environment and wildlife. These regulations do not embrace that authority. Instead these regulations primarily look to "minimize" and "mitigate" impacts, by allowing **further reduced setbacks**, well pads within 100-year flood plains, and other exemptions **if requested by the BOCC** or an applicant. This nearly guarantees health impacts and environmental danger to waterways and aquifers. Denying applications that are not protective of public health and safety is clearly supported under state law. Larimer County should not fear the threat of takings claims from operators, as long as the regulations are clearly tied to protecting health and safety or the environment.
2. **Comprehensive transparent public process.** The Planning Commission recommended the inclusion of an amendment which would create a greatly improved public notice system: "Notification All O&GF applications shall have a minimum APO notification boundary of ½ mile (2,640 feet) for all neighbor referral, neighborhood meeting and public hearing notices, as outlined in Section 12.2.4. and Section 12.3. of this code." could be permanently inserted in the regulations. **We strongly urge the BOCC to adopt this recommendation.**
3. **Setbacks were included in the 2nd draft, but were removed.** The Planning Commissioners recommended 1000 foot setbacks for all habitable buildings be inserted into the regulations. The Planning Commission's recommendation is an improvement over a complete lack of setbacks, but, this area is of significant concern and detailed comments can be found below.
4. **Water resource protections.** These proposed regulations allow oil and gas locations too close to water resources, and within flood plains, if no other viable locations are available. This does not comply with SB181 and does not protect public health and safety. If no viable locations are available, then regulations need to allow the county to deny the applications.
5. **Air Quality:** Proposed regulations are especially weak regarding air quality. Larimer County is categorized in "serious" non-attainment status by the EPA, yet these regulations only say that oil and gas facilities shall "avoid" or "mitigate" adverse impacts to air quality. The Planning Commission recommended well site baseline air quality testing in the operator's well application but did not recommend the type of air quality testing required.
6. **Applicability:** The proposed regulations say that these new rules only apply to new locations. In addition it does not address new flowlines, existing well pads, etc... In addition, regulations that

cover issues like noise pollution, dust, chemical handling, waste disposal, plugging and abandonment, leak detection and repair, must apply to all oil and gas facilities in the County.

7. **RECOMPLETIONS were taken out of the regulations** implying that existing wells can be re-engineered by hydraulic fracturing without complying with the regulations. These are in essence "new well pads" as unconventional wells differ in significant ways from existing wells. **We strongly urge that Re Completions of existing wells be subject to the same regulations as new wells.**
8. In addition, **regulations regarding noise were greatly weakened** between draft 2 and the proposed regulations, and the **chemical disclosure list was removed** after draft 1.

Comments on Section 17.1 Intent & Purpose of the Larimer County Oil and Gas Regulations

A. Intent: This paragraph does not prioritize Health, Safety, Welfare, the Environment and Wildlife as mandated by SB-181. Instead it says: "Regulatory framework... *"acknowledges private property rights"* and protects public health, safety, and general welfare, protects environment and wildlife, **and minimizes adverse** effects." This conflicts with the intent of SB181 and muddles the priority of protecting Public Health, Safety, Welfare, the Environment and Wildlife (PHSWEW).

C. Purpose: Provides for the managed development, installation, maintenance, modification, reclamation and removal "without unnecessarily discriminating against O&G developers, operators or mineral owners." **In essence prioritizing protection of O&G industry -- prohibited by SB-181.**

6. This regulation says, "*Encourages O&G to strategically locate where adverse effects from such operations can be avoided.*" "Encourages" is not a clear regulation; PHSWEW is the priority when siting O&G Facilities, and if adverse effects cannot be avoided the permit application should be denied.

Comments on Specific Areas within the Proposed Regulations:

Setbacks: Setbacks offered in the 2nd draft included 2000 feet for high occupancy buildings and 1000 feet from homes. We were dismayed to see that setbacks were removed entirely from the proposed regulations. **In the current draft per Planning Commission recommendations 1000 foot setbacks from habitable buildings are reinserted including this caveat: "or as required by the rules of the COGCC, whichever are greater."**

- It is of concern, that the Planning Commission did not reinsert the 2000 foot setbacks from high occupancy buildings such as hospitals and schools. (Per the discussion at the Hearing, it appears that was Commissioners Wallace and True's intent, however, the discussion that ensued did not clarify what footage the 2nd draft setbacks had been for high occupancy buildings, homes or waterways.)

CDPHE's recent study shows that living within 2,000 feet from oil and gas facilities is associated with adverse public health. The County needs to adopt at least a 2,000 foot setback for all homes, high occupancy buildings, and water resources, as well as an impact assessment process to require greater setbacks if necessary.

- Note: per another recommendation by Planning Commission, the County staff does not have to review for compliance with State Regulations until 120 days after the State regulations are completed. The major State Rulemaking for SB-181 will be completed by June 30. However, additional State Rulemaking is expected to continue until the end of 2020. Does this mean that

the weak County regulations will continue to support well permits into 2021? Well permits, issued under lax regulations, for wells that may be grandfathered in and produce for 40 years?

- 17.3.B.3 says that the BOCC may, by appeal, allow a reduction of setbacks if operator demonstrates that setbacks prohibit access to mineral interests being sought. This is in direct conflict with current waste and takings legal application; Larimer County has the right to deny permits if they do not meet setback standards. Again, saying that Oil and Gas Company's "right" to access the minerals is the priority-- in direct contradiction to SB-181 which instructs regulations to prioritize public health, safety, welfare, environment and wildlife-- and ignoring current "waste and takings" legal precedent.
- If the County feels that it absolutely *must* include a variance to the setback requirement, we strongly urge the BOCC to adopt a procedure that requires gaining the permission of all potentially impacted landowners, building owners, residents, and tenants, and require disclosure of the setback variance in any transfer of property within the normal setback boundary.
- Regulations also no longer specify that stronger standards will apply if other agencies' standards are more protective.

We ask that the BOCC instruct that Planning Department restore the 2000 foot setback provision for high occupancy buildings. We ask that the 2000 foot setback apply to homes, as well, based on the CDPHE's recent findings, and the larger body of work showing the potential for adverse health impacts associated with proximity to oil and gas development.

Air Quality: The Planning Commission at the Feb. 19 Hearing recommended air quality baseline testing at each new well pad. The type of testing was not specified. **We ask that the BOCC approve this recommendation and specify the type of air quality baseline testing.**

- Proposed regulations are especially weak regarding air quality. Larimer County is categorized in "serious" non-attainment of surface ozone requirements set by the federal EPA, yet these regulations only say that oil and gas facilities shall "avoid" or "mitigate" adverse impacts to air quality.
- Flaring, a great detriment to air quality and a contributor to greenhouse gases, is allowed "during emergency or upset conditions" as defined by the operator. It is not acceptable to let operators determine which emergencies require flaring.
- **24/7 continuous air quality monitoring is needed to adequately assess the true quality of the air we are breathing.**
- There is no fee and penalty framework for operators violating Air Quality standards.
- And, specifically, "emissions controls for glycol dehydrators of 95%" were deleted from the regulations.
- Nowhere in the proposed regulations is there mentioned an attempt to get oil and gas operations in Larimer County to net-zero emissions.

Leak Detection & Repair:

- An expedient time frame for repair and inspections and report to Larimer County inspectors needs to be included in these regulations.
- The regulation requiring **verified leaks to be reported to the County** LDG (in 2020 that is Matt Lafferty) and the County Health Department within 24 hours **was removed entirely in these proposed regulations.**
- As written inspection and corrective action are only reported to the County upon request.

- There is no public notification of leaks and mishaps, and no public portal that allows citizens to be informed of leaks.
- There is no clear definition of what size leak or emission is considered an imminent safety risk to trigger mandatory reporting. Regulation 17.3.D.4 only says, "Equipment leaks that pose an imminent safety risk to persons, wildlife, or the environment shall undergo emergency shut down and not be allowed to operate until the operator has provided evidence that the leak has been repaired." Operators should not be allowed the position of determining what constitutes a safety risk.

Odors:

- The change that puts PHSWEW most at risk is that **the chemical list, printed in the first draft was removed from the regulations.**
- Another change that the "Larimer Alliance" takes issue with is that operators are given *choices* of how to notify residents of well completion when chemicals will be used that can cause significant health impacts.
- Against prior LOGIC/LAHSE recommendations for PHSWEW, regulations now allow added odorants and increased additives during peak hours.
- Shale shakers to contain fumes from exposed mud, now are required only if "safe and feasible". Wording like "if feasible" is no longer acceptable per state regulations.

Water: The Planning Commission approved and recommended King Operating's requested change: "The requirements of the Section 17.3.L.6 shall not prevent discharges or beneficial uses of water permitted by CDPHE Water Quality Control Division or another agency with jurisdiction".

- At the Planning Commission hearing, an operator described their practice of discharging produced water into Boxelder Creek. This is utterly unacceptable. **Before an operator is allowed to discharge any produced or other waste water into a surface water body, they must prove that the water has been treated to be consistent with the baseline quality of the surface water body.**
- Larimer County must require a description of where the operator will get water necessary for their operations, and how the produced water will be disposed of in advance.
- Larimer County must include a prohibition on the use of deep waste water disposal wells
- Proposed regulations should specify that operators plan for testing, prevention of discharge, storm water management, containment of pollutants and spill notification. None of those areas are covered in the proposed regulations.
- **Allowing O&G facilities to locate within 100 year floodplains if "no other location is feasible" is unconscionable.** These areas WILL flood at some point; our groundwater will be contaminated. Allowing such practices does not conform with the provisions of SB19-181.
- The regulations say they will "Avoid impacts to surface and groundwater", whereas to protect Public Health, Safety, Welfare and the Environment and Wildlife (PHSWEW), "No adverse effects" should be allowed.
- Does not require operators to post reports of water source testing nor post-closure assessments online for public access and transparency.

Spills and Releases:

- The 2nd draft said that "A Spill Prevention Control and Countermeasure Plan" must be submitted. Now only requiring a "Spill Prevention and Containment Plan". These regulations should require an operation to demonstrate the ability to control, contain and remediate all damage from leaks and spills.
- There is no notification to the public of spill reports, and no available public record of spills.
- Only "recommended" annual training for emergency service personnel.
- Operators should be required to provide topographical maps showing the location of the spill and measures for immediate mitigation. Site investigation should occur.
- Spills and releases impacting or threatening any waters of the state, residences or occupied structures, livestock, public byways should be verbally reported to the LDG and followed by a written report within 24 hours. This should be shared with the public.

Noise and Mitigation: The League of Oil and Gas Impacted Coloradans (LOGIC) and Larimer Alliance for Health Safety & the Environment (LAHSE) submitted significant recommendations to the County regarding Noise regulations that are an "imperative component...to protect" PHSWEW.

- Regulations have no continuous monitoring required at 350, 500, 1000 feet from sound barrier, per LOGIC/LAHSE recommendation.
- Construction of O&G's including drilling, well completions, recompletions, and pipeline installations can use maximum permissible noise at the "Industrial Standard" (80 db. daytime; 75 db. night). **This allows INDUSTRIAL level noise in RESIDENTIAL neighborhoods. This is unacceptable; LOGIC and LAHSE recommended 65 db.**
- No county complain line offered for citizens to have ready access to register disturbances due to excess noise.

Vibration The County regulations insignificantly addressed vibration, which is a major concern for residences and any occupied buildings

- Should require instrumentation and reporting of all vibration within 500 feet of existing and 2000 feet of new facilities. Intensive vibrations should be restricted within 2000 feet of residential, commercial areas and waterways.
- Reports to the County and COGCC of seismic activity above 1.0 on the Richter Scale should be required. Any seismic activity above 2.0 on Richter Scale should require immediate cessation of operation.

Dust

- Dust suppression should be within 1000 feet of the high-water mark of any water body-- not 300 feet, as in the proposed regulations. Oil and gas operations can cause "dust" that contaminates water bodies beyond 300 feet.

Well Plugging and Abandonment:

- **The regulations do not require geo-mapping, which is now part of COGCC Flowline Rulemaking Regulations.** Instead county regulations only require coordinates of locations for decommissioned wells and any associated gathering or flowlines. This does not meet state standards and thus is unacceptable.

- The current regulations say that locations of pipelines will be evaluated on a case-by-case basis. COGCC has specific regulations and more Alternative Siting regulations upcoming this spring.
- Notice to the County LDG does not have a time requirement; we recommended 48 hours.
- Public access to this information is obscured and difficult, if not impossible, to find.

Flowlines, Transfer Lines and Gathering Lines:

- **State Rulemaking on Flowlines is complete, with detailed requirements. The County's regulations should include the requirement that all flowlines follow state law.**
- **The County should require an inventory of existing gathering lines. Not knowing where existing and future lines lay is dangerous and concerning.** Future leaks, explosions, and inadvertent accidents are a high risk. WHY would we not require an inventory?
- The County should develop a reverse setback from existing pipelines based on explosion hazards that would not allow new residential (or other) development in the zone of danger around existing transportation infrastructure.
 - Josh Joswick provided a detailed slideshow about the public safety aspects of flowlines at a BOCC meeting on January 14, 2020. This is extremely important because such lines fall into a “regulatory gap” that is not covered by other regulations at the state or federal level.

Financial Protection for County Residents: Financial protections are very weak in these regulations. There is only one source for Fees and Security for Reclamation and an unclear process for validating operator financial foundation and stability.

- O&G operators/companies should be required to provide current information about their financial condition, proof of financial strength and adequate liability insurance, and disclose records of past financial, operational, or employee-related citations or violations.
- Operators should be required to post financial security bonds of \$100,000 per wellbore as insurance for future clean-up and capping costs in the event of default, bankruptcy, or other failure to properly clean up, cap, and remediate wells/sites. This \$100,000 figure is vital as the state of Colorado estimates that it costs an average of \$86,000 to reclaim a single well.
- Oil & gas production reports should be verified by independent qualified monitors, to ensure accuracy and prevent under- or false reporting.
- The county has not provided citizens with a revenue assessment relating to oil and gas production. This would include figures such as the operators’ forecast of royalties, property tax and application fees, along with the cost for independent monitoring of air and water quality, and costs to clean-up existing or future releases of poison. Citizens should not be responsible for these costs.
- Larimer County must also adopt a meaningful set of fees and fines for operators that are not complying with these requirements. In their current state, the draft regulations contain no real compliance-enforcing mechanisms. Oil and gas operators across the state have made it clear that they do not deserve the level of trust that these draft regulations currently grant. 75% of operators in the state have failed to properly file even the simplest production reports with the state. This is not an industry that can be allowed to self-regulate and self-report. The regulations need clear enforcement mechanisms, and clear penalties for non-compliance.

Drilling in or under Open Spaces

- The proposed regulations open the door to oil and gas development in our Larimer County Open Spaces. These lands were preserved by tax dollars for the protection of the land and wildlife and the enjoyment of our residents. Most tax payers are not aware and have not been consulted. **It is incumbent upon our County to protect our public lands.**

Public Process for Leasing County Owned Minerals

- **Decisions around the management of county-owned minerals must be made in view of the public--** during public meetings, recorded for access, and publicized to inform the taxpayers who own this land. These are OUR mineral rights.

Additional significant problems throughout the regulations that minimize and reduce protections:

- **No geo-mapping requirements-- Which is required under new COGCC Flowline Rulemaking.**
- Weak language: "avoids impacts to surface and ground water", instead of "no adverse impacts"
- **Opens the door to exploratory drilling!!!**
- NO Public process of notification of permit application within one mile, however, the Planning Commission (Feb. 19 Hearing) recommended increased "Notification: All O&G applications shall have a minimum APO notification boundary of ½ mile(2,640 feet) for all neighbor referral, neighborhood meeting and public hearing notices, as outlined in Section 12.2.4. and Section 12.3. of this code" We ask that the BOCC vote to be included in the final regulations.
- NO Public disclosure of all documents submitted to the County.
- NO Independent Risk Analysis (except for"complex technical issues")
- NO Public neighborhood meetings 30 days before well-pad hearing
- NO Detailed process of submission of materials by operators
- Standards no longer apply to ALL O&G Facilities; the word "all" was removed.

Additional Recommendations made by Planning Commission at Feb. 19 Hearing:

1. Recommendation to increase signage at proposed well sites to 1 sign per access way on the property is greatly appreciated and **we ask the BOCC to approve this recommendation.**
2. Upon condition of approval by the Planning Commission: Regulations will include a review of Section 17 of the Larimer County Land Use Code for consistency and compliance in comparison of state of Colorado Oil and Gas Regulations within 120 days of the State completing regulations. The bulk of the State Rulemaking will be completed by July 2020. However, additional Rulemaking is to continue through the end of the year. (The Planning Commission was told that the Rulemaking would be complete this summer.)

It is unacceptable that the County's regulations, if they are below the "basement" of the State regulations, would continue to be operational and that the County would not do a comparative review until 120 days after the State Rulemaking is completed. This could mean well permits could continue to be granted under County regulations that do not meet State Law for a significant number of months. **We ask that the review period be shortened to 30 days and that a specific date for review be added. (e.g. June 30, 2020 when the bulk of the State Rulemaking will be completed.)**

3. The Planning Commission made a recommendation that the Larimer County Oil & Gas Regulations be reviewed two years after adoption to revisit adding an administrative review process to the regulations. **The Larimer Alliance for Health, Safety & the Environment strongly objects to any form of "Administrative Review" which would allow an operator to avoid or bypass any aspect of due diligence with the well permitting process.**
4. Planning Commissioner Barnett asked for review of the section allowing well pads within 100-year floodplain if no other siting is possible. Barnett asked that county engineers review this section of regulations. The motion failed. **Well pads should not be placed in floodplains and waste and takings precedent gives the County full reign to deny permits in these cases.**

In summary, the Larimer Alliance for Health, Safety & the Environment appreciates the opportunity to submit our well-researched points to support compliance with Senate Bill 181 and the State's soon-to-be completed regulations. We hope that the County is sincere in its diligence to protect its people, land, natural resources and wildlife.

In all aspects of oil and gas regulations, Larimer Alliance for Health, Safety & the Environment maintains that the Board of County Commissioners for Larimer County and the County Planning Department work for and protect its citizens, rather than promote oil and gas development to the detriment of Larimer County residents. We have legal standing to demand that Larimer County prioritize Public Health, Safety, Welfare, the environment and wildlife.

FINAL DRAFT
Comments by
LOGIC



March 5, 2020

Larimer County Commissioners
200 W. Oak Street
Ft. Collins, CO 80521
CC: Matt Lafferty, Lesli Ellis, Tom Gonzales

RE: Larimer County Draft Oil and Gas Regulations

Dear Commissioners Johnson, Donnelly and Kefalas, and Mr. Lafferty, Mr. Gonzales, and Ms. Ellis,

The League of Oil and Gas Impacted Coloradans (LOGIC) appreciates the opportunity to submit comments to the Larimer County Commissioners regarding the County's draft oil and gas regulations prior to the County Commissioners' hearing on March 23rd.

LOGIC and the Larimer Alliance for Health, Safety, and the Environment (Larimer Alliance) have participated extensively in the drafting process for these regulations. We have submitted extensive written comments on both the first and second drafts of the regulations, as well as letters on the extent of local authority to regulate to protect public health, safety, and welfare, the environment, and wildlife resources under SB19-181 as they relate to takings claims. We also attended the Planning Commission hearing on February 19th, where LOGIC's deputy director and numerous members of the Larimer Alliance made public comments.

At every opportunity, we have provided detailed and extensive recommendations to County planning staff and supported them with scientific evidence and examples from other jurisdictions. Throughout this process, our goal has been to inform the County and to provide support for regulations that would effectively protect the health, safety, and welfare of Larimer County residents, the environment, and wildlife resources.

Unfortunately, we have watched as the draft regulations have gotten *weaker*, not stronger. Despite extensive evidence to the contrary, our common sense suggestions have been largely dismissed as arbitrary, unnecessary, or simply disliked by planning staff, and were not adopted by a majority of the Planning Commission. We submit this letter to you, the County Commissioners, to reiterate our concerns with the draft regulations, and to encourage you to look through the record provided by your residents and adopt meaningful regulations that are actually protective.

Sincerely,

Andrew Forkes-Gudmundson
Deputy Director
League of Oil and Gas Impacted Coloradans
Andrew@coloradologic.org
(507) 421-9021

FINAL DRAFT
Comments by
Mary Bodesky

March 5th, 2020

Dear Larimer County Commissioners and Staff,

As a member of the Larimer County oil and gas task force in the minority, it is my position the proposed regulations do not offer adequate protections for public health, safety, and welfare, environment and the wildlife (PHSWEW). Oil and gas development is an industrial activity with unique industrial risks and nuisances which are not adequately addressed with these proposed regulations. Larimer County has been granted new authority under SB-181 to go beyond state standards to better protect citizens, wildlife and the environment. I recognize my position was not the prevailing position of the majority of the task force. However, I ask you give careful consideration to the requests within this report, which I believe will enhance the proposed regulations to better protect our community.

I ask the County please consider the following modifications, which are discussed in further detail below:

1. Reinsert recompletions and exploratory wells into applicability section
2. Add an additional processing time provision for comprehensive drilling plans
3. Include protective setbacks from homes, schools, high occupancy buildings and water resources, as well as reciprocal setbacks from existing sites
4. Provide enhanced air quality regulations and monitoring above state standards
5. Prohibit use of hydrocarbon-based drilling fluids within 2,500 feet of an occupied building
6. Require bonding and fees to cover full costs of operations through reclamation
7. Require enhanced baseline water testing
8. Do not allow sites within the floodplain
9. Reinsert prohibited hydraulic fracturing chemicals list
10. Set time constraints on duration of drilling and completions
11. Address safety concerns with allowed discharges of produced water

12. Express County's authority to require operator cease activities if out of compliance
13. Include County inspection and enforcement authority details
14. Require mapping of all nearby oil and gas facilities as requirement of application
15. Assert the County's authority to deny or condition a permit

Thank you for your consideration of these items which are discussed in further detail below. I appreciate your time and welcome any questions.

Sincerely,
Mary Bedosky

Please consider amendments to the proposed regulations to address these specific areas of concern:

17.1.D- Applicability: Please reinsert recompletions and exploration wells.

Surrounding circumstances can change from the time a well was initially drilled to the time a recompletion request may occur, including the proximity of that well to homes, water resources, wildlife habitats, schools or other high occupancy buildings, and pipeline access. In order to protect citizens, wildlife and the environment, recompletion requests (including any request to redrill a well which has previously been completed) should be thoroughly evaluated just as new oil and gas site applications are. I would also ask exploratory wells be included as these carry risks and nuisance impacts similar to other wells.

17.2.D. Please allow additional processing time for any comprehensive drilling plans or submission of multiple applications by a single operator simultaneously. County staff will need additional time to evaluate each individual application thoroughly and additional time should be allowed for public engagement. If an applicant submits plans for two or more facilities, I suggest procedures also include an informational public

open house 60 days prior to any hearings and at least one discussion-only meeting with the Board of County Commissioners and the Planning Commission at least 30 days prior to any hearings.

17.3.B. Setbacks: Based on available data, I support setbacks of *at least* 2,000 feet from occupied structures and high occupancy buildings, 2,000 feet from the perimeter of school properties and outdoor recreational areas and 500 feet from water resources. I understand these regulations will be reevaluated after state rulemaking if the Planning Commission's recommendation of such remains. The information gained from state rulemaking, other local government regulation updates and any additional research made available during that time will be useful in making a more accurate long-term determination of setbacks. I request the County take a protective approach during the interim. A setback of at least 2,000 feet from the perimeter of school properties and outdoor recreation areas is advised due to emissions exposure having a greater potential impact on children when playing outside and participating in sports. Children are inherently more sensitive and vulnerable to emissions released with oil and gas development. Although the following study "Human Health Risk Assessment for Oil & Gas Operations in Colorado" released by CDPHE in October 2019 demonstrates risks under worst case scenarios, it is imperative to protect children from these increased risks by enacting adequate setbacks now.

https://drive.google.com/file/d/1pO41DJMXw9sD1NjR_OKyBJP5NCb-AO0I/view

I also urge you include reciprocal setbacks for any new development from an existing well site to better protect the public's health and safety, as well as allow adequate space for any possible well maintenance activities. I recommend 500 feet for new residences and 1000feet for high occupancy buildings, which is also consistent with current regulations in Fort Collins and Loveland.

Fort Collins reciprocal setbacks are 500 feet from dwellings and 1000ft from high occupancy buildings. No playgrounds, parks or community gathering places allowed

within the 500 feet. Variance considered down to 150ft for P&A wells after soil, water and air testing.

http://webcache.googleusercontent.com/search?q=cache:rWffBBoVNvEJ:citydocs.fcgov.com/%253Fcmd%253Dconvert%2526vid%253D72%2526docid%253D3237709%2526dt%253DAGENDA%2526ITEM%2526doc_download_date%253DAUG-21-2018%2526ITEM_NUMBER%253D24+&cd=8&hl=en&ct=clnk&gl=us&client=safari

Loveland reciprocal setbacks are 500 feet from all buildings, except high occupancy buildings are 1000feet

<http://www.cityofloveland.org/home/showdocument?id=21299>

Numerous comments were provided by industry workers in this Larimer County survey from August, 2019 advocating for reciprocal setbacks:

https://www.larimer.org/sites/default/files/uploads/2019/final_oil_and_gas_questionnaire_composite_-_2019.08.30.pdf

17.3.C.1. I agree with the need for more accurate data and support the planning commission's insertion of baseline air monitoring required. I suggest specifics be included to allow this data to be useful, such as that proposed by Broomfield:

From Broomfield's draft regulations:

“ Protocol, subject to City approval, for air monitoring plan to be conducted by a qualified third-party. Air monitoring plan shall describe how the operator will conduct baseline monitoring within 500 feet of a proposed facility prior to construction and during all phases of development, including drilling, completion, production and operation. The plan shall include monitoring for all potential emissions, including but not limited to, methane, VOCs, Hazardous Air Pollutants (HAPs), BTEX, Hydrogen Sulfide, Oxides of Nitrogen (NOx), Particulate Matter (PM), Fine Particulate

Matter (PM 2.5), Carbon Monoxide (CO) and methane (CH₄), carbon dioxide (CO₂). Operator shall pay for the baseline and ongoing monitoring.”

17.3.C.3.b. When flaring is allowed during emergency or upset conditions, please require operator notify the County within 24 hours providing details and an explanation. This information should also be made publicly available on the County’s oil and gas webpage.

17.3.D.3. Please require repair of leaks to occur within 36 hours instead of 72 hours. If it is anticipated that leak repair will take longer than 36 hours, the operator shall provide a written explanation to the LCDHE and the LGD as to why more time is required and how the leak will be contained. If a leak is not repaired within 72 hours, the O&GF shall be shut-in until the leak is repaired. The fugitive emissions spared with this change could be significant.

<https://www.wsj.com/articles/the-leaks-that-threaten-the-clean-image-of-natural-gas-11565280375>

Please consider the benefit of a county owned/operated infrared camera and/or 3rd party independent leak detection performed yearly. Average cost \$450 per inspection

<http://www.methanefacts.org/files/2016/05/LDAR-Fact-Sheet-FINAL.pdf>

In addition to current regulations proposed, I suggest facilities within 2,500 feet of an occupied structure undergo an additional yearly leak detection inspection performed by an independent 3rd-party inspector selected by the county and paid for by the operator, follow up inspection would be required after any leak repairs. Total cost to applicant not to exceed \$800?/year/site.

17.3.E.5.f Please only allow non-diesel based drilling muds that do not contain BTEX to be utilized for sites within 2,500feet of an occupied building. The odors associated with

hydrocarbon-based drilling muds can have a significant impact on sensitive individuals.

17.3.F.2. Please consider the need for improved baseline and subsequent water testing as suggested by CSU Professor Thomas Borch, who has done extensive research in this area:

“Baseline monitoring is insufficient since the current rules only require baseline monitoring at a minimum of two groundwater sources in 1/2-mile radius before and after drilling an oil and gas well and thus will not detect a potential spill before it’s too late (due to the often long distance between the spill and the first monitoring well – groundwater moves VERY slow) or they will never know there was a spill because the monitoring wells are not located within the groundwater (GW) flow direction (and thus the contaminant plume will never be detected). Thus the need to first determine the actual GW flow direction and then place several monitoring wells both upgradient and downgradient relative to the fracking wells within the GW flow path.”

It is my suggestion the county consult with a soil and water quality expert to help develop an improved water quality monitoring system and standards. The ramifications of inadequate testing could be significant.

<https://www.sciencedirect.com/science/article/pii/S0048969718325245>

<https://www.nrdc.org/sites/default/files/fracking-drinking-water-fs.pdf>

17.3.F.4 I do not feel it is in the best interest of this community to ever allow drilling within the floodplain. Please do not make exceptions. The risks are too great.

17.3.G.7 Please add all reportable spills and remediation details will be shared on the County’s oil and gas webpage within 24hours. Transparency of incidences and accountability may also create further motivation to prevent spills in the first place.

17.3.K. Hydraulic Fracturing Prohibited Chemicals List:

This list of chemicals was initially included in the first draft regulations, but was removed from subsequent versions by county planners due to feedback from industry. Industry stated the chemicals related to downhole activity and, thus, the county should not be regulating. It is my understanding the County has authority to regulate chemicals which are stored, transferred, transported and prepared above ground. Local governments are granted authority to avoid and mitigate impacts to water quality and source. SB 19 -181. CRS 29-20-104 (1) (h). These chemicals pose a greater risk for ground water contamination from spills or releases due to their increased mobility and persistence. This list of prohibited chemicals is included in Adams County's final oil and gas regulations adopted September 2019, Erie's November 2019 Operator Agreement with Crestone Peaks Resources and Broomfield's October 2017 Operator Agreement with Extraction Oil and Gas. This has not prevented operators from moving forward or pursuing new plans in these jurisdictions. It is also included in COGCC's 400 series rulemaking draft changes for rule 411. The list is based on the following study from Colorado University's AirWaterGas program, which analyzed 659 chemicals:

Rogers et al., 2015. A framework for identifying organic compounds of concern in hydraulic fracturing fluids based on their mobility and persistence in groundwater. *Environmental Science and Technology Letters*. 2 (6): 158-164 (<https://pubs.acs.org/doi/abs/10.1021/acs.estlett.5b00090>).

I support the inclusion of this regulation into section 17.3.K:

The following toxic chemicals shall not be utilized in the hydraulic fracturing fluid:

- Benzene
- Lead
- Mercury
- Arsenic
- Cadmium
- Chromium

- Ethylbenzene
- Xylene
- 1,3,5-trimethylbenzene
- 1,4-dioxane
- 1-butanol
- 2-butoxyethanol
- N,N-dimethylformamide
- 2-ethylhexanol
- 2-mercaptoethanol
- Benzene, 1, 1'-oxybis-,tetrapropylene derivatives, sulfonated, sodium salts
- Butyl glycidyl ether
- Polysorbate 80
- Quaternary ammonium compounds, dicoco alkyldimethyl, chlorides
- Bis hexamethylene triamine penta methylene phosphonic acid
- Diethylenetriamine penta
- FD&C blue no 1.
- w.Tetrakis (triethanolaminate) zirconium (IV) (TTZ)

17.3.L.6. I am concerned about the potential for water contamination with allowed activities under this regulation. Please consider adding requirement to test for radioactivity prior to discharge. Do not allow produced water or recycled water to be used in surface applications, such as dust suppression

Please ensure PHSWEW are being considered and please restrict permitting of all injection wells within the county.

<https://pubs.acs.org/doi/pdf/10.1021/acs.est.6b00428>

17.3.V.1. Financial Assurance:

The current bonding requirements of the state are inadequate to cover the costs to fully reclaim a site.

https://cogcc.state.co.us/documents/about/TF_Summaries/GovTaskForceSummaryPermitting_Bonding.pdf

The COGCC estimates the cost to plug and abandon an orphan well at \$82,500. The potential cost to P&A an unconventionally drilled well may be higher with increased drilling depths. Please consider the liability to citizens with operators who may not be able to stay in business. Newer wells may cost an average of \$100,000 each to properly plug and abandon. I suggest the County require bonding of at least \$10,000/well, in addition to state requirements, to bridge some of this potential deficit that puts taxpayers at risk.

<http://insideenergy.org/2015/10/01/the-rising-cost-of-cleaning-up-after-oil-and-gas/?fbclid=IwAR3ze0UUEbxrJ5wQpljrn1RoJbD0BlrjOYp10vJ7zOYVvH0bKo187slAaOs>

17.3.W Permit Time Constraints:

I suggest the County consider implementing some system of time constraints on the permit due to the significant impact intermittent operations (drilling a few wells every couple years) can have on nearby residents and wildlife. Please consider Superior's draft time constraints as a guide:

- (1) The term of the permit shall be for two (2) years except as otherwise stated herein. Upon issuance of a COGCC permit allowing drilling or operations on the well site that is the subject of the Town's permit, the term of the permit shall automatically become coterminous with the COGCC issued permit (including individual well permits) unless the permit has otherwise expired, lapsed, revoked, forfeited, abandoned, or otherwise terminated.
- (2) Upon issuance of a permit, and notwithstanding any other provision in this Code, the total number of wells approved in the Oil and Gas Permit must be drilled and completed within three (3) years of permit approval. Failure to do so shall constitute the forfeiture of the authorization and right to drill any undrilled wells.

Authority to drill forfeited wells can only be obtained by amending the existing Oil and Gas Permit or issuance of a new Oil and Gas Permit. (3) If requested by the applicant at any stage of the permit review process including prior to approval of operations by the COGCC, the Town Manager may extend the duration of permit by up to six (6) months if:

- a. The permit has not yet expired;
- b. The permit recipient has proceeded with due diligence and in good faith; and
- c. Conditions have not changed so substantially as to warrant a new application.

17.6.A.a A Capital Transportation Impact Fee:

Please require a thorough analysis of anticipated impacts to roadways and set a fee to adequately cover the costs. Consider a higher fee for facilities not utilizing pipeline. This Douglas County Transportation impact study demonstrates the potential discrepancy between revenue generated by oil and gas and annual road improvement costs (graph on pg 66 summarizes).

<https://www.douglas.co.us/documents/oil-and-gas-study.pdf>

I emphasize my support of the following sections:

17.2: Due to the complexity of applications and the need for extensive review and judgement with each application, I support the Special Review process for all applications.

17.2.C Notifications: To allow for better transparency and public involvement, I support the Planning Commission's decision to extend the required notification boundary to 2,640 feet.

I, again, thank you for your consideration and am grateful for the opportunity to provide feedback.

Sincerely,

Mary Bedosky

FINAL DRAFT
Comments by
Occidental



Occidental Petroleum Corporation
1099 18th Street
Denver, CO 80202
(720) 929-6000

March 4, 2020

VIA EMAIL

Matthew Lafferty
LARIMER COUNTY
Community Development Department
200 W. Oak Street, Suite 3100
Fort Collins CO 80521

RE: Proposed Larimer County Oil and Gas Regulations

Dear Mr. Lafferty,

Occidental Petroleum Corporation (“Oxy”) sincerely thanks you for the opportunity to comment on the County’s latest draft of oil and gas land use regulations reflective of the changes made by the Planning Commission and dated February 28, 2020. Oxy fully supports the County’s efforts to update these regulations based on the new requirements of Senate Bill 19-181 and appreciates the opportunity to participate in the Oil and Gas Task Force.

There are two related topics concerning the siting of oil and gas locations that Oxy respectfully requests the County Commission consider in its review of the proposed regulations. These issues are discussed below.

Setbacks

Oxy is concerned about the Planning Commission’s addition of a one size fits all County wide setback that was incorporated contrary to the proposal from County staff. The siting of an oil and gas location is a lengthy and complex process involving several factors, surface and subsurface limitations and multiple stakeholders.

The Larimer County Oil and Gas Task Force dedicated a significant amount of time to work with County staff to develop “effective local regulations to supplement State regulations that mitigate impacts on land use and public health and address industry changes”. Ultimately, the Task Force did not recommend a county wide setback nor did County Staff include a setback in the last draft released on February 5, 2020.

Oxy supports Staff’s February 5, 2020 draft and urges the Commissioners to support the thorough technical analysis performed by the Oil and Gas Task Force and Staff, and reject the setbacks added by the Planning Commission.

The proposed Special Review application process requires a public hearing, notice and community outreach requirements and mitigation and compatibility standards in combination with site specific Best Management Practices (“BMPs”) and development of an Alternative Location Analysis process as described below, is a much better approach to regulating siting of oil and gas locations than a one size fits all setbacks.

Alternative Location Analysis as Part of the Permit Process

Oxy recommends that the County incorporate a detailed Alternative Location Analysis (“ALA”). A comprehensive ALA will be a valuable tool for county staff when evaluating siting and compatibility of a proposed oil and gas location.

Oxy suggests the ASA include the following:

1. A comprehensive siting rationale for the preferred location; AND
2. An analysis of alternative locations that were evaluated and why these lands were not selected; AND
3. Discussion of best management practices that the operator will implement to minimize and mitigate impacts of development; AND
4. Discussion of community outreach already conducted or planned.

In addition to the above; Oxy recommends the County work with the Colorado Oil and Gas Conservation Commission as it updates its permitting process outlined in the draft 300-Series regulations.

As always, Oxy is willing to discuss the concepts outlined in this response at any time. Thank you for your consideration to these suggested changes to the County's proposed oil and gas regulations.

Sincerely,

Kim M Cooke

Kim M Cooke, Director Regulatory Policy
Occidental Petroleum Corporation

FINAL DRAFT
Comments by
Platte River

17.0. – OIL AND GAS FACILITIES

17.1. – Intent and Purpose.

- A. **Intent.** The intent of this section of the Land Use Code is to establish a regulatory framework for new oil and gas facilities (O&GFs) to be located in the unincorporated areas of Larimer County in a manner that acknowledges private property rights and protects the public health, safety and general welfare, protects environment and wildlife, and minimizes adverse impacts.
- B. **Authority:** C.R.S. 29-20-104-(1) provides the County authority to regulate and review applications pertaining to the surface development of O&GFs.
- C. **Purpose:** These regulations are necessary to:
 1. Ensure a comprehensive land use process and transparent public process for the development of new O&GFs, in the unincorporated areas of the County.
 2. Provide for the managed development, installation, maintenance, modification, reclamation and removal of O&GFs without unreasonably discriminating against oil and gas developers and operators, or mineral interest owners.
 3. Minimize to the maximum extent possible the nuisance effects of O&GFs through the application of best available techniques and technologies.
 4. Promote and protect the public health, safety and welfare, and protect the environment and wildlife by minimizing the adverse impacts of O&GFs.
 5. Maximize protection of natural and cultural resources and public facilities.
 6. Encourage O&GF's to strategically locate where adverse impacts from such operations can be avoided.
 7. Minimize and mitigate the extent and severity of adverse impacts that cannot be avoided.
 8. Confirm the financial, indemnification and insurance capacities of the oil and gas developer/operator to ensure timely and effective construction, production, removal and reclamation of O&GFs and infrastructure.
- D. **Applicability:** These regulations shall apply to all new O&GFs, to be constructed on any property in all zoning districts in the unincorporated portions of Larimer County.
- E. **Severability:** If any section, clause, provision, or portion of these regulations should be found to be unconstitutional or otherwise invalid by a court of competent jurisdiction, the remainder of the regulations in this section shall not be affected thereby and is hereby declared to be necessary for the public health, safety and welfare.

Commented [SC1]: The reference to discrimination here is inappropriate. Discrimination means being treated differently because of a protected characteristic. The purpose of these rules is not to prevent discrimination, but to protect the public health and safety while acknowledging private property rights.

17.2. – Review Procedures and Required Permits.

- A. **General Requirements.** No person, firm or corporation shall establish, construct, or build a new O&GF, without first having obtained required land use approval(s) and permits as required by this Code. Applications to the County for new O&GFs, may be submitted simultaneously with the Colorado Oil and Gas Conservation Commission (COGCC) permitting process.
- B. **County Review Process:** All new O&GFs, in the unincorporated portions of Larimer County shall require approval of a Special Review application for the proposed facility as set forth in Section 4.5 of this Code. Application and submittal requirements for O&GFs are specified in the following Community Development Department application handouts:
 1. Sketch Plan Review Application and Submittal Requirements for Oil and Gas Facilities.
 2. Neighborhood Meeting Submittal Requirements and Guidelines for Oil and Gas Facilities.
 3. Special Review Application and Submittal Requirements for Oil and Gas Facilities.
- C. **Notification:** All O&GF applications shall have a minimum APQ notification boundary of ½ mile.

Commented [SC2]: The application submittal requirements should include proof that a surface use agreement has been executed with the property owner, or evidence that the applicant has made a good faith effort to negotiate a surface use agreement. This evidence may include a copy of the proposed agreement that was last submitted to the property owner (with confidential information redacted).

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(2,640 feet) for all neighbor referral, neighborhood meeting and public hearing notices, as outlined in Section 12.2.4. and Section 12.3. of this code.

C. D. County Permits. Prior to the commencement of any construction activity for an O&GF, all required permits for such facilities shall be approved. Required permits include, but are not limited to:

- 1. Access permits,
- 2. Development construction permit,
- 3. Building permits for all qualifying buildings and structures,
- 4. Electrical permits, and
- 5. All federal, state and local permits.

D. E. Non-County Permits: County approval of an O&GF shall not relieve the landowner or applicant of the responsibility for securing other permits or approvals required by any other applicable County Departments, local fire district, municipalities, or other applicable public agencies.

F. Technical Expert Review: Applications for O&GFs may involve complex technical issues that require review and input that is beyond the expertise of County staff. If such a situation arises, the Community Development Director may commission a third-party review of the relevant subject matter and require the applicant to pay reasonable costs for the third-party review. Selection of a third-party expert(s) to review portions the proposal will be at the discretion of the County.

17.3. – Standards Required for Oil and Gas Facilities.

A. General:

- 1. In addition to the standards and requirements of this Section 17, all other relevant standards and regulations set forth in this Code shall also apply.
- 2. All applications for new O&GFs, shall meet all applicable federal, state and local standards and regulations pertaining to the development and operation of such facilities.

B. Setbacks:

- 1. Setbacks for O&GFs shall be 1,000 feet from building units, including high occupancy building units, or as required by the rules of the COGCC, whichever are greater. All other setbacks from natural and manmade feature as required by the rules of the COGCC shall apply. ~~Setbacks for O&GFs shall conform to Section 604. SETBACK AND MITIGATION MEASURES FOR OIL AND GAS FACILITIES, DRILLING, AND WELL SERVICING OPERATION of the 600 Series Safety Regulations of the COGCC Rules and Regulations.~~
- 2. To achieve the objectives of Section 17.1.C., the Board of County Commissioners may, on a case by case basis, require setbacks greater than required by 17.3.B.1. above. by the COGCC.
- 3. The Board of County Commissioners may, by request appeal, allow a reduction of the COGCC setbacks required by 17.3.B.1. above when it has been determined that the applicant has adequately demonstrated that the setbacks prohibit access to the mineral interests being sought, and/or the reduced setbacks will achieve and mitigate to the extent necessary the objectives of this code or the expectations of the Board of County Commissioners.

C. Air Quality:

- 1. **An Air Quality Report and Plan** shall be submitted with all O&GF applications. The report/plan shall include baseline air quality data and demonstrate how the development and operation of the facility will avoid and/or mitigate adverse impacts to air quality and demonstrate compliance with and implementation of standards in Sections 17.3.C. and 8.11 of this Code.

Commented [SC3]: This language permits the County to approve setbacks that are *less than* those required by the COGCC (contrary to the intent of these regulations). This section should be revised to ensure that a reduced setback will not be approved if it would be less than the setback required by the COGCC.

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- 2. In addition to all federal and state laws, rules and regulations, applications for O&GFs shall demonstrate how exploration, construction and standard operations of a O&GF will comply with the rules and regulations of the Colorado Air Quality Control Commission (AQCC). Information to be provided shall include all appropriate applications of notifications and permits for sources of emissions.
 - 3. Reduced Emission (Green) Completions shall be used for all completions and well workovers. Such completions shall include the use of Best Management Practices including, when available, the following unless an equal or better system exists:
 - a. Closed loop, pitless drilling, completion systems, without permanent on-site storage tanks, for the containment and/or recycling of all drilling, completion and flowback fluids.
 - b. Flaring only allowed during emergencies or upset conditions. When allowed, routing and control of all emissions to a flare or combustor shall provide at least 98% destruction or removal efficiency.
 - c. Zero emission desiccant dehydrators.
 - d. Emission controls of 95% or better for glycol dehydrators.
 - e. Pressure-suitable separator and vapor recovery units.
 - f. No-bleed continuous and intermittent pneumatic devices.
 - g. Automated tank gauging.
 - 4. O&GFs shall be equipped with electric-powered engines for motors, compressors, drilling and production equipment, and pumping systems unless no adequate electricity source is available, or it is technically infeasible.
 - 5. O&GF applications shall include operational provisions to reduce emissions on Air Quality Action Advisory Days posted by the Colorado Department of Public Health and Environment (CDPHE) for the Front Range area. The provisions shall include how alerts are received, outline specific emission reduction measures, and include requirements for documenting the measures implemented. Measures should include:
 - a. Minimizing vehicle traffic and engine idling,
 - b. Reducing truck and worker traffic,
 - c. Delaying vehicle refueling,
 - d. Suspending or delaying use of fossil fuel powered equipment,
 - e. Postponing construction and maintenance activities,
 - f. Postponing well maintenance and liquid unloading that would result in emission releases to the atmosphere, and
 - g. Postponing or reducing operations with high potential to emit VOCs or NOx.
- D. Leak Detection and Repair:**
- 1. A Leak Detections and Repair Plan shall be submitted with all O&GF applications. The plan shall disclose techniques, methods and protocols that will be utilized at the proposed O&GF to identify, prevent, contain, document, repair and report leaks, and shall demonstrate how it will comply with and implement the standards in this Section 17.1.3.F.
 - 2. Operators shall conduct leak detection and repair inspections at the frequency required by the APCD for the emission source using modern leak detection technologies (infrared cameras, etc.) and equipment. The results of said inspections, including all corrective actions taken, shall be reported to the Larimer County Department of Health and Environment (LCDHE) and County Local Government Designee (LGD) upon request.
 - 3. Repair of verified leaks shall occur within 72 hours of detection. If it is anticipated that a repair

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Commented [SC4]: Please define "APCD."

will take longer than 72 hours, the operator shall provide a written explanation to the LCDHE and the LGD as to why more time is required and how the leak will be contained. If a leak is not repaired within 72-hours, the O&G shall be shut-in until the leak is repaired.

- 4. Equipment leaks that pose an imminent safety risk to persons, wildlife, or the environment shall undergo emergency shut down and not be allowed to operate until the operator has provided evidence that the leak has been repaired.
- 5. At least annually, operators shall provide a 2-week notice of a routine leak inspection to the LCDHE and LGD inviting them to attend and observe the inspection.

E. Odors:

- 1. An Odor Mitigation Plan shall be required for all O&G applications indicating how the operations will prevent odors from adversely impacting the public and wildlife and further demonstrating compliance with the standards in this Section 17.1.3.H.
- 2. Oil and gas operations shall comply with the CDPHE, AQCC, Regulation No. 2 Odor Emission, 5 CCR 1001-4, Regulation No. 3, 5 CCR 1001-5, and Regulation No. 7, 5 CCR 1001-9 Sections VII and VIII.
- 3. Proposed O&Gs shall provide protocols for immediate response to odor complaints that include options for ceasing operations, notification of affected residents, and temporary relocation of residents until the source of the odor is identified and resolved.
- 4. The operator shall communicate the schedule/timing of well completion activities to adjacent and nearby residents which could include an online portal. As part of the application, provide information on how notifications will be communicated to the public.
- 5. The Odor Mitigation Plan shall include control strategies which shall be implemented upon receipt of an odor complaint(s) or as required by the County depending on the size, location and nature of the facility. These Odor control strategies may include the following:
 - a. Odorants, that are not a masking agent, shall be added to chillers and/or mud systems.
 - b. Additives to minimize odors from drilling and fracturing fluids except that operators shall not mask odors by using masking fragrances.
 - c. Filtration systems and/or additives to minimize, not mask, odors from drilling and fracturing fluids shall be utilized in the drilling and flowback processes.
 - d. Increasing additive concentration during peak hours provided additive does not create a separate odor. Additives must be used per the manufacturer’s recommended level.
 - e. Enclosed shale shakers shall be utilized to contain fumes from exposed mud where safe and feasible.
 - f. Drilling activities shall utilize minimum low odor Category III drilling fluid or non-diesel-based drilling muds that do not contain benzene, toluene, ethylbenzene or xylene (BTEX).
 - g. Wipe down drill pipe as they exit the well bore each time.

F. Water Quality and Water Bodies:

- 1. A Water Quality Report/Plan shall be submitted with all O&G applications. The report/plan shall demonstrate how the development and operations of the facility will avoid impacts to surface and ground waters in Larimer County, identify all private and community permitted water wells within half-mile and demonstrate compliance with and implementation of standards in Sections 17.3.D. and 8.12 of this Code.
- 2. Baseline and subsequent water source tests, as typically required by and submitted to the COGCC and CDPHE, shall be provided to the LCDHE and the LGD for the life of the facility and

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- any post-closure assessments, if approved by the owner(s) of the water well.
- 3. The application shall provide documentation indicating how the COGCC water quality protection standards are being implemented.
- 4. Locating O&Gs within a Federal Emergency Management Agency (FEMA) designated 100-year floodplain shall not be allowed unless no other location is feasible, and all other appropriate permissions are obtained.
- 5. The requirements of this Section 17.4.D shall not prevent discharges reviewed and permitted by the CDPHE Water Quality Control Division, the EPA, and the Army Corps of Engineers.

G. Spills and Releases:

- 1. A **Spill Prevention and Containment Plan** shall be submitted with all O&G applications. The plan shall disclose techniques, methods, and protocols to be utilized at the proposed O&G to prevent, contain, document and report any spills or releases, and shall demonstrate compliance with and implementation of the standards in this Section 17.3.G.
- 2. An Emergency Response Plan shall be provided that includes evacuation plans and routes, inventory of emergency response supplies, and notification requirements. **As part of this plan it is recommended that an annual open house training be conducted for emergency services personnel to become familiar with the site.**
- 3. Secondary containment shall be required which is capable of holding 125% of the total capacity of on-site containment vessels and storage tanks.
- 4. Unloading areas shall be designed to contain potential spills or direct spills into other secondary containment areas
- 5. Containment systems constructed of steel rimmed berms, or similar impervious surfaces that are equal to or better, shall be used for all secondary containment areas.
- 6. Any spill or release of unrefined and refined petroleum products, hazardous substances, fracking fluids, E&P waste, or produced fluids of greater than 25 gallons outside of secondary containment areas on an O&G, including those thresholds reportable to the COGCC, shall upon discovery, be immediately reported to the National Response Center and CDPHE as well as the following Local Emergency Response Authorities in Larimer County:
 - a. Larimer County Sheriff – Public Safety Answering Point (PSAP) (9-1-1)
 - b. Larimer County Department of Health and Environment,
 - c. Local Fire Department/District,
 - d. Local Municipal Police Department if within in mile of a City or Town,
 - e. Larimer County Oil and Gas LGD, and
 - f. Larimer County Local Emergency Planning Committee (within 24-hours).
- 7. All spills or releases, whether reportable or not, shall be cleaned up immediately and to the satisfaction of the local emergency response authorities, listed in the Spill Prevention Control and Countermeasure Plan.

H. Noise:

- 1. A **Noise Report and Mitigation Plan** shall be required for all O&G applications. The plan shall demonstrate how the operations will mitigate noise and vibration impacts to comply with the noise standards contained in this Section 17.3.G. The report and plan shall include the following:
 - a. A five-day (two days being the weekend day) baseline noise analysis.
 - b. Modeled decibel levels for all phases of development shall be presented using contour maps from the O&G site (combining noise sources) at 350 feet, 500 feet, 1000 feet, and to the

Commented [SC5]: This language should be revised to require that open house training be conducted unless the appropriate emergency service agency determines that such training is not necessary.

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property line of the adjacent properties. Contour maps shall be provided that demonstrate both unmitigated and mitigated decibel levels.

- c. A plan of proposed mitigation measures to be implemented by the O&GF during each phase of development shall be provided to ensure compliance with the maximum permissible noise levels as listed in Section H.2 below.
- 2. Noise generated from O&GFs shall comply with the following maximum permissible noise levels appropriate for the Zone Area Designation of the adjacent land uses as determined by the County. Zone Area Designations are defined by C.R.S. 25-12-102 Noise Abatement and will be used as part of the County’s determination for surrounding land uses and may be different than the County’s zone districts.

ZONE AREA DESIGNATIONS	7:00 am to next 7:00 pm	7:00 pm to next 7:00 am
Residential/Agricultural/Rural	55 db(A)	50 db(A)
Commercial	60 db(A)	55 db(A)
Light Industrial	70 db(A)	65 db(A)
Industrial	80 db(A)	75 db(A)

In the hours between 7:00 a.m. and the next 7:00 p.m., the noise levels permitted above may be increased by ten (10) db(A) for a single period of not to exceed fifteen minutes in any one-hour period. Night-time levels between 7:00 p.m. and the next 7:00 a.m. shall not be exceeded therefore requiring strategic planning of noise-inducing activities to be conducted during daytime hours at the site.

- 3. Sound levels shall be measured at or within 25 feet of the parcel boundary line where the O&GF site is located. When evaluating a noise complaint, the County shall measure sound at or within 25 of the parcel boundary line of the O&GF site and other property boundaries which are more representative of the noise impact.
- 4. O&GF activities shall be operated so the ground vibration inherently and recurrently generated is not perceptible, without instruments, at any point on a boundary line of the property on which the O&GF is located.
- 5. In situations where low frequency noise is a component of the problem, a sound level measurement shall be taken twenty-five (25) feet from the exterior wall of the residence or occupied structure nearest to the noise source, using a noise meter calibrated to the db(C) scale. If this reading exceeds 65 db(C), the County shall require the operator to obtain a low frequency noise impact analysis by a qualified sound engineer, including identification of any reasonable control measure available to mitigate such low frequency noise impact to be implemented by the O&GF. **Such study shall be provided to the County for consideration and possible action.**
- 6. Construction of O&GFs, including drilling/well completions, recompletions, and pipeline installations, shall be subject to the maximum permissible noise levels specified for industrial zones for the period within which construction is being conducted. Construction activities directly connected with abatement of an emergency are exempt from the maximum permissible noise levels.
- 7. Quiet design mufflers (i.e., hospital grade or dual dissipative) or equal to or better than noise mitigation technologies shall be utilized for non-electrically operated equipment.
- 8. Motors, Generators, and engines shall be enclosed in acoustically insulated housings or covers.
- I. **Dust:**
 - 1. A Fugitive Dust Control Plan shall be submitted with all O&GF applications. The plan shall

Commented [SC6]: This language should be changed to identify what possible actions may be taken by the County.

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disclose techniques and methods to be utilized at the proposed O&GF to prevent or mitigate fugitive dust generated by the construction and operations of the proposed O&GF and shall demonstrate compliance with and implementation of standards in Sections 17.3.I and 8.11 of this Code.

- 2. Best management practices (BMPs) for the mitigation of dust associated with on-site operations and traffic activities shall be employed at the facility. The BMPs shall be outlined in the Fugitive Dust Control Plan.
- 3. Produced water and other process fluids shall not be used for dust suppression unless adequately pretreated so that it does not create odors and has been approved for land application by CDPHE Water Quality Control Division.
- 4. Safety Data Sheets (SDSs) shall be provided with the application for any proposed chemical based dust suppressants.
- 5. Unless otherwise approved by the County Health and Engineering Departments, only water will be used for dust suppression activities within 300-feet of the ordinary high- water mark of any body of water.

J. Access:

- 1. A **Traffic Impact Analysis and Routing Plan** shall be submitted with all O&GF applications. The plan shall disclose routing alternatives and transportation infrastructure improvements proposed for the proposed O&GF to mitigate projected transportation impacts and demonstrate compliance with and implementation of the standards in this Section 17.3.E.
- 2. Designs for private access drives shall conform to the Local Low Volume cross section found in the Larimer County Rural Area Road Standards and shall include the following:
 - a. The first 50 feet of access drive from the edge of pavement of the adjacent road will be paved, or made of an approved all weather surface, and the remaining portions of the access drive shall be composed of a minimum of 6 inches of compacted Class 5 road base.
 - b. The access drive entrance shall include returns with a 30-foot radius.
 - c. A mud and debris tracking pad shall be located at the end of the paved portion of the access drive.

K. Chemical Handling:

- 1. A **Chemical and Hazardous Materials Report and Handling Plan** shall be submitted with all O&GF applications. The plan shall disclose the type of hazardous and non-hazardous materials and chemicals that will be used on the site of the proposed O&GF, including how they will be handled to prevent spills and demonstrate compliance with and implementation of standards in this Section 17.3.K.
- 2. Prior to any hydraulic fracturing activity, the Operator shall provide the County with a copy of the Chemical Disclosure Registry form provided to the COGCC pursuant to the COGCC's "Hydraulic Fracturing Chemical Disclosure".
- 3. Drilling and completion chemicals shall be removed from the site **within sixty (60) days** of the drilling completion.

L. Recycle, Reuse and Disposal of Fluids:

- 1. A **Waste Management and Disposal Plan** shall be submitted with all O&GF applications. The plan shall document the techniques and methods of the proposed O&GF to manage wastes generated on the site and demonstrate compliance with and implementation of the standards in this Section 17.3.L.
- 2. Drilling, completion flowback, and produced fluids shall be recycled or reused whenever

Commented [SC7]: Removal of chemicals within thirty (30) days will provide more protection to the public health and safety.

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technically feasible.

- 3. If not to be recycled or reused onsite, exploration and production waste may be temporarily stored in tanks for up to 30-days while awaiting transport to licensed disposal or recycling sites.
- 4. Produced water shall be recycled or reused or shall be transported by pipeline unless easements are not available.
- 5. The Operator shall take precautions to prevent adverse environmental impacts to air, water, soil, or biological resources to the extent necessary to protect public health, safety and welfare, including the environment and Wildlife Resources to prevent the unauthorized discharge or disposal of oil, gas, Exploration and Production Waste, chemical substances, trash, discarded equipment, or other oil field waste.
- 6. The requirements of this Section 17.3.L shall not prevent discharges and or beneficial uses of water reviewed and permitted by the CDPHE Water Quality Control Division ~~and the Environmental Protection Agency (EPA) or another agency with jurisdiction.~~

M. Lighting and Visual Impacts:

- 1. For all phases of the development of the site, the application shall demonstrate compliance with the visual and aesthetic rules of COGCC and the Larimer County Land Use Code for landscaping, fencing and lighting set forth in Section 8.
- 2. All O&GFs shall be painted with colors that are matched to or slightly darker than the surrounding landscape, and shall utilize paint with uniform, non-contrasting, nonreflective color tones based upon the Munsell Soil Color Coding System.
- 3. The location of all outdoor lighting shall be designed to minimize off-site light spillage and glare using best practices recognized by the International Dark-Sky Association. See Section 8.15, Lighting Standards.
- 4. For all phases of site development, fencing shall be installed for security and visual aesthetics of the use.
- 5. Sound or screening wall to mitigate for noise during construction and well completion may be required if the O&GF is within 2,000 feet of residential buildings or lots, or if electric requirement is appealed.
- 6. O&GFs applications shall minimize removal of trees and vegetation on the site.
- 7. Landscaping and/or fencing for screening and visual quality as viewed from public rights-of-way and neighboring residential areas shall be required within 6 months from the time of well completion and in accordance with requirements for the zoning district.
- 8. O&GF applications shall demonstrate compliance with weed control requirements of the County Weed District and Forestry Services Department, including for access roads serving the facility.

N. Well Plugging and Abandonment:

- 1. A Reclamation Plan shall be submitted. The plan shall demonstrate how well abandonment and reclamation shall comply with the COGCC rules and shall include the following information:
 - a. Removal of all equipment from the well site,
 - b. Restoration of the site surface to the conditions of the site reclamation plan,
 - c. Notice to the County LGD of the commencement and completion of such activity, and
 - d. **Coordinates for the location of the decommissioned well(s), and any associated gathering or flow lines, shall be provided with the notice of the completion of well abandonment.**

O. Well Liquids Unloading:

- 1. Best management practices, including artificial lift, automated plunger lifts and at least 98% emission reductions when utilizing combustion to control venting shall be employed at all

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Commented [SC8]: These coordinates should also be provided when the flow lines are first installed and activated.

facilities unless technically infeasible.

- 2. Approved manual unloading shall require on-site supervision of the unloading process.

P. Flammable Materials:

- 1. The location of flammable materials on site shall conform to all COGCC safety standards and local fire codes.
- 2. A minimum 25-foot buffer, free of weeds and dried grasses, shall be required around flammable materials or equipment.

Q. Waste Disposal:

- 1. A **Waste Management and Disposal Plan** shall be submitted with all O&G applications. The plan shall document the techniques and methods of the proposed O&G to manage wastes generated on the site and demonstrate compliance with and implementation of the standards in this Section 17.3.Q.
- 2. Oil and gas facilities shall remain free of debris and excess materials during all phases of operation.
- 3. Burning of debris, trash or other flammable material is not allowed.
- 4. Temporary storage of materials (up to 30-days) may be allowed with installation of screening to mitigate from aesthetic impacts from public rights-of-way or if requested by landowner.

R. Removal of Equipment:

- 1. There shall be no permanent storage of equipment (i.e., vehicles, trailers, commercial products, chemicals, drums, totes, containers, materials, and all other supplies not necessary for uses on an oil and gas location) on the site of an oil and gas facility.
- 2. When not in use, or if no longer needed for on-site operations, all equipment not being used on the site shall be removed.

S. Maintenance of Machinery:

- 1. Statewide Best Management Practices shall be used to prevent contamination of soils and stormwater runoff, including equipment and vehicle maintenance and fluid containment.
- 2. There shall be no maintenance of field equipment involving hazardous materials within 300-feet of a water body.
- 3. Any fueling on-site shall occur over an impervious surface with a secondary containment berm and sump in case of a spill and shall not occur during storm events.

T. Flow Lines, Transfer Lines, and Gathering Lines:

- 1. All off-site lines transporting process materials, production wastes, product and any other items used or generated by the facility shall be located to avoid existing or proposed residential, commercial, and industrial buildings, places of assembly, surface waterbodies and designated open spaces. Buried pipelines shall be a minimum of 4-feet deep and shall be of detectable material which could include the addition of tracer wire to ensure detection during buried utility locating.
- 2. The location of pipelines shall be evaluated on a case-by-case basis, with the determining locational factor being the size and type of pipeline being proposed.

3. **Coordinates of all flow lines, gathering lines, and transfer lines shall be provided.**

U. Temporary Water Lines:

- 1. Temporary waterlines shall be used, unless development is not within a water service area.
- 2. Temporary waterlines shall be buried at all existing driveway and road crossings, or utilize existing culverts, if available.

V. Financial Assurance:

- 1. The Applicant shall demonstrate the financial capability to reclaim all disturbed areas during

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Commented [SC9]: Flow lines may present hazards to the public health and safety. This language should be modified to require that the coordinates of flow lines be provided upon their installation and activation.

each phase of the site development and following termination of the oil and gas operation on the site. This shall include meeting any state requirements, and any additional requirements the County deems necessary to protect the public health, safety, and welfare.

2. The Applicant shall, for the life of the use, carry customary and usual environmental liability insurance.

17.4. – Appeals.

A. Section 22 of this Code shall provide direction for all appeals to standards, processes and provisions of this Section 17.

17.5. – Enforcement and Inspections.

A. Applications for O&GFs shall demonstrate compliance with this and all other relevant Sections of this Code. Failure of an Operator to maintain compliance with the County approval of an O&GF may result in the revocation of the approval pursuant to the procedures in Section 12 of the Land Use Code. The County retains the right to seek whatever remedy or redress is legally allowable.

B. The County reserves the right to inspect the property for compliance.

17.6. – Fees and Security for Reclamation.

A. The following fees are applicable to oil and gas facilities:
a. A Capital Transportation Impact fee.

17.7. – Termination or Modifications of Use.

A. No modification to an approved O&GF shall be made without obtaining appropriate land use approvals from the County.
B. Upon termination of use, the O&GF shall be reclaimed pursuant to the reclamation plan provided.

17.8. – Definitions.

A. Unless otherwise listed herein, the definitions found within the C.R.S. and Colorado Oil and Gas Conservation Commission (COGCC) regulations shall apply.

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FINAL DRAFT
Comments by
Scott Holst

Attention Larimer County Commissioners,

As you continue to move forward on the review of drafts for oil and gas regulations in reference to Senate Bill 19-181 which was forced down citizens throats AFTER our communities fairly voted to end Prop 112, DO NOT forget about the families working in the oil and gas industry which generates over \$1 billion in taxes for our state and counties.... even as one of the most HEAVILY REGULATED in the nation. DO NOT forget about mineral owner families who have been in this area for many generations, are founding citizens of much of what makes up our counties and state today and have the RIGHT to the access and exploration of minerals we have invested in for 4 generations or more.

Please keep the following important question in mind during your process.

Are the state and counties of Colorado prepared to address the more than 600,000 mineral owners if access to minerals is lost or further limited and the investments made by generations of families disappear? Make no mistake, mineral owners will act.

Additionally, how will we address the loss well in excess of \$230 million for our schools? Not to mention the losses for our parks and the chain effect it will have on businesses from car lots, to grocery stores, to daycare centers. No reason for anyone to live around here if the economy is trashed because we regulated safe prosperous industries out of our state.

Let an industry with a better safety record than many other industries in the nation WORK!

Thank you for your time and efforts.

Scott Holst

Loveland/Windsor resident

ATTACHMENT C

PLANNING COMMISSION
MINUTES
FROM
FEBRUARY 19, 2020

LARIMER COUNTY PLANNING COMMISSION

Minutes of February 19, 2020

The Larimer County Planning Commission met in a regular session on Wednesday, February 19, 2020, at 6:30 p.m. in the Hearing Room. Commissioners Jensen, Wallace, True, Miller, Stasiewicz, Barnett, Johnson, and Choate were present. Commissioner Dougherty presided as Chairman. Also present were Matt Lafferty, Principal Planner; Don Threewitt, Planning Manager; Rob Helmick, Senior Planner; Frank Haug, County Attorney; Traci Shambo, Senior Civil Engineer; Lea Schneider, Environ Health Planner; Tom Butts, Environmental Health Director; Karin Madson, Code Compliance Super; Amy White, Code Compliance Inspector; Lesli Ellis, Community Development Director; Laurie Kadrich, CIPR Director; and Christina Scrutchins, Recording Secretary.

AMENDMENTS TO THE LARIMER COUNTY LAND USE CODE REGARDING OIL AND GAS REGULATIONS, FILE #20-CODE0245: Matt Lafferty gave a brief presentation regarding the amendments to the Larimer County Oil and Gas regulations. The participants that have been involved in the project include Internal Staff Team, Oil and Gas Task Force, Community, and Professional Resources.

The internal staff team include the Community Development Department, County Attorney, Health Department, Natural Resources Department, and Engineering Department. In May 2019, the Board of County Commissioners completed assembly of the 15-member Oil and Gas Regulations Task Force. This Task Force was formed to review and provide input on draft oil and gas regulations developed by the county staff and provide a recommendation on the final set of oil and gas regulations. The community was a very active partner in communicating their comments by email, attending open houses and other opportunities the county was offering. The professional resources included Colorado Oil and Gas Commission (COGCC), Colorado Department of Public Health and Environment (CDPHE), Larimer County Planning Commission, and the Larimer County Board of County Commissioners.

During the project process, the Oil and Gas Task Force conducted monthly meetings that focused on the following topics: Introduction, purpose and charter, and topics for regulations, introductory presentation and initial list of regulatory topics, Specific standards to include and purpose statement, refined standards and procedures, and recommendations for standards and procedures. Task force meetings were open to the public to attend and observe. Attendees were provided comment sheets to share their concerns. All meeting we recorded on video and posted on the web for non-attendees to watch. To keep all participant in the process informed, the Oil and Gas Regulations webpage was established in June and updated throughout the process. Other opportunities for the community to engage in the process included: posting comments on the webpage, online questionnaires (August and September), open houses (September and November), public comments on draft regulations (November and January), and public hearings (February and March).

Key points were mentioned during the explanation of the outline of the regulations. Section 17.0. Oil and Gas Facility is a new section of the regulations with eight subsections. The eight subsections are the following:

- 17.1 – Intent and purpose,
- 17.2 – Review procedures and required permits,
- 17.3 – Standards required for oil and gas facilities,

- 17.4 – Appeals,
- 17.5 – Enforcement and inspections,
- 17.6 – Fees and security for reclamation,
- 17.7 – Termination or modification of use, and
- 17.8 – Definitions.

Mr. Lafferty focused more in detailed on subsections 17.1 through 17.3. Subsection 17.1 is to establish the basis for having oil and gas facility regulations and set expectations for the review and consideration of applications for new oil and gas facilities. Subsection 17.2 provides the framework for the review and permitting of new oil and gas facilities by the county. Subsection 17.3 set forth the standards and requirements to be addressed when developed a new oil and gas facility in Larimer County.

Mr. Lafferty listed the steps and explained the Special Review process starting with the Sketch Plan Phase. Properties within a 500-ft radius from the project site is given notification to invite the public to review and provide comments regarding the project. He mentioned that 500-ft is the minimum statutory radius and could be expanded if the Planning Commission thought the distance was not reaching an adequate amount of surrounding properties. He completed his presentation with asking the commissioners if they had any questions.

Commissioner Wallace stated she would like for the distance to be expanded to reach more of the surrounding properties within a 2,500-ft radius.

Commissioner True asked how the 500-ft radius was determined.

Mr. Lafferty explained the State requirements for notification of an application to the public is posted by the public newspaper. The notification sent through the US postal service to the surrounding properties is a supplemental process within the county's regulations.

Commissioner True asked when the project would be reviewed again if the Planning Commissioner approved the project.

Mr. Lafferty stated that a re-evaluation could occur if they find or have concerns that stop the project from moving forward.

Commissioner Johnson wanted clarification regarding the difference between on and above the surface and at the surface below along with what the county is purposing for regulations and what COGCC regulates.

Mr. Lafferty explained that surface development is anything that happens above the hole or if an issue was a concern that required the county to monitor below the surface.

Commissioner Jensen asked what is the distance that is adequate to make an impact, what is the notification for, and what does the notification gain.

Mr. Lafferty explained that the notice is to inform the surrounding properties there is a project in their area as well as provide them with the opportunity to attend any meetings or hearings and voice their comments. Plans and studies are submitted with the application regarding how the applicant will handle impacts during the project. If there are impacts that arise during the project, the Planning Commission and Board of County Commission will re-evaluate and address them.

Commissioner Barnett expressed he felt that the larger expanded distance for surrounding properties should be considered.

Commissioner Miller asked for clarification regarding where the surrounding properties distance starts and how they are notified.

Mr. Lafferty confirmed the distance starts at the property line. The newspaper posting is only when there will be a public hearing, all other notifications are done through the postal service.

Mr. Lafferty spoke about setbacks and if an applicant can meet the setback requirement there might be a simpler process. The setback is operated that is set in place by the state COGCC as well as more information regarding setbacks.

Commissioner Choate asked if an applicant wants to go below the surrounding property distance, they would have to receive confirmation by the Board of County Commissioners and the COGCC with an appeal and what will happen after the COGCC completes their regulations.

Mr. Lafferty explained the applicant would have to go through the appeal process but was unsure of how everything will come together after the COGCC regulations are complete.

Commissioner Choate wanted a description of what the property sign states for the notification.

Mr. Lafferty did not have the sign with him but explained it says "Special Review application with contact information."

Commissioner Choate asked how many signs are posted on the proposed property.

Mr. Lafferty responded the county only requires one sign to be posted on a busy street.

Commissioner Jensen expressed he thought the notification sign may not be seen by neighbors that do not live passed the applicants property.

Commissioner Wallace thought a condition of approval should include the regulations will be re-evaluated once the COGCC completes their regulations as well as list the regulations of the state currently.

Mr. Lafferty agreed.

Commissioner Jensen wanted clarification that the current regulations state the impacts aren't to be eliminated but minimis.

Mr. Lafferty confirmed that was correct.

Commissioner Stasiewicz expressed concern that there isn't a set date when the state will complete their regulations.

Mr. Lafferty explained the state is expecting to have the regulations completed by the end of the summer or early fall of this year.

Commissioner Choate stated the applicant can submit an application with the state and the county simultaneously but "approval by the county prior to construction" was removed and wanted to know why. Also did the county give any consideration regarding the requirement to the applicant to receive county approval first?

Mr. Lafferty stated it would start early in the sketch plan phase by the applicant submitting an analysis to staff giving the options for possible siting locations. If there are any concerns regarding the applicants chosen location the applicant can then defend the site.

Commissioner Choate asked if the applicant specifies where the site will be placed on the property before the application is approved.

Mr. Lafferty stated that was correct.

Commissioner Barnett felt there should be a condition of approval stating that if the regulations move forward then once the COGCC complete their regulations, the county should re-evaluate and update their regulations.

Mr. Lafferty agreed.

PUBLIC COMMENTS:

The official record of the public comments is on the tape from the hearing.

Brad Pomeroy and Jay Young expressed their understanding when working in the Oil and Gas industry that they are taking and listening to the publics concerns.

Chris Colclasure and Brandon Taylor presented requests for four targeted changes to the Draft rules. The changes requested are Administrative permitting process, Appeal standings, Odors, and Recycle, reuse and disposal.

Mary Bedosky who spoke as a community member and task force member expressed her desire to improve the regulations.

Randy Evans explained the water waste process and concerns regarding those parts of the regulations.

Rick Casey, Tim Gosar, Deb Bjork, Nancy York, Karen Artell, Tom Hoehn, Joseph Salazar, Ed Behan, Anne Sutherland, Elizabeth Lynch, Andy Peterson, Andrew Forkes-Gudmundson, Gayla Martinez, Rutilio Martinez, Stephanie Malin, Gina Janett, David Lehman, Will Karspeck, Tom Rhodes (Sierra Club), Robyn Dolgin, and Warren Schneider were community members who spoke regarding the following concerns:

- Moratorium on fracking,
- approval of new well before regulations are completed,
- getting sued,
- air quality,
- water quality,
- smells,
- monitoring,
- spills and releases,
- inspections,
- health safety,
- environmental safety,
- flaws in the regulations,
- not enough process,
- abandonment,
- exploratory drilling,
- open space protection,
- setbacks,
- nocent impacts,
- COGCC regulations,
- task force selection, and

- Notification.

RESPONSE TO PUBLIC COMMENTS:

Mr. Lafferty explained that he hears the public's concerns and the desire for a moratorium. The staff did present the moratorium as an option because the Board of County Commissioners had not given that direction. He also expressed the importance of putting regulations in place because there are not any county regulations at this time.

Commissioner True asked if all the Task Force members were Larimer County residents.

Mr. Lafferty explained the Board of County Commissioners chose some task force members that did not live in the county of Larimer. They were looking for subject matter experts.

Commissioner Jensen asked if the town of Berthoud or any other county is part of the notification process.

Mr. Lafferty stated that all of the surrounding towns and counties are notified and given the opportunity to submit comments.

Commissioner Jensen asked what the differences between the administrative processes are and why an administrative review is not part of the regulations.

Mrs. Ellis explained one of the administrative process is a Site Plan Review and the steps throughout the process.

Mr. Lafferty stated determining which application will go through Administrative or public is still being determined but based on the impacts they felt this application should be brought to a higher attention.

Commissioner Jensen wanted to know if there is a timeframe or a date when the county will set rules to determine which process an application will follow.

Mr. Lafferty explained the county has not had enough experience yet with these types of applications and they can place a condition of approval for a timeframe for the regulations to be re-evaluated.

Commissioner Jensen expressed he would like to see a timeframe of 2 years.

Commissioner Johnson agreed with Commissioner Jensen but would like to add to the condition of approval that if there is anything that is of concern or needs attention the re-evaluation is sooner. She also asked Mr. Haug what an appellate standing means from one of the public comments?

Mr. Haug stated the comment from the public could mean they are wanting to change the language of the regulation that instead of anyone from the general public that an appeal can be placed by the applicant themselves or someone that is affected.

Commissioner Johnson asked Mr. Lafferty to remind the Planning Commission how the 500-ft. setback was determined.

Mr. Lafferty stated that is a regulation set by the COGCC.

Commissioner Miller asked what our current Section 17.3.E.3 say regarding odors.

Commissioner Dougherty added there isn't anything in the proposed regulations regarding odor.

Mr. Lafferty explained that E.1. states there should be a mitigation plan that will identify methods. If there is an odor problem the mitigation plan should help with a process to follow.

Mr. Butts explained if there is an odor issue, then an investigation is performed.

Mr. Lafferty added the public is wanting to have a timeframe if there is an issue that cannot be resolved for the operation to be shut down, and this applies to all new wells.

Commissioner Dougherty thinks the County Attorney should look at the section because the operation should have time to fix the issue before shutting down.

Mr. Haug stated they will look into the section.

Commissioner Johnson wanted to confirm, if the operation is in violation with the code there will be a code compliance case along with the special review process.

Mr. Lafferty confirmed that is correct and how the process is currently.

Commissioner Barnett wanted to confirm a larger setback (notification area) could be placed for notification.

Mr. Lafferty confirmed that is correct.

Commissioner Miller wanted someone to address the EPA not being part of this process and is the verbiage in the section 17 needing to be cleaned up as requested by King Representatives.

Mrs. Schneider explained the state of Colorado has CBPAG's water quality control division has the authority through EPA. However, the state of Colorado has authority. The verbiage will be cleaned up to reflect that.

DISCUSSION

Commissioner Choate discussed leak issues along with the shutdown time and an on-site air quality pre-development testing.

Commissioner True wanted to know who would be required to pay for the pre-development testing.

Commissioner Choate replied the applicant.

Mr. Lafferty explained the applicant should submit an air quality report with the application.

Mr. Butts added a baseline study is challenging.

Commissioner Barnett wanted more clarification.

Mr. Butts explained the air quality plan could include a modeled emissions as in what the applicant expects their emissions to be and how they will control it. He also mentioned that the weather could affect the air quality and again it would be very challenging to get a baseline study.

Motion

Commissioner Choate moved that sections 17.3.C.1 requires a plan with baseline data added.

Commissioner Barnett seconded the motion.

Commissioners Barnett, Stasiewicz, Wallace, True, Johnson, and Choate all in favor

Commissioners Miller, Jensen, and Dougherty all opposed.

Motion passed 6-3

Commissioner Dougherty asked if there are regulations in place with Oil and Gas that explain what immediate safety item is.

Mr. Lafferty explained that once a leak is determined the operator has 72 hours to fix any issues before they are to shut down.

After more discussion regarding leaks all Commissioners agreed a motion is not needed due to the proposed regulations.

Commissioner Jensen wanted then to discuss the 500-ft setback and have the setback distance be expanded.

Mr. Lafferty confirmed setback distance could be expanded.

Motion

Commissioner Wallace moved that the notification be expanded to a half mile and will be re-evaluated in the future.

Commissioner Barnett second the motion

Commissioners Choate, Miller, Stasiewicz, Jensen, Barnett, True, Wallace, and Dougherty all in favor

Commissioner Johnson opposed.

Motion passed 8-1

Commissioner True wanted to speak upon more signs to be placed around the applicant's property notifying the surrounding residences.

Mr. Lafferty reminded the Planning Commission that the sign is only placed on a property 14 days prior to a public hearing after the neighborhood notification.

Motion

Commissioner True moved a sign must be posted at every access road on the applicant's property.

Commissioner Choate second the motion

Commissioner Johnson, Barnett, Wallace, Miller, Stasiewicz, True, and Dougherty all in favor.

Commissioner Choate and Jensen all oppose.

Motion passed 7-2

Motion

Commissioner Johnson moved that the Planning Commission add a condition of approval to tonight's standards that within 120 days of completion of the Colorado Oil and Gas Conservation Commission rule making, the County shall review Section 17 of the Land Use Code and compare it to the state's regulations.

Commissioner Miller second the motion

Commissioners Johnson, Miller, Jensen, True, Stasiewicz, Barnett, Wallace, Choate, and Dougherty all in favor.

Motion passed 9-0

Motion

Commissioner Johnson moved that 2 years after the adopted regulations, the Larimer County staff will evaluate the opportunity for an Administrative Review process and bring the findings back to the Planning Commission and the Board of County Commissioners for consideration.

Commissioner Jensen second the motion.

Commissioners Barnett, Choate, Wallace, Jensen, Stasiewicz, Miller, Johnson, True, and Dougherty all in favor.

Motion passed 9-0

Motion

Commissioner Johnson moved that Section 17.3.L.6. shall not prevent discharges or beneficial uses of water reviewed or permitted by the CDPAG Water Quality Control Division or another agency jurisdiction.

Commissioner Miller second the motion.

Commissioners Wallace, True, Miller, Barnett, Jensen, Stasiewicz, Johnson, Choate, and Dougherty all in favor

Motion passed 9-0

Motion

Commissioner Wallace moved to add a setback of 1,000 feet from any habitable structure unless the COGCC regulation setbacks is greater.

Commissioner True second the motion.

Commissioners Stasiewicz, Barnett, Choate, True, and Wallace all in favor

Commissioners Jensen, Miller, Johnson, and Dougherty all opposed.

Motion passed 5-4

Commissioner Barnett asked what the floodplain regulations would be regarding Oil and Gas facilities.

Mr. Lafferty stated section 4.2 in the Land Use Code would apply to the Oil and Gas facilities.

Motion

Commissioner Barnett moved that staff refer the application to the appropriate flood plain staff for review before it is presented to the Board of County Commissioners.

Commissioner True second the motion

Commissioners Barnett and True in favor

Commissioners Miller, Johnson, Choate, Jensen, Stasiewicz, Wallace and Dougherty all opposed.

Motion failed 7-2

MOTION

Commissioner Johnson moved that the Planning Commission adopt the following Resolution:

BE IT RESOLVED that the Planning Commission recommend to the Board of County Commissioners approval of the Land Use Code Amendments regarding Oil and Gas facilities as found in file 20-CODE0245 titled Oil and Gas Regulations as recommended by staff in the draft regulations dated February 5, 2020, with the changes voted separately per the record.

Commissioner Jensen seconded the motion.

Commissioners Stasiewicz, Johnson, Miller, Jensen, Choate, Wallace, Barnett, Dougherty in favor of the motion.

Commissioner True in oppose if the motion

Motion passed 8-1.

REPORT FROM STAFF:

None

With there being no further business, the hearing adjourned at 10:54 p.m.

These minutes constitute the Resolution of the Larimer County Planning Commission for the recommendations contained herein which are hereby certified to the Larimer County Board of Commissioners.

Sean Dougherty, Chairman

Nancy Wallace, Secretary

ATTACHMENT D

PLANNING COMMISSION
STAFF REPORT
FROM
FEBRUARY 19, 2020

2. TITLE: Amendments to the Larimer County Land Use Code regarding Oil and Gas Regulations

REQUEST: To amend the Larimer County Land Use Code by:

- 1. Modifying the definition of Oil and gas drilling and production as found in Section 0.1.;
- 2. Modifying Sections 4.1.1. through 4.1.23., and the Zoning Table in Section 4.0. by changing the procedure for Oil and gas drilling and production from (R) to (SR);
- 3. Updating the use description of Oil and gas drilling and production in Section 4.3.; and
- 4. Adding Section 17.0. Oil and Gas Facilities.

APPLICANT: Community Development Department

STAFF CONTACTS: Matt Lafferty, AICP, LGD, Principal Planner

FILE #: File #20-CODE0245

PLANNING COMMISSION HEARING: February 19, 2020

NOTICE GIVEN: Newspaper publication 14 days prior to the hearing in two newspapers of general circulation

BACKGROUND:

In late 2018, oil production figures published by the Colorado Oil and Gas Conservation Commission (COGCC) showed Larimer County to be the 2nd highest oil producing county in the state, up from 10th in just three years. This spike in production rates, along with Proposition 112 (ballot initiative to increase statewide setbacks for the siting of new oil and gas operations) evoked discussions between the Board of County Commissioners (BOCC) and the Community Development Department as to whether or not the County should develop land use regulations focusing on oil and gas development. Acknowledging that the County has no regulations and defers decision making on such uses entirely to the state, the BOCC agreed that the County should develop local regulations.

In March of 2019 the Board of County Commissioners agreed on a charter for the Oil and Gas Regulations Task Force (Task Force) to advise staff in the development of such regulations and began advertising for the Task Force.

While the County was working on assembling the Task Force, the Governor on April 16, 2019 signed into law Senate Bill 19-181. This new law would require the Colorado Oil and Gas Conservation Commission (COGCC) to change its mission from:

Foster responsible, balanced development, production and utilization of the natural resources of oil and gas in the state of Colorado in a manner consistent with protection of public health, safety, and welfare, including protection of the environment and wildlife resources.

to

Regulate the development and production of the natural resources of oil and gas in the state of Colorado in a manner that protects public health, safety, and welfare, including the protection of the environment and wildlife resources.

As the result of this change the COGCC, the Air Quality Control Commission (AQCC) and the Water Quality Control Commission (WQCC) have been, and continue to be, engaged in new rulemaking for oil and gas operations. It is expected that the rulemakings will be completed later this year.

Another significant change within SB 19-181 was the removal of existing land use preemption. The land use preemption prior to SB 19-181 established the rules of the COGCC as the maximum standards required for oil and gas operations, and local governments could not regulate beyond these rules of the state. However, with the land use preemption eliminated local governments are now allowed to regulate above and beyond the state requirements when evaluating the siting and surface impacts of oil and gas operations.

In May 2019, the BCC completed assembly of the 15-member Oil and Gas Regulations Task Force. This Task Force was formed to review and provide input on draft oil and gas regulations developed by the county staff and provide a recommendation on the final set of oil and gas regulations. To support the Task Force effort and maintain transparency in the process, a project web site was created so staff could share subject matter information with the Task Force. The project website also served as a portal for the public to review and make comments on the same information that the Task Force received. The webpage is located at www.larimer.org/planning/oil-and-gas-regulations.

Starting on June 20, 2019 and ending on October 30, 2019, the Task Force held five meetings which generally covered the following:

1. Introduction, purpose and charter, and topics for regulations (June 20, 2019)
2. Introductory presentations and initial list of regulatory topics, (July 18, 2019)
3. Specific standards to include and purpose statement (August 15, 2019)
4. Refined standards and procedures (September 25, 2019)
5. Recommendations for standards and procedures (October 30, 2019)

On October 30, 2019, staff presented the Task Force with a rough draft of proposed regulations. The Task force discussed the proposed regulations and the general understanding leaving the meeting was that the regulations were on the right track and any further refinement should maintain the balanced approach that was already being taken.

Following the last meeting of the Task Force, the Community Development Department posted the draft regulations on the project webpage for public review and comment. The comment period was open through the month of November and included an open house/office hours session on November 21. The comment period resulted in approximately 100 public comments and 13 formal responses to the draft regulations.

During December 2019, staff refined the draft regulations based upon new information, comments from the Task Force, and comments from the public comment. The resulting draft was posted for public review and comment on January 6, 2020 and was presented at the joint work session of the Planning Commission and Board of County Commissioners on January 8, 2020, along with all the public comments received during the project.

Since the January 8, 2020 work session, staff has made a variety of changes in response to the comments received at the work session. Additionally, on January 23, 2020 the Task Force met one last time to share their perspective on the progress made since October 2019. At this meeting the Task Force was asked to indicate whether they believed the regulations by Section to be ready, mostly ready or not ready for hearings. From the comments at the meeting it was determined that minor modifications throughout the regulations were needed, but the majority believed the regulations to be mostly ready for consideration of adoption.

OVERVIEW OF PROPOSED REGULATIONS AND PUBLIC INPUT RELATED SECTIONS:

The proposed regulations for oil and gas facilities are in **Attachment A** to this report. This version of the regulations differs from the version presented at the January 8, 2020 work session, to see the changes made between the work session and this version refer to **Attachment B**, which includes the tracked changes that were made.

In overview, Section 17.0 contains the following eight subsections:

- 17.1. – Intent and Purpose
- 17.2. – Review Procedures and Required Permits
- 17.3. – Standards Required for Oil and Gas Facilities
- 17.4. – Appeals
- 17.5. – Enforcement and Inspections
- 17.6. – Fees and Security for Reclamation
- 17.7. – Termination or Modifications of Use
- 17.8. – Definitions

Subsection 17.1. – Intent and Purpose establishes the basis for having oil and gas facility regulations and sets expectations for the review and consideration of applications for new oil and gas facilities. Some of the language in this subsection stems from Senate Bill 19-181, which bill defines the mission of the COGCC and how their regulations should be administered.

Commentary received regarding this subsection of the regulations indicates a strong preference to model the language to regulate to the maximum extent possible new oil and gas facilities. The proponents of such provisions suggest that mitigation of impacts should be a last alternative and that avoidance of impacts should be the primary basis of the regulations. The general opinion of the Task Force was to develop regulations that would allow industry to provide reports and plans that demonstrate how they would comply with the standards of the County or provide acceptable alternatives that mitigate impacts through best available technologies.

Subsection 17.2. – Review Procedures and Required Permits sets the framework for how new oil and gas facilities will be reviewed and permitted by the county utilizing a transparent public hearing process for the review and consideration of new oil and gas facilities. Additionally, this subsection documents that it is the responsibility of the property owner/applicant to secure all other permits outside of the County’s purview.

Comments raised regarding this subsection suggest that the county will not be implementing a transparent public process for new oil and gas facilities. This comment has repeatedly been made throughout the project as the procedure is not in this subsection because Section 4.5 – Special Review is referenced in the regulations, and that Section of the Code addresses the review procedure.

Additionally, notification has been a topic raised throughout the project. Notice is addressed through Section 4.5 and Section 22 of the Land Use Code and will be consistent with state statutory requirements. Statutory notification requirements involve posting of the application in a newspaper of general circulation. The County Land Use Code requires that notice be mailed to neighboring property owners within 500 feet of the development boundaries and via a sign posted at the site. Mailed notice is provided during the sketch plan process, as part of a neighborhood meeting, upon receipt of the Special Review application and prior to the two-public hearings for the Special Review.

A tiered approach involving an administrative process versus a public hearing process for some new oil and gas facilities was discussed throughout the project. However, determining an acceptable threshold for these processes was more difficult than thought. Some options discussed to create an administrative review process included size of the well pad, number of wells being drilled and setbacks of the well pad from other uses. Having not settled on an approach and given the limited number of applications anticipated to be submitted annually, staff proposes that, for now, all applications for new oil and gas facilities go through the Special Review public hearing process.

Additional criteria for approving a Special Review application for oil and gas facilities was discussed at the PC/BCC work session. Staff has looked at the existing criteria of Section 4.5 – Special Reviews and believes that the criteria ensures that all requirements of the Code must be adhered to or determined to be unnecessary by the BCC if approval is to be granted. Based upon the adequacy of the existing review criteria for a Special Review, no additional criteria is being proposed at this time.

Subsection 17.3. - Standards Required for Oil and Gas Facilities is the heart of the oil and gas regulations, as it sets forth the standards and requirements to be addressed when developing a

new oil and gas facility in Larimer County. The regulations proposed focus on site planning, nuisance impacts, and measures to be taken to avoid and/or minimize various impacts generated by oil and gas development activities.

One siting factor raised throughout the project was setbacks. Many participants in the project would like larger setbacks and separation of oil and gas facilities from other land uses (houses, schools and the like) as they believe setbacks to be critical to the protection of public health and safety, environment and wildlife. To this point, recent studies have suggested short term health impacts associated with the location of oil and gas development. The studies are cautiously viewed by health officials, as the study parameters are limited. Because of the uncertainty of what an acceptable setback should or shouldn't be, staff is recommending that the setbacks of the COGCC be utilized by the county at this time, with the understanding that if new information becomes available causing increased setbacks could be added to the Code.

The Task Force and community discussed that air and water quality protection are the most pressing issues associated with oil and gas development. Presentations from the state and local health departments provided clarity to what is being done to mitigate such issues, as well as to provide direction on standards and practices that should be employed at oil and gas facilities. Solutions include technology/system improvements, electrification of equipment, leak detection and spill containment and repair, and monitoring and reporting. Many of the participants in the project state that the regulations have not gone far enough on these issues and are looking for 24/7 air quality monitoring, increased setback provisions, and complete bans if avoidance is not achieved. Other participants note that the use of best available technologies and newer standards being required by the state and employed by the industry are working.

Nuisance impacts, such a noise, odor, dust and light, were the focus of many comments received during the project. Many proponents note that these issues are best address through avoidance, generally through the application of setbacks. Others state that technology and operational practices can mitigate the nuisances. The proposed standards require report and plans to be submitted with the applications demonstrating the level of potential impacts and how such impacts will be mitigated to alleviate impacts to the surrounding community.

Staff proposes that Subsection 17.3. along with Section 8.0 of the Land Use Code will provide the necessary standards, requirements, reports and plans necessary to evaluate and inform staff, the public, the Planning Commission and ultimately the Board of County Commissioners about the pitfalls and merits of new oil and gas facilities in Larimer County.

Subsection 17.4. – Appeals identifies where in the Land Use Code to find information on finding appeals either to standards and regulations or to the decisions of authorities in the process. Comments received on the appeals portion of the regulations focused on not allowing appeals to the standards being proposed. No other comments were raised regarding appeals.

Subsection 17.5. - Enforcement and Inspections provides remedies for dealing with operations that fail to follow the approvals granted. No comments were provided on this subsection of the regulations.

Subsection 17.6. – Fees and Security for Reclamation identifies any supplemental fees required by the county for impacts associated with oil and gas facilities.

Comments received on this subsection address the desire to require bonding or other appropriate mechanisms to ensure the successful operation of oil and gas facilities. Many proponents have indicated that the fiscal strength and abilities of some operators are inadequate to ensure protection of the public, environment and wildlife in event of failure or upset conditions. They further emphasize that it would be easier for operators to walk away from a site than correct issues. Staff proposes to handle this issue the financial securities required for the construction activities associated with new oil and gas facilities will be best addressed through development agreements required by the county prior to construction.

Subsection 17.7. - Termination or Modification of Use provides notification the no changes to an approved oil and gas application shall occur without securing further approvals by the county. Furthermore, because the life of a well site can extend for many years this subsection provide notice that the approved reclamation plan for the approved use shall be implemented upon closure of the site.

Comments received on this emphasize that given the life of a well pad, the reclamation plan, approved with the initial application, may be outdated or inappropriate when the well site is reacclimated. However, most reclamation plans require a site to be returned to a native condition, which condition is usually the same as when approved. If conditions change, the plan can be updated to reflect current conditions.

Subsection 17.8. - Definitions indicates that for consistency in the use of terminologies that the county will use the definitions found in the COGCC rules and regulations. No comments were made on this subsection.

REVIEW CRITERIA:

To approve a change in the land use code text, the Board of County Commissioners must consider the following review criteria and find that each criterion has been met or has been determined to be inapplicable:

A. The proposed change is consistent with the Master Plan (Comprehensive Plan) and the intent and purpose of this Code; and/or

Specific principle and policy provisions speaking to this issue are found in Chapter 3 of the Comprehensive Plan under the Infrastructure category and are as follows:

- 14. Energy Provision - Larimer County collaborates on oil and gas, renewable energy, and gravel extraction to reduce land us conflicts, protect environmental quality and public health, and maintain reliable conventional and renewable energy resources.*
 - 1.4.5. Implement mitigation measures to minimize conflicts with land uses and air and water quality associated with energy development and subsurface resource extraction.*
 - 1.4.6. Assure responsible access to all mineral rights, including sand and gravel resources, through mitigation measures that can enable mining and mineral extraction within different framework categories.*

- 14.7. *Acknowledge the impacts associated with development of mineral and sand and gravel resources and use fact-based data to inform decision making regarding continues development of these resources.*
- 14.8. *Collaborate with adjacent counties and state agencies to ensure proper protections and environmental standards are met for air, water, noise and reclamation.*

Adding land use regulations to the Larimer County Land Use Code for the review and approval of oil and gas development in the county is a change that is consistent with principles and policies of the Comprehensive Plan (Master Plan) listed above. Furthermore, by virtue of SB 19-181 granting local government's authority to regulate surface impacts of oil and gas operations beyond the scope of the COGCC rules gives credence to the policy directives above, which speak to the need for local regulation of such uses.

B. The proposed change is necessary to correct an omission or error in the Code.

The proposed code changes will not correct omissions or errors in the Code, thus this criterion should be determined to be inapplicable to this request.

STAFF FINDINGS:

- A. The proposed text changes to the Larimer County Land Use Code pertaining to Oil and Gas Facility regulations are consistent with the Larimer County Comprehensive Plan.

DEVELOPMENT SERVICES TEAM RECOMMENDATION:

Community Development staff recommends that the Larimer County Planning Commission recommend to the Board of County Commissioners approval of the Land Use Code amendments regarding oil and gas operation, as found in File #20-CODE0245 – Oil and Gas Regulations Code Amendments which include:

1. Modifying the definition of oil and gas drilling and production as found in Section 0.1. as follows:

Oil and gas ~~facility drilling and production~~. Any surface operation intended to discover, develop, recover, collect and/or process oil and/or gas, including any surface operation intended to dispose of production fluids and other wastes associated with the discovery, development, recovery, collection and/or processing of oil and gas.

2. Modifying Sections 4.1.1. through 4.1.23., and the Zoning Table in Section 4.0. by changing the naming and procedure for oil and gas drilling and production as follows:

Oil and gas ~~facility drilling and production~~ (R) (SR) – see section 4.3.7

3. Updating the use description of oil and gas drilling and production in Section 4.3.7.F as follows:

F. ~~Oil and gas facility drilling and production.~~ Any surface operation intended to discover, develop, recover, collect and/or process oil and/or gas, ~~excluding refineries including any surface operation intended to dispose of production fluids and other wastes associated with the discovery, development, recovery, collection and/or processing of oil and gas.~~

1. New oil and gas facilities shall comply with the requirements of Section 17.0 – Oil and Gas Facilities ~~An access permit must be obtained from the county engineering department prior to the commencement of any oil and gas drilling production operation.~~

4. Adding Section 17.0. Oil and Gas Facilities.

See Attachment A

SUGGESTED MOTION:

I move that the Larimer County Planning Commission recommend to the Board of County Commissioners approval of the Land Use Code amendments regarding oil and gas operation, as found in File #20-CODE0245 – Oil and Gas Regulations Code Amendments as recommended by staff above.

Attachment A

Section 17 - Oil and Gas Facilities

Draft Regulations

Draft Date: February 5, 2020

17.0. – OIL AND GAS FACILITIES

17.1. – Intent and Purpose.

- A. Intent.** The intent of this section of the Land Use Code is to establish a regulatory framework for new oil and gas facilities (O&GFs) to be located in the unincorporated areas of Larimer County in a manner that acknowledges private property rights and protects the public health, safety and general welfare, protects environment and wildlife, and minimizes adverse impacts.
- B. Authority:** C.R.S. 29-20-104-(1) provides the County authority to regulate and review applications pertaining to the surface development of O&GFs.
- C. Purpose:** These regulations are necessary to:
1. Ensure a comprehensive land use process and transparent public process for the development of new O&GFs, in the unincorporated areas of the County.
 2. Provide for the managed development, installation, maintenance, modification, reclamation and removal of O&GFs without unreasonably discriminating against oil and gas developers and operators, or mineral interest owners.
 3. Minimize to the maximum extent possible the nuisance effects of O&GFs through the application of best available techniques and technologies.
 4. Promote and protect the public health, safety and welfare, and protect the environment and wildlife by minimizing the adverse impacts of O&GFs.
 5. Maximize protection of natural and cultural resources and public facilities.
 6. Encourage O&GF's to strategically locate where adverse impacts from such operations can be avoided.
 7. Minimize and mitigate the extent and severity of adverse impacts that cannot be avoided.
 8. Confirm the financial, indemnification and insurance capacities of the oil and gas developer/operator to ensure timely and effective construction, production, removal and reclamation of O&GFs and infrastructure.
- D. Applicability:** These regulations shall apply to all new O&GFs, to be constructed on any property in all zoning districts in the unincorporated portions of Larimer County.
- E. Severability:** If any section, clause, provision, or portion of these regulations should be found to be unconstitutional or otherwise invalid by a court of competent jurisdiction, the remainder of the regulations in this section shall not be affected thereby and is hereby declared to be necessary for the public health, safety and welfare.

17.2. – Review Procedures and Required Permits.

- A. General Requirements.** No person, firm or corporation shall establish, construct, or build a new O&GF, without first having obtained required land use approval(s) and permits as required by this Code. Applications to the County for new O&GFs, may be submitted simultaneously with the Colorado Oil and Gas Conservation Commission (COGCC) permitting process.
- B. County Review Process:** All new O&GFs, in the unincorporated portions of Larimer County shall require approval of a Special Review application for the proposed facility as set forth in Section 4.5 of this Code. Application and submittal requirements for O&GFs are specified in the following Community Development Department application handouts:
1. Sketch Plan Review Application and Submittal Requirements for Oil and Gas Facilities.
 2. Neighborhood Meeting Submittal Requirements and Guidelines for Oil and Gas Facilities.
 3. Special Review Application and Submittal Requirements for Oil and Gas Facilities.
- C. County Permits.** Prior to the commencement of any construction activity for an O&GF, all required

permits for such facilities shall be approved. Required permits include, but are not limited to:

1. Access permits,
2. Development construction permit,
3. Building permits for all qualifying buildings and structures,
4. Electrical permits, and
5. All federal, state and local permits.

- D. Non-County Permits:** County approval of an O&GF shall not relieve the landowner or applicant of the responsibility for securing other permits or approvals required by any other applicable County Departments, local fire district, municipalities, or other applicable public agencies.
- E. Technical Expert Review:** Applications for O&GFs may involve complex technical issues that require review and input that is beyond the expertise of County staff. If such a situation arises, the Community Development Director may commission a third-party review of the relevant subject matter and require the applicant to pay reasonable costs for the third-party review. Selection of a third-party expert(s) to review portions the proposal will be at the discretion of the County.

17.3. – Standards Required for Oil and Gas Facilities.

A. General:

1. In addition to the standards and requirements of this Section 17, all other relevant standards and regulations set forth in this Code shall also apply.
2. All applications for new O&GFs, shall meet all applicable federal, state and local standards and regulations pertaining to the development and operation of such facilities.

B. Setbacks:

1. Setbacks for O&GFs shall conform to Section 604. SETBACK AND MITIGATION MEASURES FOR OIL AND GAS FACILITIES, DRILLING, AND WELL SERVICING OPERATION of the 600 Series Safety Regulations of the COGCC Rules and Regulations.
2. To achieve the objectives of Section 17.1.C., the Board of County Commissioners may, on a case by case basis, require setbacks greater than required by the COGCC.
3. The Board of County Commissioners may, by appeal, allow a reduction of the COGCC setbacks when it has been determined that the applicant has adequately demonstrated that the setbacks prohibit access to the mineral interests being sought, and/or the reduced setbacks will achieve and mitigate to the extent necessary the objectives of this code or the expectations of the Board of County Commissioners.

C. Air Quality:

1. **An Air Quality Report and Plan** shall be submitted with all O&GF applications. The report/plan shall demonstrate how the development and operation of the facility will avoid and/or mitigate adverse impacts to air quality and demonstrate compliance with and implementation of standards in Sections 17.3.C. and 8.11 of this Code.
2. In addition to all federal and state laws, rules and regulations, applications for O&GFs shall demonstrate how exploration, construction and standard operations of a O&GF will comply with the rules and regulations of the Colorado Air Quality Control Commission (AQCC). Information to be provided shall include all appropriate applications of notifications and permits for sources of emissions.
3. Reduced Emission (Green) Completions shall be used for all completions and well workovers. Such completions shall include the use of Best Management Practices including, when available,

the following unless an equal or better system exists:

- a. Closed loop, pitless drilling, completion systems, without permanent on-site storage tanks, for the containment and/or recycling of all drilling, completion and flowback fluids.
 - b. Flaring only allowed during emergencies or upset conditions. When allowed, routing and control of all emissions to a flare or combustor shall provide at least 98% destruction or removal efficiency.
 - c. Zero emission desiccant dehydrators.
 - d. Emission controls of 95% or better for glycol dehydrators.
 - e. Pressure-suitable separator and vapor recovery units.
 - f. No-bleed continuous and intermittent pneumatic devices.
 - g. Automated tank gauging.
4. O&GFs shall be equipped with electric-powered engines for motors, compressors, drilling and production equipment, and pumping systems unless no adequate electricity source is available, or it is technically infeasible.
 5. O&GF applications shall include operational provisions to reduce emissions on Air Quality Action Advisory Days posted by the Colorado Department of Public Health and Environment (CDPHE) for the Front Range area. The provisions shall include how alerts are received, outline specific emission reduction measures, and include requirements for documenting the measures implemented. Measures should include:
 - a. Minimizing vehicle traffic and engine idling,
 - b. Reducing truck and worker traffic,
 - c. Delaying vehicle refueling,
 - d. Suspending or delaying use of fossil fuel powered equipment,
 - e. Postponing construction and maintenance activities,
 - f. Postponing well maintenance and liquid unloading that would result in emission releases to the atmosphere, and
 - g. Postponing or reducing operations with high potential to emit VOCs of NOx.

D. Leak Detection and Repair:

1. **A Leak Detections and Repair Plan** shall be submitted with all O&GF applications. The plan shall disclose techniques, methods and protocols that will be utilized at the proposed O&GF to identify, prevent, contain, document, repair and report leaks, and shall demonstrate how it will comply with and implement the standards in this Section 17.1.3.F.
2. Operators shall conduct leak detection and repair inspections at the frequency required by the APCD for the emission source using modern leak detection technologies (infrared cameras, etc.) and equipment. The results of said inspections, including all corrective actions taken, shall be reported to the Larimer County Department of Health and Environment (LCDHE) and County Local Government Designee (LGD) upon request.
3. Repair of verified leaks shall occur within 72 hours of detection. If it is anticipated that a repair will take longer than 72 hours, the operator shall provide a written explanation to the LCDHE and the LGD as to why more time is required and how the leak will be contained. If a leak is not repaired within 72-hours, the O&GF shall be shut-in until the leak is repaired.
4. Equipment leaks that pose an imminent safety risk to persons, wildlife, or the environment shall undergo emergency shut down and not be allowed to operate until the operator has provided evidence that the leak has been repaired.
5. At least annually, operators shall provide a 2-week notice of a routine leak inspection to the

LCDHE and LGD inviting them to attend and observe the inspection.

E. Odors:

1. **An Odor Mitigation Plan** shall be required for all O&GF applications indicating how the operations will prevent odors from adversely impacting the public and wildlife and further demonstrating compliance with the standards in this Section 17.1.3.H.
2. Oil and gas operations shall comply with the CDPHE, AQCC, Regulation No. 2 Odor Emission, 5 CCR 1001-4, Regulation No. 3, 5 CCR 1001-5, and Regulation No. 7, 5 CCR 1001-9 Sections VII and VIII.
3. Proposed O&GFs shall provide protocols for immediate response to odor complaints that include options for ceasing operations, notification of affected residents, and temporary relocation of residents until the source of the odor is identified and resolved.
4. The operator shall communicate the schedule/timing of well completion activities to adjacent and nearby residents which could include an online portal. As part of the application, provide information on how notifications will be communicated to the public.
5. The Odor Mitigation Plan shall include control strategies which shall be implemented upon receipt of an odor complaint(s) or as required by the County depending on the size, location and nature of the facility. These Odor control strategies may include the following:
 - a. Odorants, that are not a masking agent, shall be added to chillers and/or mud systems.
 - b. Additives to minimize odors from drilling and fracturing fluids except that operators shall not mask odors by using masking fragrances.
 - c. Filtration systems and/or additives to minimize, not mask, odors from drilling and fracturing fluids shall be utilized in the drilling and flowback processes.
 - d. Increasing additive concentration during peak hours provided additive does not create a separate odor. Additives must be used per the manufacturer's recommended level.
 - e. Enclosed shale shakers shall be utilized to contain fumes from exposed mud where safe and feasible.
 - f. Drilling activities shall utilize minimum low odor Category III drilling fluid or non-diesel-based drilling muds that do not contain benzene, toluene, ethylbenzene or xylene (BTEX).
 - g. Wipe down drill pipe as they exit the well bore each time.

F. Water Quality and Water Bodies:

1. **A Water Quality Report/Plan** shall be submitted with all O&GF applications. The report/plan shall demonstrate how the development and operations of the facility will avoid impacts to surface and ground waters in Larimer County, identify all private and community permitted water wells within half-mile and demonstrate compliance with and implementation of standards in Sections 17.3.D. and 8.12 of this Code.
2. Baseline and subsequent water source tests, as typically required by and submitted to the COGCC and CDPHE, shall be provided to the LCDHE and the LGD for the life of the facility and any post-closure assessments, if approved by the owner(s) of the water well.
3. The application shall provide documentation indicating how the COGCC water quality protection standards are being implemented.
4. Locating O&GFs within a Federal Emergency Management Agency (FEMA) designated 100-year floodplain shall not be allowed unless no other location is feasible, and all other appropriate permissions are obtained.
5. The requirements of this Section 17.4.D shall not prevent discharges reviewed and permitted by

the CDPHE Water Quality Control Division, the EPA, and the Army Corps of Engineers.

G. Spills and Releases:

1. **A Spill Prevention and Containment Plan** shall be submitted with all O&GF applications. The plan shall disclose techniques, methods, and protocols to be utilized at the proposed O&GF to prevent, contain, document and report any spills or releases, and shall demonstrate compliance with and implementation of the standards in this Section 17.3.G.
2. An Emergency Response Plan shall be provided that includes evacuation plans and routes, inventory of emergency response supplies, and notification requirements. As part of this plan it is recommended that an annual open house training be conducted for emergency services personnel to become familiar with the site.
3. Secondary containment shall be required which is capable of holding 125% of the total capacity of on-site containment vessels and storage tanks.
4. Unloading areas shall be designed to contain potential spills or direct spills into other secondary containment areas
5. Containment systems constructed of steel rimmed berms, or similar impervious surfaces that are equal to or better, shall be used for all secondary containment areas.
6. Any spill or release of unrefined and refined petroleum products, hazardous substances, fracking fluids, E&P waste, or produced fluids of greater than 25 gallons outside of secondary containment areas on an O&GF, including those thresholds reportable to the COGCC, shall upon discovery, be immediately reported to the National Response Center and CDPHE as well as the following Local Emergency Response Authorities in Larimer County:
 - a. Larimer County Sheriff – Public Safety Answering Point (PSAP) (9-1-1)
 - b. Larimer County Department of Health and Environment,
 - c. Local Fire Department/District,
 - d. Local Municipal Police Department if within in mile of a City or Town,
 - e. Larimer County Oil and Gas LGD, and
 - f. Larimer County Local Emergency Planning Committee (within 24-hours).
7. All spills or releases, whether reportable or not, shall be cleaned up immediately and to the satisfaction of the local emergency response authorities, listed in the Spill Prevention Control and Countermeasure Plan.

H. Noise:

1. **A Noise Report and Mitigation Plan** shall be required for all O&GF applications. The plan shall demonstrate how the operations will mitigate noise and vibration impacts to comply with the noise standards contained in this Section 17.3.G. The report and plan shall include the following:
 - a. A five-day (two days being the weekend day) baseline noise analysis.
 - b. Modeled decibel levels for all phases of development shall be presented using contour maps from the O&GF site (combining noise sources) at 350 feet, 500 feet, 1000 feet, and to the property line of the adjacent properties. Contour maps shall be provided that demonstrate both unmitigated and mitigated decibel levels.
 - c. A plan of proposed mitigation measures to be implemented by the O&GF during each phase of development shall be provided to ensure compliance with the maximum permissible noise levels as listed in Section H.2 below.
2. Noise generated from O&GFs shall comply with the following maximum permissible noise levels appropriate for the Zone Area Designation of the adjacent land uses as determined by the County.

Zone Area Designations are defined by C.R.S. 25-12-102 Noise Abatement, and will be used as part of the County’s determination for surrounding land uses and may be different than the County’s zone districts.

<u>ZONE AREA DESIGNATIONS</u>	<u>7:00 am to next 7:00 pm</u>	<u>7:00 pm to next 7:00 am</u>
Residential/Agricultural/Rural	55 db(A)	50 db(A)
Commercial	60 db(A)	55 db(A)
Light Industrial	70 db(A)	65 db(A)
Industrial	80 db(A)	75 db(A)

In the hours between 7:00 a.m. and the next 7:00 p.m., the noise levels permitted above may be increased by ten (10) db(A) for a single period of not to exceed fifteen minutes in any one-hour period. Night-time levels between 7:00 p.m. and the next 7:00 a.m. shall not be exceeded therefore requiring strategic planning of noise-inducing activities to be conducted during daytime hours at the site.

3. Sound levels shall be measured at or within 25 feet of the parcel boundary line where the O&GF site is located. When evaluating a noise complaint, the County shall measure sound at or within 25 of the parcel boundary line of the O&GF site and other property boundaries which are more representative of the noise impact.
 4. O&GF activities shall be operated so the ground vibration inherently and recurrently generated is not perceptible, without instruments, at any point on a boundary line of the property on which the O&GF is located.
 5. In situations where low frequency noise is a component of the problem, a sound level measurement shall be taken twenty-five (25) feet from the exterior wall of the residence or occupied structure nearest to the noise source, using a noise meter calibrated to the db(C) scale. If this reading exceeds 65 db(C), the County shall require the operator to obtain a low frequency noise impact analysis by a qualified sound engineer, including identification of any reasonable control measure available to mitigate such low frequency noise impact to be implemented by the O&GF. Such study shall be provided to the County for consideration and possible action.
 6. Construction of O&GFs, including drilling/well completions, recompletions, and pipeline installations, shall be subject to the maximum permissible noise levels specified for industrial zones for the period within which construction is being conducted. Construction activities directly connected with abatement of an emergency are exempt from the maximum permissible noise levels.
 7. Quiet design mufflers (i.e., hospital grade or dual dissipative) or equal to or better than noise mitigation technologies shall be utilized for non-electrically operated equipment.
 8. Motors, Generators, and engines shall be enclosed in acoustically insulated housings or covers.
- I. Dust:**
1. **A Fugitive Dust Control Plan** shall be submitted with all O&GF applications. The plan shall disclose techniques and methods to be utilized at the proposed O&GF to prevent or mitigate fugitive dust generated by the construction and operations of the proposed O&GF and shall demonstrate compliance with and implementation of standards in Sections 17.3.I and 8.11 of this Code.
 2. Best management practices (BMPs) for the mitigation of dust associated with on-site operations and traffic activities shall be employed at the facility. The BMPs shall be outlined in the Fugitive Dust Control Plan.

3. Produced water and other process fluids shall not be used for dust suppression unless adequately pretreated so that it does not create odors and has been approved for land application by CDPHE Water Quality Control Division.
4. Safety Data Sheets (SDSs) shall be provided with the application for any proposed chemical based dust suppressants.
5. Unless otherwise approved by the County Health and Engineering Departments, only water will be used for dust suppression activities within 300-feet of the ordinary high- water mark of any body of water.

J. Access:

1. **A Traffic Impact Analysis and Routing Plan** shall be submitted with all O&GF applications. The plan shall disclose routing alternatives and transportation infrastructure improvements proposed for the proposed O&GF to mitigate projected transportation impacts and demonstrate compliance with and implementation of the standards in this Section 17.3.E.
2. Designs for private access drives shall conform to the Local Low Volume cross section found in the Larimer County Rural Area Road Standards and shall include the following:
 - a. The first 50 feet of access drive from the edge of pavement of the adjacent road will be paved, or made of an approved all weather surface, and the remaining portions of the access drive shall be composed of a minimum of 6 inches of compacted Class 5 road base.
 - b. The access drive entrance shall include returns with a 30-foot radius.
 - c. A mud and debris tracking pad shall be located at the end of the paved portion of the access drive.

K. Chemical Handling:

1. **A Chemical and Hazardous Materials Report and Handling Plan** shall be submitted with all O&GF applications. The plan shall disclose the type of hazardous and non-hazardous materials and chemicals that will be used on the site of the proposed O&GF, including how they will be handled to prevent spills and demonstrate compliance with and implementation of standards in this Section 17.3.K.
2. Prior to any hydraulic fracturing activity, the Operator shall provide the County with a copy of the Chemical Disclosure Registry form provided to the COGCC pursuant to the COGCC's "Hydraulic Fracturing Chemical Disclosure".
3. Drilling and completion chemicals shall be removed from the site within sixty (60) days of the drilling completion.

L. Recycle, Reuse and Disposal of Fluids:

1. **A Waste Management and Disposal Plan** shall be submitted with all O&GF applications. The plan shall document the techniques and methods of the proposed O&GF to manage wastes generated on the site and demonstrate compliance with and implementation of the standards in this Section 17.3.L.
2. Drilling, completion flowback, and produced fluids shall be recycled or reused whenever technically feasible.
3. If not to be recycled or reused onsite, exploration and production waste may be temporarily stored in tanks for up to 30-days while awaiting transport to licensed disposal or recycling sites.
4. Produced water shall be recycled or reused or shall be transported by pipeline unless easements are not available.
5. The Operator shall take precautions to prevent adverse environmental impacts to air, water, soil, or biological resources to the extent necessary to protect public health, safety and welfare,

including the environment and Wildlife Resources to prevent the unauthorized discharge or disposal of oil, gas, Exploration and Production Waste, chemical substances, trash, discarded equipment, or other oil field waste.

6. The requirements of this Section 17.3.L shall not prevent discharges and beneficial uses reviewed and permitted by the CDPHE Water Quality Control Division and the Environmental Protection Agency (EPA).

M. Lighting and Visual Impacts:

1. For all phases of the development of the site, the application shall demonstrate compliance with the visual and aesthetic rules of COGCC and the Larimer County Land Use Code for landscaping, fencing and lighting set forth in Section 8.
2. All O&GFs shall be painted with colors that are matched to or slightly darker than the surrounding landscape, and shall utilize paint with uniform, non-contrasting, nonreflective color tones based upon the Munsell Soil Color Coding System.
3. The location of all outdoor lighting shall be designed to minimize off-site light spillage and glare using best practices recognized by the International Dark-Sky Association. See Section 8.15, Lighting Standards.
4. For all phases of site development, fencing shall be installed for security and visual aesthetics of the use.
5. Sound or screening wall to mitigate for noise during construction and well completion may be required if the O&GF is within 2,000 feet of residential buildings or lots, or if electric requirement is appealed.
6. O&GFs applications shall minimize removal of trees and vegetation on the site.
7. Landscaping and/or fencing for screening and visual quality as viewed from public rights-of-way and neighboring residential areas shall be required within 6 months from the time of well completion and in accordance with requirements for the zoning district.
8. O&GF applications shall demonstrate compliance with weed control requirements of the County Weed District and Forestry Services Department, including for access roads serving the facility.

N. Well Plugging and Abandonment:

1. **A Reclamation Plan** shall be submitted. The plan shall demonstrate how well abandonment and reclamation shall comply with the COGCC rules and shall include the following information:
 - a. Removal of all equipment from the well site,
 - b. Restoration of the site surface to the conditions of the site reclamation plan,
 - c. Notice to the County LGD of the commencement and completion of such activity, and
 - d. Coordinates for the location of the decommissioned well(s), and any associated gathering or flow lines, shall be provided with the notice of the completion of well abandonment.

O. Well Liquids Unloading:

1. Best management practices, including artificial lift, automated plunger lifts and at least 98% emission reductions when utilizing combustion to control venting shall be employed at all facilities unless technically infeasible.
2. Approved manual unloading shall require on-site supervision of the unloading process.

P. Flammable Materials:

1. The location of flammable materials on site shall conform to all COGCC safety standards and local fire codes.
2. A minimum 25-foot buffer, free of weeds and dried grasses, shall be required around flammable materials or equipment.

Q. Waste Disposal:

1. **A Waste Management and Disposal Plan** shall be submitted with all O&GF applications. The plan shall document the techniques and methods of the proposed O&GF to manage wastes generated on the site and demonstrate compliance with and implementation of the standards in this Section 17.3.Q.
2. Oil and gas facilities shall remain free of debris and excess materials during all phases of operation.
3. Burning of debris, trash or other flammable material is not allowed.
4. Temporary storage of materials (up to 30-days) may be allowed with installation of screening to mitigate from aesthetic impacts from public rights-of-way or if requested by landowner.

R. Removal of Equipment:

1. There shall be no permanent storage of equipment (i.e., vehicles, trailers, commercial products, chemicals, drums, totes, containers, materials, and all other supplies not necessary for uses on an oil and gas location) on the site of an oil and gas facility.
2. When not in use, or if no longer needed for on-site operations, all equipment not being used on the site shall be removed.

S. Maintenance of Machinery:

1. Statewide Best Management Practices shall be used to prevent contamination of soils and stormwater runoff, including equipment and vehicle maintenance and fluid containment.
2. There shall be no maintenance of field equipment involving hazardous materials within 300-feet of a water body.
3. Any fueling on-site shall occur over an impervious surface with a secondary containment berm and sump in case of a spill and shall not occur during storm events.

T. Flow Lines, Transfer Lines, and Gathering Lines:

1. All off-site lines transporting process materials, production wastes, product and any other items used or generated by the facility shall be located to avoid existing or proposed residential, commercial, and industrial buildings, places of assembly, surface waterbodies and designated open spaces. Buried pipelines shall be a minimum of 4-feet deep and shall be of detectable material which could include the addition of tracer wire to ensure detection during buried utility locating.
2. The location of pipelines shall be evaluated on a case-by-case basis, with the determining locational factor being the size and type of pipeline being proposed.
3. Coordinates of all flow lines, gathering lines, and transfer lines shall be provided.

U. Temporary Water Lines:

1. Temporary waterlines shall be used, unless development is not within a water service area.
2. Temporary waterlines shall be buried at all existing driveway and road crossings, or utilize existing culverts, if available.

V. Financial Assurance:

1. The Applicant shall demonstrate the financial capability to reclaim all disturbed areas during each phase of the site development and following termination of the oil and gas operation on the site. This shall include meeting any state requirements, and any additional requirements the County deems necessary to protect the public health, safety, and welfare.
2. The Applicant shall, for the life of the use, carry customary and usual environmental liability insurance.

17.4. – Appeals.

- A. Section 22 of this Code shall provide direction for all appeals to standards, processes and provisions

of this Section 17.

17.5. – Enforcement and Inspections.

- A. Applications for O&GFs shall demonstrate compliance with this and all other relevant Sections of this Code. Failure of an Operator to maintain compliance with the County approval of an O&GF may result in the revocation of the approval pursuant to the procedures in Section 12 of the Land Use Code. The County retains the right to seek whatever remedy or redress is legally allowable.
- B. The County reserves the right to inspect the property for compliance.

17.6. – Fees and Security for Reclamation.

- A. The following fees are applicable to oil and gas facilities:
 - a. A Capital Transportation Impact fee.

17.7. – Termination or Modifications of Use.

- A. No modification to an approved O&GF shall be made without obtaining appropriate land use approvals from the County.
- B. Upon termination of use, the O&GF shall be reclaimed pursuant to the reclamation plan provided.

17.8. – Definitions.

- A. Unless otherwise listed herein, the definitions found within the C.R.S. and Colorado Oil and Gas Conservation Commission (COGCC) regulations shall apply.

Attachment B

Redline Version

Section 17 - Oil and Gas Facilities

Draft Regulations

Draft Date: February 5, 2020

17.0. – OIL AND GAS FACILITIES

17.1. – Intent and Purpose.

- A. Intent.** The intent of this section of the Land Use Code is to establish a regulatory framework for new oil and gas facilities (O&GFs), ~~including recompletions~~ to be located in the unincorporated areas of Larimer County in a manner that ~~acknowledges private property rights and~~ protects the public health, safety and general welfare, ~~protects private property rights~~, protects environment and wildlife, and minimizes adverse impacts.
- B. Authority:** C.R.S. 29-20-104-(1) provides the County authority to regulate and review applications pertaining to the surface development of O&GFs.
- C. Purpose:** These regulations are necessary to:
1. Ensure a comprehensive land use process and transparent public process for the development of new O&GFs, ~~including recompletions~~, in the unincorporated areas of the County.
 2. Provide for the managed development, installation, maintenance, modification, reclamation and removal of O&GFs without unreasonably discriminating against oil and gas developers and operators, or mineral interest owners.
 3. Minimize to the maximum extent possible the nuisance effects of O&GFs through the application of best available techniques and technologies.
 4. Promote and protect the public health, safety and welfare, and protect the environment and wildlife by minimizing the adverse impacts of O&GFs.
 5. Maximize protection of natural and cultural resources and public facilities.
 6. ~~Encourage O&GFs to s~~Strategically locate ~~O&GFs to locate~~ where adverse impacts from such operations can be avoided.
 7. Minimize and mitigate the extent and severity of adverse impacts that cannot be avoided.
 8. Confirm the financial, indemnification and insurance capacities of the oil and gas developer/operator to ensure timely and effective construction, production, removal and reclamation of O&GFs and infrastructure.
- D. Applicability:** These regulations shall apply to all new O&GFs, ~~including exploration and recompletions~~, to be constructed on any property in all zoning districts in the unincorporated portions of Larimer County.
- E. Severability:** If any section, clause, provision, or portion of these regulations should be found to be unconstitutional or otherwise invalid by a court of competent jurisdiction, the remainder of the regulations in this section shall not be affected thereby and is hereby declared to be necessary for the public health, safety and welfare.

17.2. – Review Procedures and Required Permits.

- A. General Requirements.** No person, firm or corporation shall establish, construct, or build a new O&GF, ~~including recompletions~~, without first having obtained required land use approval(s) and permits as required by this Code. Applications to the County for new O&GFs, ~~including recompletions~~, may be submitted simultaneously with the Colorado Oil and Gas Conservation Commission (COGCC) permitting process, ~~but approval by the County must be secured prior to construction.~~
- B. County Review Process:** All new O&GFs, ~~including recompletions~~, in the unincorporated portions of Larimer County shall require approval of a Special Review application for the

proposed facility as set forth in Section 4.5 of this Code. Application and submittal requirements for O&GFs are specified in the following Community Development Department application handouts:

1. Sketch Plan Review Application and Submittal Requirements for Oil and Gas Facilities.
 2. Neighborhood Meeting Submittal Requirements and Guidelines for Oil and Gas Facilities.
 3. Special Review Application and Submittal Requirements for Oil and Gas Facilities.
- C. County Permits.** Prior to the commencement of any construction activity for an O&GF, all required permits for such facilities shall be approved. Required permits include, but are not limited to:
1. Access permits,
 2. Development construction permit,
 3. Building permits for all qualifying buildings and structures,
 4. Electrical permits, and
 5. All federal, state and local permits.
- D. Non-County Permits:** County approval of an O&GF shall not relieve the landowner or applicant of the responsibility for securing other permits or approvals required by any other applicable County Departments, local fire district, municipalities, or other applicable public agencies.
- E. Technical Expert Review:** Applications for O&GFs may involve complex technical issues that require review and input that is beyond the expertise of County staff. If such a situation arises, the Community Development Director may commission a third-party review of the relevant subject matter and require the applicant to pay reasonable costs for the third-party review. Selection of a third-party expert(s) to review portions the proposal will be at the discretion of the County.

17.3. – Standards Required for ~~all~~ Oil and Gas Facilities.

A. General:

1. In addition to the standards and requirements of this Section 17, all other relevant standards and regulations set forth in this Code shall also apply.
2. All applications for new O&GFs, ~~including recompletions,~~ shall meet all applicable federal, state and local standards and regulations pertaining to the development and operation of such facilities. ~~When the standards and regulations contained herein conflict with the standards and requirements of another agency, the stricter standard shall apply.~~

B. Setbacks:

1. ~~The minimum required setbacks for buildings and structures set forth in the applicable zoning district shall apply to the proposed O&GF.~~
2. ~~In addition to the setbacks in paragraph 3 below, the setbacks set forth in Section 4.9 of this Code shall apply to proposed O&GFs to minimize their impacts on public health, safety, welfare, the environment, and agricultural operations.~~
3. ~~To achieve the intent and purpose of this Section 17, the following minimum setbacks for O&GFs shall be required, unless more restrictive setbacks are required by the rules of the COGCC:~~
 - ~~1,000-foot setback from a residential building or platted residential lot~~
 - ~~2,000-foot setback from a high-occupancy building including schools,~~

~~registered day cares, nursing homes.~~

~~— 500-foot setback from a water body or designated outside activity area~~

1. Setbacks for O&GF's shall conform to Section 604. SETBACK AND MITIGATION MEASURES FOR OIL AND GAS FACILITIES, DRILLING, AND WELL SERVICING OPERATION of the 600 Series Safety Regulations of the COGCC Rules and Regulations.

~~7.2.~~ To achieve the objectives of Section 17.1.C., the Board of County Commissioners may, on a case by case basis, require setbacks greater than required by the COGCC. ~~an increase to these minimum setbacks.~~

~~8.3.~~ The Board of County Commissioners may, by appeal, allow a reduction of the COGCC minimum setbacks when it has been determined that the applicant has adequately demonstrated that the setbacks prohibit access to the mineral interests being sought, and /or the reduced setbacks will achieve and mitigate to the extent necessary practicable the objectives of this code or the expectations of the Board of County Commissioners.

C. Air Quality:

1. **An Air Quality Report and /Plan** shall be submitted with all O&GF applications. The report/plan shall demonstrate how the development and operation of the facility will avoid and/or mitigate adverse impacts to air quality and demonstrate compliance with and implementation of standards in Sections 17.3.C. and 8.11 of this Code.
2. In addition to all federal and state laws, rules and regulations, applications for O&GFs shall demonstrate how exploration, construction and standard operations of a O&GF, ~~including traffic and construction equipment~~, will comply with the rules and regulations of the Colorado Air Quality Control Commission (AQCC). Information to be provided shall include all appropriate applications of notifications and permits for sources of emissions.
3. Reduced Emission (Green) Completions shall be used for all completions and well workovers ~~following hydraulic fracturing~~. Such completions shall include the use of Best Management Practices including, when available, the following unless an equal or better system exists:
 - a. ~~Except for very small productions,~~ Closed loop, pitless drilling, completion systems, without permanent on-site storage tanks, for the containment and/or recycling of all drilling, completion and flowback fluids.
 - b. Flaring only allowed during emergencies or upset conditions. When allowed, routing and control of all emissions to a flare or combustor shall provide at least 98% destruction or removal efficiency.
 - c. Zero emission desiccant dehydrators.
 - d. Emission controls of 95%~~90%~~ or better for glycol dehydrators.
 - e. Pressure-suitable separator and vapor recovery units.
 - f. No-bleed continuous and intermittent pneumatic devices.
 - g. Automated tank gauging.
4. O&GFs shall be equipped with electric-powered engines for motors, compressors, drilling and production equipment, and pumping systems unless no adequate electricity source is available, or it is technically infeasible.
- ~~5. During exploration and construction, the applicant shall demonstrate that all facilities on the site, including traffic and construction equipment, complies with all AQCC rules and~~

~~regulations.~~

~~6.5.~~ O&GF applications shall include operational provisions to reduce emissions on Air Quality Action Advisory Days posted by the Colorado Department of Public Health and Environment (CDPHE) for the Front Range area. The provisions shall include how alerts are received, outline specific emission reduction measures, and include requirements for documenting the measures implemented. Measures should include:

- a. Minimizing vehicle traffic and engine idling,
- b. Reducing truck and worker traffic,
- c. Delaying vehicle refueling,
- d. Suspending or delaying use of fossil fuel powered equipment,
- e. Postponing construction and maintenance activities,
- f. Postponing well maintenance and liquid unloading that would result in emission releases to the atmosphere, and
- g. Postponing or reducing operations with high potential to emit VOC's of NOx's.

D. Leak Detection and Repair:

1. **A Leak Detections and Repair Plan** shall be submitted with all O&GF applications. The plan shall disclose techniques, methods and protocols that will be utilized at the proposed O&GF to identify, prevent, contain, document, repair and report leaks, and ~~it~~ shall demonstrate how it will comply with and implement the standards in this Section 17.1.3.F.
2. Operators shall conduct leak detection and repair inspections at the frequency required by the APCD for the emission source using modern leak detection technologies (infrared cameras, etc.) and equipment. The results of said inspections, including all corrective actions taken, shall be reported to the Larimer County Department of Health and Environment (LCDHE) and County Local Government Designee (LGD) upon request.
- ~~3. All verified leaks at an O&GF shall be reported to the LCDHE and LGD within 24 hours of the detection of the leak.~~
- ~~4.3.~~ Repair of verified leaks shall occur within 72 hours of detection. If it is anticipated that a repair will take longer than 72 hours, the operator shall provide a written explanation to the LCDHE and the LGD as to why more time is required and how the leak will be contained. If a leak is not repaired within 72-hours, the O&GF shall be shut-in until the leak is repaired.
- ~~5.4.~~ Equipment leaks that pose an imminent safety risk to persons, wildlife, or the environment shall undergo emergency shut down and not be allowed to operate until the operator has provided evidence that the leak has been repaired.
- ~~6.5.~~ At least annually, operators shall provide a 2-week notice of a routine leak inspection to the LCDHE and LGD inviting them to attend and observe the inspection.

E. Odors:

1. **An Odor Mitigation Plan** shall be required for all O&GF applications indicating how the operations will prevent odors from adversely impacting the public and wildlife and further demonstrating compliance with the standards in this Section 17.1.3.H.
2. Oil and gas operations shall comply with the CDPHE, AQCC, Regulation No. 2 Odor Emission, 5 ~~Code of Colorado Regulations-CCR 1001-4, Regulation No. 3, 5 CCR 1001-5, and Regulation No. 7, 5 CCR 1001-9 Sections VII and VIII.~~
3. Proposed O&GFs shall provide protocols for immediate response to odor complaints

that include options for ceasing operations, notification of affected residents, and temporary relocation of residents until the source of the odor is identified and resolved.

4. The operator shall communicate the schedule/timing of well completion activities to adjacent and nearby residents which could include an online portal. As part of the application, provide information on how notifications will be communicated to the public.
5. The Odor Mitigation Plan shall include control strategies ese which shall be implemented upon receipt of an odor complaint(s) or as required by the County depending on the size, location and nature of the facility. These Odor control strategies may include the following:
 - a. Odorants, that are not a masking agent, shall be added to chillers and /or mud systems.
 - b. Additives to minimize odors from drilling and fracturing fluids except that operators shall not mask odors by using masking fragrances. Operators shall not use odor masking agents or additives.
 - c. Filtration systems and/or additives to minimize, not mask, odors from drilling and fracturing fluids shall be utilized in the drilling and flowback processes.
 - d. Increasing additive concentration during peak hours provided additive does not create a separate odor. Additives must be used per the manufacturer's recommended level. Additives intended to eliminate odors generated by the operations of an O&GF shall not create a separate odor.
 - e. Enclosed shale shakers shall be utilized to contain fumes from exposed mud where safe and feasible.
 - f. Drilling activities shall utilize minimum low odor Category III drilling fluid or non-diesel-based drilling muds that do not contain benzene, toluene, ethylbenzene or xylene (BTEX).
 - g. Wipe down drill pipe as they exit the well bore each time.

F. Water Quality and Water Bodies:

1. **A Water Quality Report/Plan** shall be submitted with all O&GF applications. The report/plan shall demonstrate how the development and operations of the facility will avoid impacts to surface and ground waters in Larimer County, identify all private and community permitted water wells within a half-mile and demonstrate compliance with and implementation of standards in Sections 17.3.D. and 8.12 of this Code.
2. Baseline and subsequent water source tests, as typically required by and submitted to the COGCC and CDPHE, shall be provided to the LCDHE and the LGD for the life of the facility and any post-closure assessments, if approved by the owner(s) of the water well. It is recommended that the operator also post these reports online for public/access transparency.
3. The application shall provide documentation indicating how the COGCC water quality protection standards are being implemented.
4. Locating O&GFs within a Federal Emergency Management Agency (FEMA) designated 100-year floodplain shall not be allowed unless no other location is feasible, and all other appropriate permissions are obtained.

~~5. New wastewater injection wells shall not be allowed.~~

~~6.5.~~ The requirements of this Section 17.4.D shall not prevent discharges reviewed and permitted by the CDPHE Water Quality Control Division, the EPA, and the Army Corps of Engineers.

G. Spills and Releases:

1. **A Spill Prevention and Containment Control and Countermeasure Plan** shall be submitted with all O&GF applications. The plan shall disclose techniques, methods, and protocols to be utilized at the proposed O&GF to prevent, contain, document and report any spills or releases, and shall demonstrate compliance with and implementation of the standards in this Section 17.3.~~GE.~~
2. An Emergency Response Plan shall be provided that includes evacuation plans and routes, inventory of emergency response supplies, and notification requirements. As part of this plan it is recommended that an~~and~~ annual open house training be conducted for emergency services personnel to become familiar with the site.
3. Secondary containment shall be required which is capable of holding 125% of the total capacity of on-site containment vessels and storage tanks.
4. Unloading areas shall be designed to contain potential spills or direct spills into other secondary containment areas
5. Containment systems constructed of steel rimmed berms, or similar impervious surfaces that are equal to or better, shall be used for all secondary containment areas.
6. Any spill or release of unrefined and refined petroleum products, hazardous substances, fracking fluids, extraction and production (E&P) waste, or produced fluids of greater than 25 gallons outside of secondary containment areas on an O&GF, including those thresholds reportable to the COGCC, shall upon discovery, be immediately reported to the National Response Center and CDPHE as well as the following Local Emergency Response Authorities in Larimer County:
 - a. Larimer County Sheriff – Public Safety Answering Point (PSAP) (9-1-1)
 - b. Larimer County Department of Health and Environment,
 - c. Local Fire Department/District,
 - d. Local Municipal Police Department if within in mile of a City or Town,
 - e. Larimer County Oil and Gas LGD, and
 - f. Larimer County Local Emergency Planning Committee (within 24-hours).
7. All spills or releases, whether reportable or not, shall be cleaned up immediately and to the satisfaction of the local emergency response authorities, listed in the Spill Prevention Control and Countermeasure Plan.

H. Noise:

1. **A Noise Report and Mitigation Plan** shall be required for all O&GF applications. The plan shall demonstrate how the operations will mitigate noise and vibration impacts to comply with the noise standards contained in this Section 17.3.G. The report and plan shall include the following:
 - a. A ~~thre~~five-day (two one days being a the weekend day) baseline noise analysis.
 - b. Modeled decibel levels for ~~various~~ all phases of development shall be presented using contour maps ~~to radii of 350 feet from the site of operation/noise source (per COGCC) or at the property line of an adjacent land use, whichever is closer from the O&GF site (combining noise sources)~~

at 350 feet, 500 feet, 1000 feet, and to the property lines of the adjacent properties. Contour maps shall be provided that demonstrate both unmitigated and mitigated decibel levels.

- c. A plan of proposed mitigation measures to be implemented by the ~~oil and gas operations~~ O&GF during ~~all stages~~ each phase of development shall be provided to ensure compliance with the maximum permissible noise levels as listed in Section ~~GH.2~~ below.
2. Noise generated from O&GFs shall comply with the following maximum permissible noise levels appropriate for the ~~zoning and~~ Zone Area Designation of the adjacent land uses as determined by the County: Zone Area Designations are defined by C.R.S. 25-12-102 Noise Abatement, and will be used as part of the County’s determination for surrounding land uses and may be different than the County’s zone districts.

<u>ZONE AREA DESIGNATIONS</u>	<u>7:00 am to next 7:00 pm</u>	<u>7:00 pm to next 7:00 am</u>
Residential/Agricultural/Rural	55 db(A)	50 db(A)
Commercial	60 db(A)	55 db(A)
Light Industrial	70 db(A)	65 db(A)
Industrial	80 db(A)	75 db(A)

In the hours between 7:00 a.m. and the next 7:00 p.m., the noise levels permitted above may be increased by ten (10) db(A) for a single period of not to exceed fifteen minutes in any one-hour period. Night-time levels between 7:00 p.m. and the next 7:00 a.m. shall not be exceeded therefore requiring strategic planning of noise-inducing activities to be conducted during daytime hours at the site.

- ~~3. Decibel levels produced by the O&GF shall meet the identified level for the appropriate zoning area designation of the adjacent land use. Zones as defined by Article 12 – Noise abatement of the Colorado Revised Statutes (C.R.S.) 25-12-102 will be considered as part of the County’s determination for surrounding land uses.~~
- ~~4. In remote locations, where there is no reasonably proximate occupied structure or Designated Outside Activity Area (COGCC), the light industrial standard may be applicable as determined by the County.~~
3. Decibel Sound levels shall be measured at least 350 feet from the boundary of the operation/noise source (from source or sound wall per COGCC) or at the property line of the adjacent land use, whichever is greater, or within 25 feet of the parcel boundary line where the O&GF site is located. When evaluating a noise complaint, the County shall measure sound at or within 25 feet of the parcel boundary line of the O&GF site and other property boundaries which are more representative of the noise impact.
4. O&GF activities shall be operated so the ground vibration inherently and recurrently generated is not perceptible, without instruments, at any point on a boundary line of the property on which the O&GF is located.
5. In situations where low frequency noise is a component of the problem, a sound level measurement shall be taken twenty-five (25) feet from the exterior wall of the residence or occupied structure nearest to the noise source, using a noise meter calibrated to the db(C) scale. If this reading exceeds 65 db(C), the County shall require the operator to obtain a low frequency noise impact analysis by a qualified sound

engineer, including identification of any reasonable control measure available to mitigate such low frequency noise impact to be implemented by the O&GF. Such study shall be provided to the County for consideration and possible action.

6. Construction of O&GFs, including drilling/well completions, recompletions, and pipeline installations, shall be subject to the maximum permissible noise levels specified for ~~light~~-industrial zones for the period within which construction is being conducted. Construction activities directly connected with abatement of an emergency are exempt from the maximum permissible noise levels.
7. Quiet design mufflers (i.e., hospital grade or dual dissipative) or equal to or better than noise mitigation technologies shall be utilized for non-electrically operated equipment.
8. Motors, Generators, and engines shall be enclosed in acoustically insulated housings or covers.

I. Dust:

1. **A Fugitive Dust Control Plan** shall be submitted with all O&GF applications. The plan shall disclose techniques and methods to be utilized at the proposed O&GF to prevent or mitigate fugitive dust generated by the construction and operations of the proposed O&GF and shall demonstrate compliance with and implementation of standards in Sections 17.3.I and 8.11 of this Code.
2. Best management practices (BMPs) for the mitigation of dust associated with on-site operations and traffic activities shall be employed at the facility. The BMPs shall be outlined in the Fugitive Dust Control Plan.
3. Produced water and other process fluids shall not be used for dust suppression unless adequately pretreated so that it does not create odors and has been approved for land application by CDPHE Water Quality Control Division.
4. Safety Data Sheets (SDSs) shall be provided with the application for any proposed chemical based dust suppressants.
5. Unless otherwise approved by the County Health and Engineering Departments, only water will be used for dust suppression activities within 300-feet of the ordinary high-water mark of any body of water.

J. Access:

1. **A Traffic Impact Analysis and Routing Plan** shall be submitted with all O&GF applications. The plan shall disclose routing alternatives and transportation infrastructure improvements proposed for the proposed O&GF to mitigate projected transportation impacts and demonstrate compliance with and implementation of the standards in this Section 17.3.E.
2. Designs for private access drives shall conform to the Local Low Volume cross section found in the Larimer County Rural Area Road Standards and shall include the following:
 - a. The first 50 feet of access drive from the edge of pavement of the adjacent road will be paved, or made of an approved all weather surface, and the remaining portions of the access drive shall be composed of a minimum of 6 inches of compacted Class 5 road base.
 - b. The access drive entrance shall include returns with a 30-foot radius.
 - c. A mud and debris tracking pad shall be located at the end of the paved portion of the access drive.

K. Chemical Handling:

1. **A Chemical and Hazardous Materials Report and Handling Plan** shall be submitted with all O&GF applications. The plan shall disclose the type of hazardous and non-hazardous materials and chemicals that will be used on the site of the proposed O&GF, including how they will be handled to prevent spills and demonstrate compliance with and implementation of standards in this Section 17.3.K.
2. Prior to any hydraulic fracturing activity, the Operator shall provide the County with a copy of the Chemical Disclosure Registry form provided to the COGCC pursuant to the COGCC’s “Hydraulic Fracturing Chemical Disclosure”.
3. Drilling and completion chemicals shall be removed from the site within sixty (60) days of the drilling completion.

L. Recycle, Reuse and Disposal of Fluids:

1. **A Waste Management and Disposal Plan** shall be submitted with all O&GF applications. The plan shall document the techniques and methods of the proposed O&GF to manage wastes generated on the site and demonstrate compliance with and implementation of the standards in this Section 17.3.L.
2. Drilling, completion flowback, and produced fluids shall be recycled or reused whenever technically feasible.
3. If not to be recycled or reused onsite, exploration and production waste may be temporarily stored in tanks for up to 30-days while awaiting transport to licensed disposal or recycling sites.
4. Produced water shall be recycled or reused or shall be transported by pipeline unless easements are not available.
5. The Operator shall take precautions to prevent adverse environmental impacts to air, water, soil, or biological resources to the extent necessary to protect public health, safety and welfare, including the environment and Wildlife Resources to prevent the unauthorized discharge or disposal of oil, gas, Exploration and Production Waste, chemical substances, trash, discarded equipment, or other oil field waste.
6. The requirements of this Section 17.3.L shall not prevent discharges and beneficial uses reviewed and permitted by the CDPHE Water Quality Control Division and the Environmental Protection Agency (EPA).

M. Lighting and Visual Impacts:

1. For all phases of the development of the site, the application shall demonstrate compliance with the visual and aesthetic rules of COGCC and the Larimer County Land Use Code for landscaping, fencing and lighting set forth in Section 8.
2. All O&GFs shall be painted with colors that are matched to or slightly darker than the surrounding landscape, and shall utilize paint with uniform, non-contrasting, nonreflective color tones based upon the Munsell Soil Color Coding System.
3. The location of all outdoor lighting shall be designed to minimize off-site light spillage and glare using best practices recognized by the International Dark-Sky Association. See Section 8.15, Lighting Standards.
4. For all phases of site development, fencing shall be installed for security and visual aesthetics of the use.
5. Sound or screening wall to mitigate for noise during construction well completion may be required if the O&GF is within 2,000 feet of residential buildings or lots, -or if electric requirement is appealed.

6. O&GFs applications shall minimize removal of trees and vegetation on the site.
7. Landscaping and/or fencing for screening and visual quality as viewed from public rights-of-way and ~~nearby-neighboring~~ residential areas shall be required within 6 months from the time of well completion and in accordance with requirements for the zoning district.
8. O&GF applications shall demonstrate compliance with weed control requirements of the County Weed District and Forestry Services Department, including for access roads serving the facility.

N. Well Plugging and Abandonment:

1. **A Reclamation Plan** shall be submitted. The plan shall demonstrate how well abandonment and reclamation shall comply with the COGCC rules and shall include the following information:

- a. Removal of all equipment from the well site,
- b. Restoration of the site surface to the conditions of the site reclamation plan,
- c. Notice to the County LGD of the commencement and completion of such activity, and
- d. Coordinates for the location of the decommissioned well(s), and any associated gathering or flow lines, shall be provided with the notice of the completion of well abandonment.
- ~~e.—Question: Should we include water testing/monitoring for a certain amount of time post plugging/abandoned wells to monitor that they are in sound condition and not leaking into water. This could be a condition of approval for certain sites (e.g., nearing high occupancy buildings, water reservoirs, drinking water wells.)~~

O. Well Liquids Unloading:

1. Best management practices, including artificial lift, automated plunger lifts and at least 98% emission reductions when utilizing combustion to control venting shall be employed at all facilities unless technically infeasible.
2. Approved manual unloading shall require on-site supervision of the unloading process.

P. Flammable Materials:

1. The location of flammable materials on site shall conform to all COGCC safety standards and local fire codes.
2. A minimum 25-foot buffer, free of weeds and dried grasses, shall be required around flammable materials or equipment.

Q. Waste Disposal:

1. **A Waste Management and Disposal Plan** shall be submitted with all O&GF applications. The plan shall document the techniques and methods of the proposed O&GF to manage wastes generated on the site and demonstrate compliance with and implementation of the standards in this Section 17.3.Q.
2. Oil and gas facilities shall remain free of debris and excess materials during all phases of operation.
3. Burning of debris, trash or other flammable material is not allowed.
4. Temporary storage of materials (up to 30-days) may be allowed with installation of screening to mitigate from aesthetic impacts from public rights-of-way or if requested by landowner.

R. Removal of Equipment:

1. There shall be no permanent storage of equipment (i.e., vehicles, trailers, commercial products, chemicals, drums, totes, containers, materials, and all other supplies not necessary for uses on an oil and gas location) on the site of an oil and gas facility.
2. When not in use, or if no longer needed for on-site operations, all equipment not being used on the site shall be removed.

S. Maintenance of Machinery:

1. Statewide Best Management Practices shall be used to prevent contamination of soils and stormwater runoff, including equipment and vehicle maintenance and fluid containment.
2. There shall be no maintenance of field equipment involving hazardous materials within 300-feet of a water body.
3. Any fueling on-site shall occur over an impervious surface with a ~~bermed~~-secondary containment berm and sump in case of a spill and shall not occur during storm events.

T. Flow Lines, Transfer Lines, and Gathering Lines:

1. All off-site lines transporting process materials, production wastes, product and any other items used or generated by the facility shall be located to avoid existing or proposed residential, commercial, and industrial buildings, places of assembly, surface waterbodies and designated open spaces. Buried pipelines shall be a minimum of 4-feet deep and shall be of detectable material which could include the addition of tracer wire to ensure detection during buried utility locating.
2. The location of pipelines shall be evaluated on a case-by-case basis, with the determining locational factor being the size and type of pipeline being proposed.
3. Coordinates of all flow lines, gathering lines, and transfer lines shall be provided.

U. Temporary Water Lines:

1. Temporary waterlines shall be used, unless development is not within a water service area.
2. Temporary waterlines shall be buried at all existing driveway and road crossings, or utilize existing culverts, if available.

V. Financial Assurance:

1. The Applicant shall demonstrate the financial capability to reclaim all disturbed areas during each phase of the site development and following termination of the oil and gas operation on the site. This shall include meeting any state requirements, and any additional requirements the County deems necessary to protect the public health, safety, and welfare.
2. The Applicant shall, for the life of the use, carry customary and usual environmental liability insurance.

~~17.1. XX—Additional Application Requirements.~~

~~A.—In addition to the items specified as required in Section 17.3., the applicant shall provide:~~

- ~~1.—A site inventory map.~~
- ~~2.—A Safety Management Plan.~~
- ~~3.—A Site Security Plan.~~
- ~~4.—A surface use agreement.~~
- ~~5.—A statement verifying the legal right to extract the mineral resources.~~

17.4. – Appeals.

- A. Section 22 of this Code shall provide direction for all appeals to standards, processes and provisions of this Section 17.

17.5. – Enforcement and Inspections.

- A. Applications for O&GFs shall demonstrate compliance with this and all other relevant Sections of this Code. Failure of an Operator to maintain compliance with the County approval of an O&GF may result in the revocation of the approval pursuant to the procedures in Section 12 of the Land Use Code. The County retains the right to seek whatever remedy or redress is legally allowable.
- B. The County reserves the right to inspect the property for compliance.

17.6. – Fees and Security for Reclamation.

- A. The following fees are applicable to oil and gas facilities:
 - a. A Capital Transportation Impact fee.

17.7. – Termination or Modifications of Use ~~or Modifications~~.

- A. No modification to an approved O&GF shall be made without obtaining appropriate land use approvals from the County.
- B. Upon termination of use, the O&GF shall be reclaimed pursuant to the reclamation plan provided.

17.8. – Definitions.

- A. Unless otherwise listed herein, the definitions found within the C.R.S. and Colorado Oil and Gas Conservation Commission (COGCC) regulations shall apply.

Public Comments

Section 17 - Oil and Gas Facilities

Draft Regulations

Draft Date: January 6, 2020

January 6, 2020 Draft
Comments by Colorado
Petroleum Council

17.0. – OIL AND GAS FACILITIES

17.1. – Intent and Purpose.

Note: This section has been updated to better reflect the language in SB 19-181.

- A. Intent.** The intent of this section of the Land Use Code is to establish a regulatory framework for new oil and gas facilities (O&GFs) as defined in COGCC rules, including recompletions to be located in the unincorporated areas of Larimer County in a manner that protects the public health, safety and general welfare, protects private property rights, protects environment and wildlife, and minimizes adverse impacts.
- B. Authority:** C.R.S. 29-20-104-(1) provides the County authority to regulate and review applications pertaining to the surface development of O&GFs.
- C. Purpose:** These regulations are necessary to:
1. Ensure a comprehensive land use process and transparent public process for the development of new O&GFs, including recompletions, in the unincorporated areas of the County.
 2. Provide for the managed development, installation, maintenance, modification, reclamation and removal of O&GFs without unreasonably discriminating against oil and gas developers and operators, or mineral interest owners.
 3. Minimize to the maximum extent possible the nuisance effects of O&GFs through the application of best available techniques and technologies.
 4. Promote and protect the public health, safety and welfare, and protect the environment and wildlife by minimizing the adverse impacts of O&GFs.
 5. Maximize protection of natural and cultural resources and public facilities.
 6. Strategically locate O&GFs to locate where adverse impacts from such operations can be avoided.
 7. Minimize and mitigate the extent and severity of adverse impacts that cannot be avoided.
 8. Confirm the financial, indemnification and insurance capacities of the oil and gas developer/operator to ensure timely and effective construction, production, removal and reclamation of O&GFs and infrastructure.
- D. Applicability:** These regulations shall apply to all new O&GFs, including exploration and recompletions, to be constructed on any property in all zoning districts in the unincorporated portions of Larimer County.
- E. Severability:** If any section, clause, provision, or portion of these regulations should be found to be unconstitutional or otherwise invalid by a court of competent jurisdiction, the remainder of the regulations in this section shall not be affected thereby and is hereby declared to be necessary for the public health, safety and welfare.

Commented [CJM1]: We strongly agree with this stated purpose. Private property rights are constitutionally protected rights, and cannot be usurped by any proposed state regulation or statute

17.2. – Review Procedures and Required Permits.

Note: Some members of the Task Force and stakeholders provided input that they would like to see a tiered process for reviews, including an administrative process for simpler, smaller projects. The County could consider defining an administrative process (e.g., PSP) for recompletions that do not exceed a

certain percentage in size greater than what exists, or perhaps require a building permit only for replacement of equipment.

- A. **General Requirements.** No person, firm or corporation shall establish, construct, build a new O&GF, including recompletions, without first having obtained required land use approval(s) and permits as required by this Code. Applications to the County for new O&GFs, including recompletions, may be submitted simultaneously with the Colorado Oil and Gas Conservation Commission (COGCC) permitting process, but approval by the County must be secured prior to construction.
- B. **County Review Process:** All new O&GFs, including recompletions, in the unincorporated portions of Larimer County shall require approval of a **Special Review** application for the proposed facility as set forth in Section 4.5 of this Code. Application and submittal requirements for O&GFs are specified in the following Community Development Department application handouts:
 - 1. Sketch Plan Review Application and Submittal Requirements for Oil and Gas Facilities.
 - 2. Neighborhood Meeting Submittal Requirements and Guidelines for Oil and Gas Facilities.
 - 3. Special Review Application and Submittal Requirements for Oil and Gas Facilities.
- C. **County Permits.** Prior to the commencement of any construction activity for an O&GF, all required permits for such facilities shall be approved. Required permits include, but are not limited to:
 - 1. Access permits,
 - 2. Development construction permit,
 - 3. Building permits for all qualifying buildings and structures,
 - 4. Electrical permits, and
 - 5. All federal, state and local permits.
- D. **Non-County Permits:** County approval of an O&GF shall not relieve the landowner or applicant of the responsibility for securing other permits or approvals required by any other applicable County Departments, local fire district, municipalities, or other applicable public agencies.
- E. **Technical Expert Review:** Applications for O&GFs may involve complex technical issues that require review and input that is beyond the expertise of County staff. If such a situation arises, the Community Development Director may commission a third-party review of the relevant subject matter and require the applicant to pay reasonable costs for the third-party review. Selection of a third-party expert(s) to review portions the proposal will be at the discretion of the County.

Commented [CJM2]: We would support the notion of an administrative review. We understand such criteria can be difficult to develop, however we would suggest that the county either allow for administrative review in the instance all criteria listed have been satisfied, or operators meet a distance threshold.

17.3. – Standards Required for all Oil and Gas Facilities.

- A. **General:**
 - 1. In addition to the standards and requirements of this Section 17, all other relevant standards and regulations set forth in this Code shall also apply.
 - 2. All applications for new O&GFs, including recompletions, shall meet all applicable federal, state and local standards and regulations pertaining to the development and operation of such facilities. When the standards and regulations contained herein

conflict with the standards and requirements of another agency, the stricter standard shall apply.

Note: The setbacks and buffers section below has been added since Draft 1 for Planning Commission and Board of County Commissioner discussion. The Task Force did not review this section.

B. Setbacks:

1. The minimum required setbacks for buildings and structures set forth in the applicable zoning district shall apply to the proposed O&GF.
2. In addition to the setbacks in paragraph 3 below, the setbacks set forth in Section 4.9 of this Code shall apply to proposed O&GFs to minimize their impacts on public health, safety, welfare, the environment, and agricultural operations.
3. To achieve the intent and purpose of this Section 17, the following minimum setbacks for O&GFs shall be required, unless more restrictive setbacks are required by the rules of the COGCC:
 - a. 1,000-foot setback from a residential building or platted residential lot
 - b. ~~2,000~~-foot setback from a high occupancy building including schools, registered day cares, nursing homes.
 - c. 500-foot setback from a water body or designated outside activity area
4. To achieve the objectives of Section 17.1.C., the Board of County Commissioners may, on a case by case basis, ~~require an increase to these minimum setbacks.~~
5. The Board of County Commissioners may allow a reduction of the minimum setbacks when it has been determined that the applicant has adequately demonstrated that the setbacks prohibit access to the mineral interests being sought, and the reduced setbacks will achieve to the extent practicable the objectives of this code.

Commented [CJM3]: We would support the alignment of setbacks with current COGCC standards.

Further, we would note the discussion surrounding the impact study regarding the 2000' threshold was based on modeling, and thus incomplete. Furthermore, the CDPHE has noted that indeed none of the hypothetical conditions contained within the health study have ever been present at any development site within Colorado.

Commented [CJM4]: 2,000 ft. setback is extremely high. We would suggest this align with your setback proposal for a residential building, or perhaps finding a more suitable middle ground.

Commented [CJM5]: This seems like a subjective provision that would essentially provide an unlimited setback distance as deemed by the board

C. Air Quality:

1. **An Air Quality Report/Plan** shall be submitted with all O&GF applications. The report/plan shall demonstrate how the development and operation of the facility will avoid and/or mitigate adverse impacts to air quality and demonstrate compliance with and implementation of standards in Sections 17.3.C. and 8.11 of this Code.
2. In addition to all federal and state laws, rules and regulations, applications for O&GFs shall demonstrate how exploration, construction and standard operations of a O&GF, including traffic and construction equipment, will comply with the rules and regulations of the Colorado Air Quality Control Commission (AQCC). Information to be provided shall include all appropriate applications of notifications and permits for sources of emissions.
3. Reduced Emission Completions shall be used for all completions and well workovers following hydraulic fracturing. Such completions shall include the use of Best Management Practices including, when available, the following unless an equal or better system exists:

- a. Except for very small productions, closed loop, pitless drilling, completion systems, without permanent on-site storage tanks, for the containment and/or recycling of all drilling, completion and flowback fluids.
 - b. Flaring only allowed during emergencies or upset conditions. When allowed, routing and control of all emissions to a flare or combustor shall provide at least 98% destruction or removal efficiency.
 - c. Zero emission desiccant dehydrators.
 - d. Emission controls of 90% or better for glycol dehydrators.
 - e. Pressure-suitable separator and vapor recovery units.
 - f. No-bleed continuous and intermittent pneumatic devices.
 - g. Automated tank gauging.
4. O&GFs shall be equipped with electric-powered engines for motors, compressors, drilling and production equipment, and pumping systems unless no adequate electricity source is available or it is technically infeasible.
5. During exploration and construction, the applicant shall demonstrate that all facilities on the site, including traffic and construction equipment, complies with all AQCC rules and regulations.
6. O&GF applications ~~should~~ shall include operational provisions to reduce emissions on Air Quality Action Advisory Days posted by the Colorado Department of Public Health and Environment (CDPHE) for the Front Range area. The provisions shall include how alerts are received, outline specific emission reduction measures, and include requirements for documenting the measures implemented. Measures should include:
- a. Minimizing vehicle traffic and engine idling,
 - b. Reducing truck and worker traffic,
 - c. Delaying vehicle refueling,
 - d. Suspending or delaying use of fossil fuel powered equipment,
 - e. Postponing construction and maintenance activities,
 - f. Postponing well maintenance and liquid unloading that would result in emission releases to the atmosphere, and
 - g. Postponing or reducing operations with high potential to emit VOC's of NOx's.

Commented [CJM6]: Is this a wellhead compression station only, or does it include compressor stations as well

Commented [CJM7]: Air Quality Action Advisory days are advisory in nature. Operators can certainly be encouraged to comply, and will to the extent feasible. However a requirement to comply with such days may fall outside the purview of the county's rules.

D. Leak Detection and Repair:

- 1. A Leak Detections and Repair Plan shall be submitted with all O&GF applications. The plan shall disclose techniques, methods and protocols that will be utilized at the proposed O&GF to identify, prevent, contain, document, repair and report leaks, and it shall demonstrate how it will comply with and implement the standards in this Section 17.1.3.F.
- 2. Operators shall conduct leak detection and repair inspections at the frequency required by the APCD for the emission source using modern leak detection technologies and equipment. The results of said inspections, including all corrective actions taken, shall be reported to the Larimer County Department of Health and Environment (LCDHE) and County Local Government Designee (LGD) upon request.
- 3. All verified leaks at an O&GF shall be reported to the LCDHE and LGD within 24-hours of the detection of the leak.

4. Repair of verified leaks shall occur within 72 hours of detection. If it is anticipated that a repair will take longer than 72 hours, the operator shall provide a written explanation to the LCDHE and the LGD as to why more time is required and how the leak will be contained. If a leak is not repaired within 72-hours, the O&GF shall be shut-in until the leak is repaired.
5. Equipment leaks that pose an imminent safety risk to persons, wildlife, or the environment shall undergo emergency shut down and not be allowed to operate until the operator has provided evidence that the leak has been repaired.
6. At least annually, operators shall provide a 2-week notice of a routine leak inspection to the LCDHE and LGD inviting them to attend and observe the inspection.

E. Odors:

1. **An Odor Mitigation Plan** shall be required for all O&GF applications indicating how the operations will prevent odors from adversely impacting the public and wildlife and further demonstrating compliance with the standards in this Section 17.1.3.H.
2. Oil and gas operations shall comply with the CDPHE, AQCC, Regulation No. 2 Odor Emission, 5 Code of Colorado Regulations 1001-4.
3. Proposed O&GFs shall provide protocols for immediate response to odor complaints that include options for ceasing operations, notification of affected residents, and temporary relocation of residents until the source of the odor is identified and resolved.
4. The operator shall communicate the schedule/timing of well completion activities to adjacent and nearby residents which could include an online portal. As part of the application, provide information on how notifications will be communicated to the public.
5. The Odor Mitigation Plan shall include control strategic which shall be implemented upon receipt of an odor complaint(s) or as required by the County. These Odor control strategies may include the following:
 - a. Odorants, that are not a masking agent, shall be added to chillers and mud systems.
 - b. Operators shall not use odor masking agents or additives.
 - c. Filtration systems and/or additives to minimize, not mask, odors from drilling and fracturing fluids shall be utilized in the drilling and flowback processes.
 - d. Additives intended to eliminate odors generated by the operations of an O&GF shall not create a separate odor.
 - e. Enclosed shale shakers shall be utilized to contain fumes from exposed mud.
 - f. Drilling activities shall utilize minimum low odor Category III drilling fluid or non-diesel-based drilling muds that do not contain benzene, toluene, ethylbenzene or xylene (BTEX) where technically feasible.
 - g. Wipe down drill pipe as they exit the well bore each time.

F. Water Quality and Water Bodies:

1. **A Water Quality Report/Plan** shall be submitted with all O&GF applications. The report/plan shall demonstrate how the development and operations of the facility will avoid impacts to surface and ground waters in Larimer County, and demonstrate compliance with and implementation of standards in Sections 17.3.D. and 8.12 of this Code.

2. Baseline and subsequent water source tests, as typically required by and submitted to the COGCC and CDPHE, shall be provided to the LCDHE and the LGD for the life of the facility and any post-closure assessments, if approved by the owner(s) of the water well. It is recommended that the operator also post these reports online for public/access transparency.
3. The application shall provide documentation indicating how the COGCC water quality protection standards are being implemented.
4. Locating O&GFs within a Federal Emergency Management Agency (FEMA) designated 100-year floodplain shall not be allowed unless no other location is feasible, and all other appropriate permissions are obtained.
5. New wastewater injection wells shall not be allowed.
6. The requirements of this Section 17.4.D shall not prevent discharges reviewed and permitted by the CDPHE Water Quality Control Division, the EPA, and the Army Corps of Engineers.

G. Spills and Releases:

1. A **Spill Prevention Control and Countermeasure Plan** shall be submitted with all O&GF applications. The plan shall disclose techniques, methods, and protocols to be utilized at the proposed O&GF to prevent, contain, document and report any spills or releases, and shall demonstrate compliance with and implementation of the standards in this Section 17.3.E.
2. An Emergency Response Plan shall be provided that includes evacuation plans and routes, inventory of emergency response supplies, notification requirements and annual open house training for emergency services personnel to become familiar with the site.
3. Secondary containment shall be required which is capable of holding 125% of the total capacity of on-site containment vessels and storage tanks.
4. Unloading areas shall be designed to contain potential spills or direct spills into other secondary containment areas
5. Containment systems constructed of steel rimmed berms, or similar impervious surfaces that are equal to or better, shall be used for all secondary containment areas.
6. Any spill or release of greater than 25 gallons on an O&GF, including those thresholds reportable to the COGCC, shall upon discovery, be immediately reported to the following Local Emergency Response Authorities in Larimer County:
 - a. Larimer County Sheriff – Public Safety Answering Point (PSAP) (9-1-1)
 - b. Larimer County Department of Health and Environment,
 - c. Local Fire Department/District,
 - d. Local Municipal Police Department if within in mile of a City or Town,
 - e. Larimer County Oil and Gas LGD, and
 - f. Larimer County Local Emergency Planning Committee (within 24-hours).
7. All spills or releases, whether reportable or not, shall be cleaned up immediately and to the satisfaction of the local emergency response authorities, listed in the Spill Prevention Control and Countermeasure Plan.

H. Noise:

1. A **Noise Report and Mitigation Plan** shall be required for all O&GF applications. The plan shall demonstrate how the operations will mitigate noise impacts to comply with

Commented [CJM8]: As noted during the task force meeting, this would result in a significantly larger footprint for development. This should incorporate only vessels as opposed to the entire capacity.

Commented [CJM9]: This is an extremely low threshold. We would suggest using state COGCC reporting standards

Commented [CJM10]: We would again suggest deferring to COGCC standards

the noise standards contained in this Section 17.3.G. The report and plan shall include the following:

- a. A three-day (one day being a weekend day) baseline noise analysis.
 - b. Modeled decibel levels for various phases of development shall be presented using contour maps to radii of 350 feet from the site of operation/noise source (per COGCC) or at the property line of an adjacent land use, whichever is closer.
 - c. A plan of proposed mitigation measures to be implemented by the oil and gas operations during all stages of compliance with the maximum permissible noise levels as listed in Section G.2 below.
2. Noise generated from O&GFs shall comply with the following maximum permissible noise levels appropriate for the zoning and adjacent land uses at determined by the County:

ZONE AREA DESIGNATIONS	7:00 am to next 7:00 pm	7:00 pm to next 7:00 am
Residential/Agricultural/Rural	55 db(A)	50 db(A)
Commercial	60 db(A)	55 db(A)
Light Industrial	70 db(A)	65 db(A)
Industrial	80 db(A)	75 db(A)

In the hours between 7:00 a.m. and the next 7:00 p.m., the noise levels permitted above may be increased by ten (10) db(A) for a single period of not to exceed fifteen minutes in any one-hour period. Night-time levels between 7:00 p.m. and the next 7:00 a.m. shall not be exceeded therefore requiring strategic planning of noise-inducing activities to be conducted during daytime hours at the site.

3. Decibel levels produced by the O&GF shall meet the identified level for the appropriate zoning area designation of the adjacent land use. Zones as defined by Article 12 – Noise abatement of the Colorado Revised Statutes (C.R.S.) 25-12-102 will be considered as part of the County’s determination for surrounding land uses.
4. In remote locations, where there is no reasonably proximate occupied structure or Designated Outside Activity Area (COGCC), the light industrial standard may be applicable as determined by the County.
5. Decibel levels shall be measured at least 350-feet from the boundary of the operation/noise source (from source or sound wall per COGCC) or at the property line of the adjacent land use, whichever is greater.
6. Construction of O&GFs, including drilling/well completions, recompletions, and pipeline installations, shall be subject to the maximum permissible noise levels specified for light industrial zones for the period within which construction is being conducted.
7. Quiet design mufflers (i.e., hospital grade or dual dissipative) or equal to or better than noise mitigation technologies shall be utilized for non-electrically operated equipment.
8. Motors, Generators, and engines shall be enclosed in acoustically insulated housings or covers.

I. Dust:

1. **A Fugitive Dust Control Plan** shall be submitted with all O&GF applications. The plan shall disclose techniques and methods to be utilized at the proposed O&GF to prevent or mitigate fugitive dust generated by the construction and operations of the proposed

O&GF and shall demonstrate compliance with and implementation of standards in Sections 17.3.1 and 8.11 of this Code.

2. Best management practices (BMPs) for the mitigation of dust associated with on-site operations and traffic activities shall be employed at the facility. The BMPs shall be outlined in the Fugitive Dust Control Plan.
3. Produced water and other process fluids shall not be used for dust suppression unless adequately pretreated so that it does not create odors and has been approved for land application by CDPHE Water Quality Control Division.
4. Safety Data Sheets (SDSs) shall be provided with the application for any proposed chemical based dust suppressants.
5. Unless otherwise approved by the County Health and Engineering Departments, only water will be used for dust suppression activities within 300-feet of the ordinary high-water mark of any body of water.

J. Access:

1. **A Traffic Impact Analysis and Routing Plan** shall be submitted with all O&GF applications. The plan shall disclose routing alternatives and transportation infrastructure improvements proposed for the proposed O&GF to mitigate projected transportation impacts and demonstrate compliance with and implementation of the standards in this Section 17.3.E.
2. Designs for private access drives shall conform to the Local Low Volume cross section found in the Larimer County Rural Area Road Standards and shall include the following:
 - a. The first 50 feet of access drive from the edge of pavement of the adjacent road will be paved, or made of an approved all weather surface, and the remaining portions of the access drive shall be composed of a minimum of 6 inches of compacted Class 5 road base.
 - b. The access drive entrance shall include returns with a 30-foot radius.
 - c. A mud and debris tracking pad shall be located at the end of the paved portion of the access drive.

K. Chemical Handling:

1. **A Chemical and Hazardous Materials Report and Handling Plan** shall be submitted with all O&GF applications. The plan shall disclose the type of hazardous and non-hazardous materials and chemicals that will be used on the site of the proposed O&GF, including how they will be handled to prevent spills and demonstrate compliance with and implementation of standards in this Section 17.3.K.
2. Prior to any hydraulic fracturing activity, the Operator shall provide the County with a copy of the Chemical Disclosure Registry form provided to the COGCC pursuant to the COGCC's "Hydraulic Fracturing Chemical Disclosure".
3. Drilling and completion chemicals shall be removed from the site within sixty (60) days of the drilling completion.

L. Recycle, Reuse and Disposal of Fluids:

1. **A Waste Management and Disposal Plan** shall be submitted with all O&GF applications. The plan shall document the techniques and methods of the proposed O&GF to manage wastes generated on the site and demonstrate compliance with and implementation of the standards in this Section 17.3.L.
2. Drilling, completion flowback, and produced fluids shall be recycled or reused whenever

Commented [CJM11]: We should suggest a minimum threshold for these reporting requirements as this could cause unintended consequences for reporting by encapsulating non relevant substances

technically feasible.

3. If not to be recycled or reused onsite, exploration and production waste may be temporarily stored in tanks for up to 30-days while awaiting transport to licensed disposal or recycling sites.
4. Produced water shall be recycled or reused or shall be transported by pipeline unless easements are not available.
5. The Operator shall take precautions to prevent adverse environmental impacts to air, water, soil, or biological resources to the extent necessary to protect public health, safety and welfare, including the environment and Wildlife Resources to prevent the unauthorized discharge or disposal of oil, gas, Exploration and Production Waste, chemical substances, trash, discarded equipment, or other oil field waste.
6. The requirements of this Section 17.3.L shall not prevent discharges and beneficial uses reviewed and permitted by the CDPHE Water Quality Control Division and the Environmental Protection Agency (EPA).

M. Lighting and Visual Impacts:

1. For all phases of the development of the site, the application shall demonstrate compliance with the visual and aesthetic rules of COGCC and the Larimer County Land Use Code for landscaping, fencing and lighting set forth in Section 8.
2. All O&GFs shall be painted with colors that are matched to or slightly darker than the surrounding landscape, and shall utilize paint with uniform, non-contrasting, nonreflective color tones based upon the Munsell Soil Color Coding System.
3. The location of all outdoor lighting shall be designed to minimize off-site light spillage and glare using best practices recognized by the International Dark-Sky Association. See Section 8.15, Lighting Standards.
4. For all phases of site development, fencing shall be installed for security and visual aesthetics of the use.
5. Sound or screening wall to mitigate for noise during well completion may be required if the O&GF is within 2,000 feet of residential buildings or lots, if electric requirement is appealed.
6. O&GFs applications shall minimize removal of trees and vegetation on the site.
7. Landscaping and/or fencing for screening and visual quality as viewed from public rights-of-way and nearby residential areas shall be required within 6 months from the time of well completion and in accordance with requirements for the zoning district.
8. O&GF applications shall demonstrate compliance with weed control requirements of the County Weed District and Forestry Services Department, including for access roads serving the facility.

Note: Environmental and health advocacy groups would like the next section, Well Plugging and Abandonment, to be more extensive and address noticing requirements and inspections after removal. The industry groups noted that this is down hole regulation and therefore not included in the SB 19-181 granted authority.

N. Well Plugging and Abandonment:

1. **A Reclamation Plan** shall be submitted. The plan shall demonstrate how well abandonment and reclamation shall comply with the COGCC rules and shall include the following information:

Commented [CJM12]: We would note that this is likely a downhole regulation, and should be deferred to the COGCC pursuant to SB19-181

- a. Removal of all equipment from the well site,
 - b. Restoration of the site surface to the conditions of the site reclamation plan,
 - c. Notice to the County LGD of the commencement and completion of such activity, and
 - d. Coordinates for the location of the decommissioned well(s), and any associated gathering or flow lines, shall be provided with the notice of the completion of well abandonment.
 - e. Question: Should we include water testing/monitoring for a certain amount of time post plugging/abandoned wells to monitor that they are in sound condition and not leaking into water. This could be a condition of approval for certain sites (e.g., nearing high occupancy buildings, water reservoirs, drinking water wells.)
- O. Well Liquids Unloading:**
- 1. Best management practices, including artificial lift, automated plunger lifts and at least 98% emission reductions when utilizing combustion to control venting shall be employed at all facilities unless technically infeasible.
 - 2. Approved manual unloading shall require on-site supervision of the unloading process.
- P. Flammable Materials:**
- 1. The location of flammable materials on site shall conform to all COGCC safety standards and local fire codes.
 - 2. A minimum 25-foot buffer, free of weeds and dried grasses, shall be required around flammable materials or equipment.
- Q. Waste Disposal:**
- 1. **A Waste Management and Disposal Plan** shall be submitted with all O&G applications. The plan shall document the techniques and methods of the proposed O&G to manage wastes generated on the site and demonstrate compliance with and implementation of the standards in this Section 17.3.Q.
 - 2. Oil and gas facilities shall remain free of debris and excess materials during all phases of operation.
 - 3. Burning of debris, trash or other flammable material is not allowed.
 - 4. Temporary storage of materials (up to 30-days) may be allowed with installation of screening to mitigate from aesthetic impacts from public rights-of-way or if requested by landowner.
- R. Removal of Equipment:**
- 1. There shall be no permanent storage of equipment (i.e., vehicles, trailers, commercial products, chemicals, drums, totes, containers, materials, and all other supplies not necessary for uses on an oil and gas location) on the site of an oil and gas facility.
 - 2. When not in use, or if no longer needed for on-site operations, all equipment not being used on the site shall be removed.
- S. Maintenance of Machinery:**
- 1. Statewide Best Management Practices shall be used to prevent contamination of soils and stormwater runoff, including equipment and vehicle maintenance and fluid containment.
 - 2. There shall be no maintenance of field equipment involving hazardous materials within 300-feet of a water body.

3. Any fueling on-site shall occur over an impervious surface with a bermed secondary containment and sump in case of a spill and shall not occur during storm events.

T. Flow Lines, Transfer Lines, and Gathering Lines:

1. All off-site lines transporting process materials, production wastes, product and any other items used or generated by the facility shall be located to avoid existing or proposed residential, commercial, and industrial buildings, places of assembly, surface waterbodies and designated open spaces. Buried pipelines shall be a minimum of 4-feet deep and shall be of detectable material which could include the addition of tracer wire to ensure detection during buried utility locating.
2. The location of pipelines shall be evaluated on a case-by-case basis, with the determining locational factor being the size and type of pipeline being proposed.
3. Coordinates of all flow lines, gathering lines, and transfer lines shall be provided.

Commented [CJM13]: This requirement is very restrictive. Indeed this could cause a significantly larger impact by requiring a much larger distance when placing lines. We would suggest this align with other current development standards. In addition, typically these lines are located where easements are able to be secured.

Commented [CJM14]: This is a very subjective standard, and we would request clarity in order to provide operators certainty when proposing projects.

U. Temporary Water Lines:

1. Temporary waterlines shall be used, unless development is not within a water service area.
2. Temporary waterlines shall be buried at all existing driveway and road crossings, or utilize existing culverts, if available.

V. Financial Assurance:

1. The Applicant shall demonstrate the financial capability to reclaim all disturbed areas during each phase of the site development and following termination of the oil and gas operation on the site. This shall include meeting any state requirements, and any additional requirements the County deems necessary to protect the public health, safety, and welfare.
2. The Applicant shall, for the life of the use, carry customary and usual environmental liability insurance.

Commented [CJM15]: Please further clarify. This is a very subjective standard that would need further refinement. As noted by the rule, the COGCC already has financial assurance requirements and will likely be looking to amend those in the near future.

17.1. XX – Additional Application Requirements.

- A. In addition to the items specified as required in Section 17.3., the applicant shall provide:
 1. A site inventory map.
 2. A Safety Management Plan.
 3. A Site Security Plan.
 4. A surface use agreement.
 5. A statement verifying the legal right to extract the mineral resources.

17.4. – Appeals.

- A. Section 22 of this Code shall provide direction for all appeals to standards, processes and provisions of this Section 17.

17.5. – Enforcement and Inspections.

- A. Applications for O&GFs shall demonstrate compliance with this and all other relevant Sections of this Code. Failure of an Operator to maintain compliance with the County approval of an O&GF may result in the revocation of the approval pursuant to the procedures in Section 12 of the Land Use Code. The County retains the right to seek whatever remedy or redress is legally allowable.
- B. The County reserves the right to inspect the property for compliance with reasonable notice.

17.6. – Fees and Security for Reclamation.

- A. The following fees are applicable to oil and gas facilities:
 - a. A Capital Transportation Impact fee.

17.7. – Termination of Use or Modifications.

- A. No major modification to an approved O&GF shall be made without obtaining appropriate land use approvals from the County.
- B. Upon termination of use, the O&GF shall be reclaimed pursuant to the reclamation plan provided.

17.8. – Definitions.

- A. Unless otherwise listed herein, the definitions found within the C.R.S. and Colorado Oil and Gas Conservation Commission (COGCC) regulations shall apply.

January 6, 2020 Draft
Comments by Julie Pignataro

Attachment A: Section 17 Draft

17.0. – OIL AND GAS FACILITIES

17.1. – Intent and Purpose.

Note: This section has been updated to better reflect the language in SB 19-181.

- A. Intent.** The intent of this section of the Land Use Code is to establish a regulatory framework for new oil and gas facilities (O&GFs), including recompletions to be located in the unincorporated areas of Larimer County in a manner that protects the public health, safety and general welfare, protects private property rights, protects environment and wildlife, and minimizes adverse impacts.
- B. Authority:** C.R.S. 29-20-104-(1) provides the County authority to regulate and review applications pertaining to the surface development of O&GFs.
- C. Purpose:** These regulations are necessary to:
1. Ensure a comprehensive land use process and transparent public process for the development of new O&GFs, including recompletions, in the unincorporated areas of the County.
 2. Provide for the managed development, installation, maintenance, modification, reclamation and removal of O&GFs without unreasonably discriminating against oil and gas developers and operators, or mineral interest owners.
 3. Minimize to the maximum extent possible the nuisance effects of O&GFs through the application of best available techniques and technologies.
 4. Promote and protect the public health, safety and welfare, and protect the environment and wildlife by minimizing the adverse impacts of O&GFs.
 5. Maximize protection of natural and cultural resources and public facilities.
 6. Strategically locate O&GFs to locate where adverse impacts from such operations can be avoided.
 7. Minimize and mitigate the extent and severity of adverse impacts that cannot be avoided.
 8. Confirm the financial, indemnification and insurance capacities of the oil and gas developer/operator to ensure timely and effective construction, production, removal and reclamation of O&GFs and infrastructure.
- D. Applicability:** These regulations shall apply to all new O&GFs, including exploration and recompletions, to be constructed on any property in all zoning districts in the unincorporated portions of Larimer County.
- E. Severability:** If any section, clause, provision, or portion of these regulations should be found to be unconstitutional or otherwise invalid by a court of competent jurisdiction, the remainder of the regulations in this section shall not be affected thereby and is hereby declared to be necessary for the public health, safety and welfare.



17.2. – Review Procedures and Required Permits.

Note: Some members of the Task Force and stakeholders provided input that they would like to see a tiered process for reviews, including an administrative process for simpler, smaller projects. The County could consider defining an administrative process (e.g., PSP) for recompletions that do not exceed a

certain percentage in size greater than what exists, or perhaps require a building permit only for replacement of equipment.

- A. General Requirements.** No person, firm or corporation shall establish, construct, build a new O&GF, including recompletions, without first having obtained required land use approval(s) and permits as required by this Code. Applications to the County for new O&GFs, including recompletions, may be submitted simultaneously with the Colorado Oil and Gas Conservation Commission (COGCC) permitting process, but approval by the County must be secured prior to construction.
- B. County Review Process:** All new O&GFs, including recompletions, in the unincorporated portions of Larimer County shall require approval of a Special Review application for the proposed facility as set forth in Section 4.5 of this Code. Application and submittal requirements for O&GFs are specified in the following Community Development Department application handouts:
1. Sketch Plan Review Application and Submittal Requirements for Oil and Gas Facilities.
 2. Neighborhood Meeting Submittal Requirements and Guidelines for Oil and Gas Facilities.
 3. Special Review Application and Submittal Requirements for Oil and Gas Facilities.
- C. County Permits.** Prior to the commencement of any construction activity for an O&GF, all required permits for such facilities shall be approved. Required permits include, but are not limited to:
1. Access permits,
 2. Development construction permit,
 3. Building permits for all qualifying buildings and structures,
 4. Electrical permits, and
 5. All federal, state and local permits.
- D. Non-County Permits:** County approval of an O&GF shall not relieve the landowner or applicant of the responsibility for securing other permits or approvals required by any other applicable County Departments, local fire district, municipalities, or other applicable public agencies.
- E. Technical Expert Review:** Applications for O&GFs may involve complex technical issues that require review and input that is beyond the expertise of County staff. If such a situation arises, the Community Development Director may commission a third-party review of the relevant subject matter and require the applicant to pay reasonable costs for the third-party review. Selection of a third-party expert(s) to review portions the proposal will be at the discretion of the County.

17.3. – Standards Required for all Oil and Gas Facilities.

- A. General:**
1. In addition to the standards and requirements of this Section 17, all other relevant standards and regulations set forth in this Code shall also apply.
 2. All applications for new O&GFs, including recompletions, shall meet all applicable federal, state and local standards and regulations pertaining to the development and operation of such facilities. When the standards and regulations contained herein

conflict with the standards and requirements of another agency, the stricter standard shall apply.

Note: The setbacks and buffers section below has been added since Draft 1 for Planning Commission and Board of County Commissioner discussion. The Task Force did not review this section.

B. Setbacks:

1. The minimum required setbacks for buildings and structures set forth in the applicable zoning district shall apply to the proposed O&GF.
2. In addition to the setbacks in paragraph 3 below, the setbacks set forth in Section 4.9 of this Code shall apply to proposed O&GFs to minimize their impacts on public health, safety, welfare, the environment, and agricultural operations.
3. To achieve the intent and purpose of this Section 17, the following minimum setbacks for O&GFs shall be required, unless more restrictive setbacks are required by the rules of the COGCC:
 - a. 1,000-foot setback from a residential building or platted residential lot
 - b. 2,000-foot setback from a high occupancy building including schools, registered day cares, nursing homes.
 - c. 500-foot setback from a water body or designated outside activity area 
4. To achieve the objectives of Section 17.1.C., the Board of County Commissioners may, on a case by case basis, require an increase to these minimum setbacks.
5. The Board of County Commissioners may allow a reduction of the minimum setbacks when it has been determined that the applicant has adequately demonstrated that the setbacks prohibit access to the mineral interests being sought, and the reduced setbacks will achieve to the extent practicable the objectives of this code. 

C. Air Quality:

1. **An Air Quality Report/Plan** shall be submitted with all O&GF applications. The report/plan shall demonstrate how the development and operation of the facility will avoid and/or mitigate adverse impacts to air quality and demonstrate compliance with and implementation of standards in Sections 17.3.C. and 8.11 of this Code.
2. In addition to all federal and state laws, rules and regulations, applications for O&GFs shall demonstrate how exploration, construction and standard operations of a O&GF, including traffic and construction equipment, will comply with the rules and regulations of the Colorado Air Quality Control Commission (AQCC). Information to be provided shall include all appropriate applications of notifications and permits for sources of emissions.
3. Reduced Emission Completions shall be used for all completions and well workovers following hydraulic fracturing. Such completions shall include the use of Best Management Practices including, when available, the following unless an equal or better system exists:

- a. Except for very small productions, closed loop, pitless drilling, completion systems, without permanent on-site storage tanks, for the containment and/or recycling of all drilling, completion and flowback fluids.
 - b. Flaring only allowed during emergencies or upset conditions. When allowed, routing and control of all emissions to a flare or combustor shall provide at least 98% destruction or removal efficiency.
 - c. Zero emission desiccant dehydrators.
 - d. Emission controls of 90% or better for glycol dehydrators.
 - e. Pressure-suitable separator and vapor recovery units.
 - f. No-bleed continuous and intermittent pneumatic devices.
 - g. Automated tank gauging.
4. O&GFs shall be equipped with electric-powered engines for motors, compressors, drilling and production equipment, and pumping systems unless no adequate electricity source is available or it is technically infeasible.
 5. During exploration and construction, the applicant shall demonstrate that all facilities on the site, including traffic and construction equipment, complies with all AQCC rules and regulations.
 6. O&GF applications shall include operational provisions to reduce emissions on Air Quality Action Advisory Days posted by the Colorado Department of Public Health and Environment (CDPHE) for the Front Range area. The provisions shall include how alerts are received, outline specific emission reduction measures, and include requirements for documenting the measures implemented. Measures should include:
 - a. Minimizing vehicle traffic and engine idling,
 - b. Reducing truck and worker traffic,
 - c. Delaying vehicle refueling,
 - d. Suspending or delaying use of fossil fuel powered equipment,
 - e. Postponing construction and maintenance activities,
 - f. Postponing well maintenance and liquid unloading that would result in emission releases to the atmosphere, and
 - g. Postponing or reducing operations with high potential to emit VOC's of NOx's.

D. Leak Detection and Repair:

1. **A Leak Detections and Repair Plan** shall be submitted with all O&GF applications. The plan shall disclose techniques, methods and protocols that will be utilized at the proposed O&GF to identify, prevent, contain, document, repair and report leaks, and it shall demonstrate how it will comply with and implement the standards in this Section 17.1.3.F.
2. Operators shall conduct leak detection and repair inspections at the frequency required by the APCD for the emission source using modern leak detection technologies and equipment. The results of said inspections, including all corrective actions taken, shall be reported to the Larimer County Department of Health and Environment (LCDHE) and County Local Government Designee (LGD) upon request.
3. All verified leaks at an O&GF shall be reported to the LCDHE and LGD within 24-hours of the detection of the leak.

4. Repair of verified leaks shall occur within 72 hours of detection. If it is anticipated that a repair will take longer than 72 hours, the operator shall provide a written explanation to the LCDHE and the LGD as to why more time is required and how the leak will be contained. If a leak is not repaired within 72-hours, the O&GF shall be shut-in until the leak is repaired.
 5. Equipment leaks that pose an imminent safety risk to persons, wildlife, or the environment shall undergo emergency shut down and not be allowed to operate until the operator has provided evidence that the leak has been repaired.
 6. At least annually, operators shall provide a 2-week notice of a routine leak inspection to the LCDHE and LGD inviting them to attend and observe the inspection.
- E. Odors:**
1. **An Odor Mitigation Plan** shall be required for all O&GF applications indicating how the operations will prevent odors from adversely impacting the public and wildlife and further demonstrating compliance with the standards in this Section 17.1.3.H.
 2. Oil and gas operations shall comply with the CDPHE, AQCC, Regulation No. 2 Odor Emission, 5 Code of Colorado Regulations 1001-4.
 3. Proposed O&GFs shall provide protocols for immediate response to odor complaints that include options for ceasing operations, notification of affected residents, and temporary relocation of residents until the source of the odor is identified and resolved.
 4. The operator shall communicate the schedule/timing of well completion activities to adjacent and nearby residents which could include an online portal. As part of the application, provide information on how notifications will be communicated to the public.
 5. The Odor Mitigation Plan shall include control strategic which shall be implemented upon receipt of an odor complaint(s) or as required by the County. These Odor control strategies may include the following:
 - a. Odorants, that are not a masking agent, shall be added to chillers and mud systems.
 - b. Operators shall not use odor masking agents or additives.
 - c. Filtration systems and/or additives to minimize, not mask, odors from drilling and fracturing fluids shall be utilized in the drilling and flowback processes.
 - d. Additives intended to eliminate odors generated by the operations of an O&GF shall not create a separate odor.
 - e. Enclosed shale shakers shall be utilized to contain fumes from exposed mud.
 - f. Drilling activities shall utilize minimum low odor Category III drilling fluid or non-diesel-based drilling muds that do not contain benzene, toluene, ethylbenzene or xylene (BTEX).
 - g. Wipe down drill pipe as they exit the well bore each time.
- F. Water Quality and Water Bodies:**
1. **A Water Quality Report/Plan** shall be submitted with all O&GF applications. The report/plan shall demonstrate how the development and operations of the facility will avoid impacts to surface and ground waters in Larimer County, and demonstrate compliance with and implementation of standards in Sections 17.3.D. and 8.12 of this Code.

2. Baseline and subsequent water source tests, as typically required by and submitted to the COGCC and CDPHE, shall be provided to the LCDHE and the LGD for the life of the facility and any post-closure assessments, if approved by the owner(s) of the water well. It is recommended that the operator also post these reports online for public/access transparency.
3. The application shall provide documentation indicating how the COGCC water quality protection standards are being implemented.
4. Locating O&GFs within a Federal Emergency Management Agency (FEMA) designated 100-year floodplain shall not be allowed unless no other location is feasible, and all other appropriate permissions are obtained.
5. New wastewater injection wells shall not be allowed.
6. The requirements of this Section 17.4.D shall not prevent discharges reviewed and permitted by the CDPHE Water Quality Control Division, the EPA, and the Army Corps of Engineers.

G. Spills and Releases:

1. **A Spill Prevention Control and Countermeasure Plan** shall be submitted with all O&GF applications. The plan shall disclose techniques, methods, and protocols to be utilized at the proposed O&GF to prevent, contain, document and report any spills or releases, and shall demonstrate compliance with and implementation of the standards in this Section 17.3.E.
2. An Emergency Response Plan shall be provided that includes evacuation plans and routes, inventory of emergency response supplies, notification requirements and annual open house training for emergency services personnel to become familiar with the site.
3. Secondary containment shall be required which is capable of holding 125% of the total capacity of on-site containment vessels and storage tanks.
4. Unloading areas shall be designed to contain potential spills or direct spills into other secondary containment areas
5. Containment systems constructed of steel rimmed berms, or similar impervious surfaces that are equal to or better, shall be used for all secondary containment areas.
6. Any spill or release of greater than 25 gallons on an O&GF, including those thresholds reportable to the COGCC, shall upon discovery, be immediately reported to the following Local Emergency Response Authorities in Larimer County:
 - a. Larimer County Sheriff – Public Safety Answering Point (PSAP) (9-1-1)
 - b. Larimer County Department of Health and Environment,
 - c. Local Fire Department/District,
 - d. Local Municipal Police Department if within in mile of a City or Town,
 - e. Larimer County Oil and Gas LGD, and
 - f. Larimer County Local Emergency Planning Committee (within 24-hours).
7. All spills or releases, whether reportable or not, shall be cleaned up immediately and to the satisfaction of the local emergency response authorities, listed in the Spill Prevention Control and Countermeasure Plan.

H. Noise:

1. **A Noise Report and Mitigation Plan** shall be required for all O&GF applications. The plan shall demonstrate how the operations will mitigate noise impacts to comply with

the noise standards contained in this Section 17.3.G. The report and plan shall include the following:

- a. A three-day (one day being a weekend day) baseline noise analysis.
 - b. Modeled decibel levels for various phases of development shall be presented using contour maps to radii of 350 feet from the site of operation/noise source (per COGCC) or at the property line of an adjacent land use, whichever is closer.
 - c. A plan of proposed mitigation measures to be implemented by the oil and gas operations during all stages of compliance with the maximum permissible noise levels as listed in Section G.2 below.
2. Noise generated from O&GFs shall comply with the following maximum permissible noise levels appropriate for the zoning and adjacent land uses as determined by the County:

<u>ZONE AREA DESIGNATIONS</u>	<u>7:00 am to next 7:00 pm</u>	<u>7:00 pm to next 7:00 am</u>
Residential/Agricultural/Rural	55 db(A)	50 db(A)
Commercial	60 db(A)	55 db(A)
Light Industrial	70 db(A)	65 db(A)
Industrial	80 db(A)	75 db(A)

In the hours between 7:00 a.m. and the next 7:00 p.m., the noise levels permitted above may be increased by ten (10) db(A) for a single period of not to exceed fifteen minutes in any one-hour period. Night-time levels between 7:00 p.m. and the next 7:00 a.m. shall not be exceeded therefore requiring strategic planning of noise-inducing activities to be conducted during daytime hours at the site.

- 3. Decibel levels produced by the O&GF shall meet the identified level for the appropriate zoning area designation of the adjacent land use. Zones as defined by Article 12 – Noise abatement of the Colorado Revised Statutes (C.R.S.) 25-12-102 will be considered as part of the County’s determination for surrounding land uses.
- 4. In remote locations, where there is no reasonably proximate occupied structure or Designated Outside Activity Area (COGCC), the light industrial standard may be applicable as determined by the County. 
- 5. Decibel levels shall be measured at least 350-feet from the boundary of the operation/noise source (from source or sound wall per COGCC) or at the property line of the adjacent land use, whichever is greater. 
- 6. Construction of O&GFs, including drilling/well completions, recompletions, and pipeline installations, shall be subject to the maximum permissible noise levels specified for light industrial zones for the period within which construction is being conducted. 
- 7. Quiet design mufflers (i.e., hospital grade or dual dissipative) or equal to or better than noise mitigation technologies shall be utilized for non-electrically operated equipment.
- 8. Motors, Generators, and engines shall be enclosed in acoustically insulated housings or covers.

I. Dust:

- 1. **A Fugitive Dust Control Plan** shall be submitted with all O&GF applications. The plan shall disclose techniques and methods to be utilized at the proposed O&GF to prevent or mitigate fugitive dust generated by the construction and operations of the proposed

O&GF and shall demonstrate compliance with and implementation of standards in Sections 17.3.I and 8.11 of this Code.

2. Best management practices (BMPs) for the mitigation of dust associated with on-site operations and traffic activities shall be employed at the facility. The BMPs shall be outlined in the Fugitive Dust Control Plan.
3. Produced water and other process fluids shall not be used for dust suppression unless adequately pretreated so that it does not create odors and has been approved for land application by CDPHE Water Quality Control Division.
4. Safety Data Sheets (SDSs) shall be provided with the application for any proposed chemical based dust suppressants.
5. Unless otherwise approved by the County Health and Engineering Departments, only water will be used for dust suppression activities within 300-feet of the ordinary high-water mark of any body of water.

J. Access:

1. **A Traffic Impact Analysis and Routing Plan** shall be submitted with all O&GF applications. The plan shall disclose routing alternatives and transportation infrastructure improvements proposed for the proposed O&GF to mitigate projected transportation impacts and demonstrate compliance with and implementation of the standards in this Section 17.3.E.
2. Designs for private access drives shall conform to the Local Low Volume cross section found in the Larimer County Rural Area Road Standards and shall include the following:
 - a. The first 50 feet of access drive from the edge of pavement of the adjacent road will be paved, or made of an approved all weather surface, and the remaining portions of the access drive shall be composed of a minimum of 6 inches of compacted Class 5 road base.
 - b. The access drive entrance shall include returns with a 30-foot radius.
 - c. A mud and debris tracking pad shall be located at the end of the paved portion of the access drive.

K. Chemical Handling:

1. **A Chemical and Hazardous Materials Report and Handling Plan** shall be submitted with all O&GF applications. The plan shall disclose the type of hazardous and non-hazardous materials and chemicals that will be used on the site of the proposed O&GF, including how they will be handled to prevent spills and demonstrate compliance with and implementation of standards in this Section 17.3.K.
2. Prior to any hydraulic fracturing activity, the Operator shall provide the County with a copy of the Chemical Disclosure Registry form provided to the COGCC pursuant to the COGCC's "Hydraulic Fracturing Chemical Disclosure".
3. Drilling and completion chemicals shall be removed from the site within sixty (60) days of the drilling completion.

L. Recycle, Reuse and Disposal of Fluids:

1. **A Waste Management and Disposal Plan** shall be submitted with all O&GF applications. The plan shall document the techniques and methods of the proposed O&GF to manage wastes generated on the site and demonstrate compliance with and implementation of the standards in this Section 17.3.L.
2. Drilling, completion flowback, and produced fluids shall be recycled or reused whenever

technically feasible.

3. If not to be recycled or reused onsite, exploration and production waste may be temporarily stored in tanks for up to 30-days while awaiting transport to licensed disposal or recycling sites.
4. Produced water shall be recycled or reused or shall be transported by pipeline unless easements are not available.
5. The Operator shall take precautions to prevent adverse environmental impacts to air, water, soil, or biological resources to the extent necessary to protect public health, safety and welfare, including the environment and Wildlife Resources to prevent the unauthorized discharge or disposal of oil, gas, Exploration and Production Waste, chemical substances, trash, discarded equipment, or other oil field waste.
6. The requirements of this Section 17.3.L shall not prevent discharges and beneficial uses reviewed and permitted by the CDPHE Water Quality Control Division and the Environmental Protection Agency (EPA).

M. Lighting and Visual Impacts:

1. For all phases of the development of the site, the application shall demonstrate compliance with the visual and aesthetic rules of COGCC and the Larimer County Land Use Code for landscaping, fencing and lighting set forth in Section 8.
2. All O&GFs shall be painted with colors that are matched to or slightly darker than the surrounding landscape, and shall utilize paint with uniform, non-contrasting, nonreflective color tones based upon the Munsell Soil Color Coding System.
3. The location of all outdoor lighting shall be designed to minimize off-site light spillage and glare using best practices recognized by the International Dark-Sky Association. See Section 8.15, Lighting Standards.
4. For all phases of site development, fencing shall be installed for security and visual aesthetics of the use.
5. Sound or screening wall to mitigate for noise during well completion may be required if the O&GF is within 2,000 feet of residential buildings or lots, if electric requirement is appealed.
6. O&GFs applications shall minimize removal of trees and vegetation on the site.
7. Landscaping and/or fencing for screening and visual quality as viewed from public rights-of-way and nearby residential areas shall be required within 6 months from the time of well completion and in accordance with requirements for the zoning district.
8. O&GF applications shall demonstrate compliance with weed control requirements of the County Weed District and Forestry Services Department, including for access roads serving the facility.

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- d. Coordinates for the location of the decommissioned well(s), and any associated gathering or flow lines, shall be provided with the notice of the completion of well abandonment.
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1. Best management practices, including artificial lift, automated plunger lifts and at least 98% emission reductions when utilizing combustion to control venting shall be employed at all facilities unless technically infeasible.
2. Approved manual unloading shall require on-site supervision of the unloading process.

P. Flammable Materials:

1. The location of flammable materials on site shall conform to all COGCC safety standards and local fire codes.
2. A minimum 25-foot buffer, free of weeds and dried grasses, shall be required around flammable materials or equipment.

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3. Burning of debris, trash or other flammable material is not allowed.
4. Temporary storage of materials (up to 30-days) may be allowed with installation of screening to mitigate from aesthetic impacts from public rights-of-way or if requested by landowner.

R. Removal of Equipment:

1. There shall be no permanent storage of equipment (i.e., vehicles, trailers, commercial products, chemicals, drums, totes, containers, materials, and all other supplies not necessary for uses on an oil and gas location) on the site of an oil and gas facility.
2. When not in use, or if no longer needed for on-site operations, all equipment not being used on the site shall be removed.

S. Maintenance of Machinery:

1. Statewide Best Management Practices shall be used to prevent contamination of soils and stormwater runoff, including equipment and vehicle maintenance and fluid containment.
2. There shall be no maintenance of field equipment involving hazardous materials within 300-feet of a water body.



3. Any fueling on-site shall occur over an impervious surface with a bermed secondary containment and sump in case of a spill and shall not occur during storm events.

T. Flow Lines, Transfer Lines, and Gathering Lines:

1. All off-site lines transporting process materials, production wastes, product and any other items used or generated by the facility shall be located to avoid existing or proposed residential, commercial, and industrial buildings, places of assembly, surface waterbodies and designated open spaces. Buried pipelines shall be a minimum of 4-feet deep and shall be of detectable material which could include the addition of tracer wire to ensure detection during buried utility locating.
2. The location of pipelines shall be evaluated on a case-by-case basis, with the determining locational factor being the size and type of pipeline being proposed.
3. Coordinates of all flow lines, gathering lines, and transfer lines shall be provided.

U. Temporary Water Lines:

1. Temporary waterlines shall be used, unless development is not within a water service area.
2. Temporary waterlines shall be buried at all existing driveway and road crossings, or utilize existing culverts, if available.

V. Financial Assurance:

1. The Applicant shall demonstrate the financial capability to reclaim all disturbed areas during each phase of the site development and following termination of the oil and gas operation on the site. This shall include meeting any state requirements, and any additional requirements the County deems necessary to protect the public health, safety, and welfare.
2. The Applicant shall, for the life of the use, carry customary and usual environmental liability insurance.

17.1. XX – Additional Application Requirements.

- A. In addition to the items specified as required in Section 17.3., the applicant shall provide:
 1. A site inventory map.
 2. A Safety Management Plan.
 3. A Site Security Plan.
 4. A surface use agreement.
 5. A statement verifying the legal right to extract the mineral resources.

17.4. – Appeals.

- A. Section 22 of this Code shall provide direction for all appeals to standards, processes and provisions of this Section 17.

17.5. – Enforcement and Inspections.

- A. Applications for O&GFs shall demonstrate compliance with this and all other relevant Sections of this Code. Failure of an Operator to maintain compliance with the County approval of an O&GF may result in the revocation of the approval pursuant to the procedures in Section 12 of the Land Use Code. The County retains the right to seek whatever remedy or redress is legally allowable.
- B. The County reserves the right to inspect the property for compliance.

17.6. – Fees and Security for Reclamation.

- A. The following fees are applicable to oil and gas facilities:
 - a. A Capital Transportation Impact fee.

17.7. – Termination of Use or Modifications.

- A. No modification to an approved O&GF shall be made without obtaining appropriate land use approvals from the County.
- B. Upon termination of use, the O&GF shall be reclaimed pursuant to the reclamation plan provided.

17.8. – Definitions.

- A. Unless otherwise listed herein, the definitions found within the C.R.S. and Colorado Oil and Gas Conservation Commission (COGCC) regulations shall apply.

January 6, 2020 Draft
Comments by Karen Artell

Please note – with added wording there are blank areas in the document but no wording is deleted.

Please add the following (based on SB 181):

Wildlife protection plan for all applicants – there are Sensitive Wildlife Habitat Areas and Restricted Surface Occupancy Areas near the Poudre and Thompson Rivers and other water bodies. Wildlife protection should be addressed if in, near these areas and take into account wildlife migration. Consult with CPW and USFW

Imposed fines for leaks, spills and emissions

Imposed fees for the direct and indirect costs of permitting and regulation and the cost of any monitoring and inspection program necessary to address the impacts of development and to enforce local governmental requirements

Other additions:

County staff may enter and inspect any O&GF at any time.

Add specifics about operator neighborhood contacts and notices as part of the application process. Contact all within 2000 ft of planned O&GF. Also contact local school district. Notices should provide contact information for CDPHE and COGCC complaint websites. Should also include link to COGCC public comment site.

Remote shut off for wells and tank valves and remote tank level monitoring

Emergency response plan for fires, explosions etc. Coordinate and file with local EMS and fire department. Include evacuation routes and healthcare facilities

17.0. – OIL AND GAS FACILITIES

17.1. – Intent and Purpose.

Note: This section has been updated to better reflect the language in SB 19-181.

- A. **Intent.** The intent of this section of the Land Use Code is to establish a regulatory framework for new oil and gas facilities (O&GFs), including recompletions, to be located in the unincorporated areas of Larimer County in a manner that protects the public health, safety and general welfare, protects private property rights, protects the environment and wildlife, and minimizes by avoiding adverse impacts from oil and gas operations and minimizing and mitigating the extent and severity of those impacts.
- B. **Authority:** C.R.S. 29-20-104-(1) provides the County authority to regulate and review applications pertaining to the surface development of O&GFs.
- C. **Purpose:** These regulations are necessary to:
 1. Ensure a comprehensive land use process and transparent public process for the development of new O&GFs, including recompletions, in the unincorporated areas of the County.
 2. Provide for the managed development, installation, maintenance, modification, reclamation and removal of O&GFs without unreasonably discriminating against oil and gas developers and operators, or mineral interest owners.
 3. Minimize to the maximum extent possible the nuisance effects of O&GFs through the application of best available techniques and technologies.
 4. Promote and protect the public health, safety and welfare, and protect the environment and wildlife by minimizing the adverse impacts of O&GFs.

Commented [KA1]: I like this addition.

Commented [KA2]: 29-20-104(h) Powers of local governments - definition

Commented [KA3]: 34-60-103(11)(b) ["Waste", as applied to gas]...Does not include the nonproduction of gas from a formation if necessary to protect public health, safety, and welfare, the environment, or wildlife resources as determined by the Commission. 34-60-103(12)(b) ["Waste", as applied to oil...Does not include the nonproduction of oil from a formation if necessary to protect public health, safety, and welfare, the environment, or wildlife resources as determined by the Commission. Protection of health, safety welfare etc. takes priority over the "rights" of oil and gas producers and mineral interest owners.

- 5. Maximize protection of natural and cultural resources and public facilities.
 - 6. Strategically locate O&GFs to locate where adverse impacts from such operations can be avoided.
 - 7. Minimize and mitigate the extent and severity of adverse impacts that cannot be avoided.
 - 8. Confirm the financial, indemnification and insurance capacities of the oil and gas developer/operator to ensure timely and effective construction, production, removal and reclamation of O&GFs and infrastructure.
- D. **Applicability:** These regulations shall apply to all new O&GFs, including exploration and recompletions, to be constructed on any property in all zoning districts in the unincorporated portions of Larimer County.
- E. **Severability:** If any section, clause, provision, or portion of these regulations should be found to be unconstitutional or otherwise invalid by a court of competent jurisdiction, the remainder of the regulations in this section shall not be affected thereby and is hereby declared to be necessary for the public health, safety and welfare.

Commented [KA4]: Please list specifics on how this will be accomplished. What evidence will be required of the developer/operator?

17.2. – Review Procedures and Required Permits.

Note: Some members of the Task Force and stakeholders provided input that they would like to see a tiered process for reviews, including an administrative process for simpler, smaller projects. The County could consider defining an administrative process (e.g., PSP) for recompletions that do not exceed a

certain percentage in size greater than what exists, or perhaps require a building permit only for replacement of equipment.

- A. **General Requirements.** No person, firm or corporation shall establish, construct, build a new O&GF, including recompletions, without first having obtained required land use approval(s) and permits as required by this Code. Applications to the County for new O&GFs, including recompletions, may be submitted simultaneously with the Colorado Oil and Gas Conservation Commission (COGCC) permitting process, but approval by the County must be secured prior to construction.
- B. **County Review Process:** All new O&GFs, including recompletions, in the unincorporated portions of Larimer County shall require approval of a Special Review application for the proposed facility as set forth in Section 4.5 of this Code. Application and submittal requirements for O&GFs are specified in the following Community Development Department application handouts:
 - 1. Sketch Plan Review Application and Submittal Requirements for Oil and Gas Facilities.
 - 2. Neighborhood Meeting Submittal Requirements and Guidelines for Oil and Gas Facilities.
 - 3. Special Review Application and Submittal Requirements for Oil and Gas Facilities.
- C. **County Permits.** Prior to the commencement of any construction activity for an O&GF, all required permits for such facilities shall be approved. Required permits include, but are not limited to:
 - 1. Access permits,
 - 2. Development construction permit,
 - 3. Building permits for all qualifying buildings and structures,
 - 4. Electrical permits, and
 - 5. All federal, state and local permits.
- D. **Non-County Permits:** County approval of an O&GF shall not relieve the landowner or applicant of the responsibility for securing other permits or approvals required by any other applicable County Departments, local fire district, municipalities, or other applicable public agencies.
- E. **Technical Expert Review:** Applications for O&GFs may involve complex technical issues that require review and input that is beyond the expertise of County staff. If such a situation arises, the Community Development Director may commission a third-party review of the relevant subject matter and require the applicant to pay reasonable costs for the third-party review. Selection of a third-party expert(s) to review portions the proposal will be at the discretion of the County.

Commented [KA5]: I agree that all applications should go through a special review process so as not to unduly burden the planning staff, so the County can learn and better understand the issues regarding permitting of oil and gas regulations and provides consistency for developers/operators.

Commented [KA6]: Agree that this is the County's prerogative.

17.3. – Standards Required for all Oil and Gas Facilities.

- A. **General:**
 - 1. In addition to the standards and requirements of this Section 17, all other relevant standards and regulations set forth in this Code shall also apply.
 - 2. All applications for new O&GFs, including recompletions, shall meet all applicable federal, state and local standards and regulations pertaining to the development and operation of such facilities. When the standards and regulations contained herein

conflict with the standards and requirements of another agency, the stricter standard shall apply.

Commented [KA7]: Agree.

3. All documents and application materials submitted to COGCC and CDPHE must also be submitted to Larimer County as part of the application process.

Note: The setbacks and buffers section below has been added since Draft 1 for Planning Commission and Board of County Commissioner discussion. The Task Force did not review this section.

B. Setbacks:

- 1. The minimum required setbacks for buildings and structures set forth in the applicable zoning district shall apply to the proposed O&GF.
- 2. In addition to the setbacks in paragraph 3 below, the setbacks set forth in Section 4.9 of this Code shall apply to proposed O&GFs to minimize their impacts on public health, safety, welfare, the environment, and agricultural operations.
- 3. To achieve the intent and purpose of this Section 17, the following minimum setbacks for O&GFs shall be required, unless more restrictive setbacks are required by the rules of the COGCC:

- a. ~~4,000~~1325-foot setback from a residential building or platted residential lot
- b. 2,000-foot setback from a high occupancy building including schools, registered day cares, nursing homes,
- c. 500-foot setback from a water body or designated outside activity area

Commented [KA8]: Please increase to 1325 feet as outlined in Tri-County Health Department recommendations to Adams County. This provides more safety for blast zones and other health concerns. 2000 foot setback is more protective and would be great to apply to all residential buildings.

4. To achieve the objectives of Section 17.1.C., the Board of County Commissioners may, on a case by case basis, require an increase to these minimum setbacks.

Commented [KA9]: Recommend the setback be from the property boundary rather than the building especially for schools where children play outside.

4-5. 1000 ft setback from these sensitive areas, including waterways, wetlands, lakes, reservoirs, streams, rivers, riparian areas, ditches, wildlife travel zone, nesting area, open space parks, natural areas.

Commented [KA10]: I would like to see this increased to 1000 feet.

5-6. The Board of County Commissioners may allow a reduction of the minimum setbacks when it has been determined that the applicant has adequately demonstrated that the setbacks prohibit access to the mineral interests being sought, and the reduced setbacks will achieve to the extent practicable the objectives of this code.

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C. Air Quality:

- 1. An Air Quality Report/Plan shall be submitted with all O&GF applications. The report/plan shall demonstrate how the development and operation of the facility will avoid and/or mitigate adverse impacts to air quality and demonstrate compliance with and implementation of standards in Sections 17.3.C. and 8.11 of this Code.
- 2. In addition to all federal and state laws, rules and regulations, applications for O&GFs shall demonstrate how exploration, construction and standard operations of an O&GF, including traffic and construction equipment, will comply with the rules and regulations of the Colorado Air Quality Control Commission (AQCC). Information to be provided shall include all appropriate applications of notifications and permits for sources of emissions.
- 3. Reduced Emission (Green) Completions shall be used for all completions and well workovers following hydraulic fracturing. Such completions shall include the use of Best Management Practices including, when available, the following unless an equal or better system exists:

Commented [KA11]: Please see note above re waste does not apply to leaving the minerals in the ground for health and safety reasons.

- a. Except for very small productions, closed loop, pitless drilling, completion systems, without permanent on-site storage tanks, for the containment and/or recycling of all drilling, completion and flowback fluids.
 - b. Flaring only allowed during emergencies or upset conditions. When allowed, routing and control of all emissions to a flare or combustor shall provide at least 98% destruction or removal efficiency.
 - c. Zero emission desiccant dehydrators.
 - d. Emission controls of 90% or better for glycol dehydrators.
 - e. Pressure-suitable separator and vapor recovery units.
 - f. No-bleed continuous and intermittent pneumatic devices.
 - g. Automated tank gauging.
4. O&GFs shall be equipped with electric-powered engines for motors, compressors, drilling and production equipment, and pumping systems unless no adequate electricity source is available or it is technically infeasible.
5. During exploration and construction, the applicant shall demonstrate that all facilities on the site, including traffic and construction equipment, complies with all AQCC rules and regulations.
6. O&GF applications shall include operational provisions to reduce emissions on Air Quality Action Advisory Days posted by the Colorado Department of Public Health and Environment (CDPHE) for the Front Range area. The provisions shall include how alerts are received, outline specific emission reduction measures, and include requirements for documenting the measures implemented. Measures should include:
- a. Minimizing vehicle traffic and engine idling,
 - b. Reducing truck and worker traffic,
 - c. Delaying vehicle refueling,
 - d. Suspending or delaying use of fossil fuel powered equipment,
 - e. Postponing construction and maintenance activities,
 - f. Postponing well maintenance and liquid unloading that would result in emission releases to the atmosphere, and
 - g. Postponing or reducing operations with high potential to emit VOC's of NOx's.

D. Leak Detection and Repair:

- 1. A Leak Detections and Repair Plan shall be submitted with all O&GF applications. The plan shall disclose techniques, methods and protocols that will be utilized at the proposed O&GF to identify, prevent, contain, document, repair and report leaks, ~~and~~ ~~and~~ shall demonstrate how it will comply with and implement the standards in this Section 17.1.3.F.
- 2. Operators shall conduct leak detection and repair inspections at the frequency required by the APCD for the emission source using modern leak detection technologies and equipment. The results of said inspections, including all corrective actions taken, shall be reported to the Larimer County Department of Health and Environment (LCDHE) and County Local Government Designee (LGD) upon request.
- 3. All verified leaks at an O&GF shall be reported to the LCDHE and LGD within 24-hours of the detection of the leak.

Commented [KA12]: Please don't except small operators/productions. Smaller companies don't have the staff, where with all, funds to operate up to standards. Example, Magpie – See [COGCC agenda](#). In January 2019 COGCC staff reported that Magpie had committed a pattern of violations described in a COGCC stipulated order finding violation. This document and a follow up document dated July 19, 2019 are in COGCC's Hearings Portfolio Magpie folder <https://drive.google.com/drive/folders/1uNDipOkzR4nIUY1I9YSaC4WeJRinSgIY>. Of particular concern is contamination of groundwater at Magpie's Little Beaver Injection Unit (LBIU) in Washington County. Application for hearing November 2018. https://cogcc.state.co.us/documents/reg/Hearings/Schedules/Notices/2019/01/190100008_MagpieNoh.pdf Also see Local Government Council presentation to AQCC December 2019 hearing - Slide # 7 Leaks also occur at lower producing facilities - attached. I have also attached the Local Government Council pre-hearing statement, see pages 2 and 14.. I otherwise appreciate the requirements you have added.

Commented [KA13]: Remember that SB 181 and the COGCC white paper note removal of wording "cost effectiveness and technical feasibility". White Paper attached.

4. Repair of verified leaks shall occur within 72 hours of detection. If it is anticipated that a repair will take longer than 72 hours, the operator shall provide a written explanation to the LCDHE and the LGD as to why more time is required and how the leak will be contained. If a leak is not repaired within 72-hours, the O&GF shall be shut-in until the leak is repaired.
5. Equipment leaks that pose an imminent safety risk to persons, wildlife, or the environment shall undergo emergency shut down and not be allowed to operate until the operator has provided evidence that the leak has been repaired.
6. At least annually, operators shall provide a 2-week notice of a routine leak inspection to the LCDHE and LGD inviting them to attend and observe the inspection.

E. Odors:

1. **An Odor Mitigation Plan** shall be required for all O&GF applications indicating how the operations will prevent odors from adversely impacting the public and wildlife and further demonstrating compliance with the standards in this Section 17.1.3.H.
2. Oil and gas operations shall comply with the CDPHE, AQCC, Regulation No. 2 Odor Emission, 5 Code of Colorado Regulations 1001-4.
3. Proposed O&GFs shall provide protocols for immediate response to odor complaints that include options for ceasing operations, notification of affected residents, and temporary relocation of residents until the source of the odor is identified and resolved.
4. The operator shall communicate the schedule/timing of well completion activities to adjacent and nearby residents which could include an online portal. As part of the application, provide information on how notifications will be communicated to the public.
5. The Odor Mitigation Plan shall include control strategic which shall be implemented upon receipt of an odor complaint(s) or as required by the County. These Odor control strategies may include the following:
 - a. Odorants, that are not a masking agent, shall be added to chillers and mud systems.
 - b. Operators shall not use odor masking agents or additives.
 - c. Filtration systems and/or additives to minimize, not mask, odors from drilling and fracturing fluids shall be utilized in the drilling and flowback processes.
 - d. Additives intended to eliminate odors generated by the operations of an O&GF shall not create a separate odor.
 - e. Enclosed shale shakers shall be utilized to contain fumes from exposed mud.
 - f. Drilling activities shall utilize minimum low odor Category III drilling fluid or non-diesel-based drilling muds that do not contain benzene, toluene, ethylbenzene or xylene (BTEX).
 - g. Wipe down drill pipe as they exit the well bore each time.

Commented [KA14]: Thanks for adding these requirements.

F. Water Quality and Water Bodies:

1. **A Water Quality Report/Plan, which includes a hydrology map,** shall be submitted with all O&GF applications. The report/plan shall demonstrate how the development and operations of the facility will avoid impacts to surface and ground waters in Larimer County, and demonstrate compliance with and implementation of standards in Sections 17.3.D. and 8.12 of this Code.

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- 2. Baseline and subsequent water source tests, as typically required by and submitted to the COGCC and CDPHE, shall be provided to the LCDHE and the LGD for the life of the facility and any post-closure assessments, if approved by the owner(s) of the water well. It is recommended that the operator also post these reports online for public/access transparency.
- 3. The application shall provide documentation indicating how the COGCC water quality protection standards are being implemented.
- 4. Locating O&GFs within a Federal Emergency Management Agency (FEMA) designated 100-year floodplain shall not be allowed ~~unless no other location is feasible, and all other appropriate permissions are obtained.~~
- 5. New wastewater injection wells shall not be ~~allowed.~~
- 6. The requirements of this Section 17.4.D shall not prevent discharges reviewed and permitted by the CDPHE Water Quality Control Division, the EPA, and the Army Corps of Engineers.
- 7. Add list of forbidden chemicals in frack fluid from CDPHE.
- 6-8. Wetland protection plan

G. **Spills and Releases:**

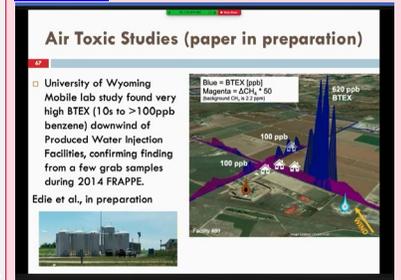
- 1. A **Spill Prevention Control and Countermeasure Plan** shall be submitted with all O&GF applications. The plan shall disclose techniques, methods, and protocols to be utilized at the proposed O&GF to prevent, contain, document and report any spills or releases, and shall demonstrate compliance with and implementation of the standards in this Section 17.3.E.
- 2. An Emergency Response Plan shall be provided that includes evacuation plans and routes, inventory of emergency response supplies, notification requirements and annual open house training for emergency services personnel to become familiar with the site.
- 3. Secondary containment shall be required which is capable of holding 125% of the total capacity of on-site containment vessels and storage tanks.
- 4. Unloading areas shall be designed to contain potential spills or direct spills into other secondary containment areas
- 5. Containment systems constructed of steel rimmed berms, or similar impervious surfaces that are equal to or better, shall be used for all secondary containment areas.
- 6. Any spill or release of greater than 25 gallons on an O&GF, including those thresholds reportable to the COGCC, shall upon discovery, be immediately reported to the following Local Emergency Response Authorities in Larimer County:
 - a. Larimer County Sheriff – Public Safety Answering Point (PSAP) (9-1-1)
 - b. Larimer County Department of Health and Environment,
 - c. Local Fire Department/District,
 - d. Local Municipal Police Department if within in mile of a City or Town,
 - e. Larimer County Oil and Gas LGD, and
 - f. Larimer County Local Emergency Planning Committee (within 24-hours).

7. All spills or releases, whether reportable or not, shall be cleaned up immediately and to the satisfaction of the local emergency response authorities ~~and as~~ listed in the Spill Prevention Control and Countermeasure Plan.

7-8. A stormwater management/erosion control plan

H. **Noise:**

Commented [KA15]: Agree. There is indication that air emissions from injection wells are greater than realized besides the risk to soil and ground water contamination. <https://www.facebook.com/BoulderCounty/videos/2347576722206820/>



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Commented [KA16]: Not sure what this portion of the sentence is saying.

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1. **A Noise Report and Mitigation Plan** shall be required for all O&GF applications. The plan shall demonstrate how the operations will mitigate noise impacts to comply with

the noise standards contained in this Section 17.3.G. The report and plan shall include the following:

- a. A three-day (one day being a weekend day) baseline noise analysis.
 - b. Modeled decibel levels for various phases of development shall be presented using contour maps to radii of 350 feet from the site of operation/noise source (per COGCC) or at the property line of an adjacent land use, whichever is closer.
 - c. A plan of proposed mitigation measures to be implemented by the oil and gas operations during all stages of compliance with the maximum permissible noise levels as listed in Section G.2 below.
2. Noise generated from O&GFs shall comply with the following maximum permissible noise levels appropriate for the zoning and adjacent land uses at determined by the County:

ZONE AREA DESIGNATIONS	7:00 am to next 7:00 pm	7:00 pm to next 7:00 am
Residential/Agricultural/Rural	55 db(A)	50 db(A)
Commercial	60 db(A)	55 db(A)
Light Industrial	70 db(A)	65 db(A)
Industrial	80 db(A)	75 db(A)

In the hours between 7:00 a.m. and the next 7:00 p.m., the noise levels permitted above may be increased by ten (10) db(A) for a single period of not to exceed fifteen minutes in any one-hour period. Night-time levels between 7:00 p.m. and the next 7:00 a.m. shall not be exceeded therefore requiring strategic planning of noise-inducing activities to be conducted during daytime hours at the site.

- 3. Decibel levels produced by the O&GF shall meet the identified level for the appropriate zoning area designation of the adjacent land use. Zones as defined by Article 12 – Noise abatement of the Colorado Revised Statutes (C.R.S.) 25-12-102 will be considered as part of the County’s determination for surrounding land uses.
 - 4. In remote locations, where there is no reasonably proximate occupied structure or Designated Outside Activity Area (COGCC), the light industrial standard may be applicable as determined by the County.
 - 5. Decibel levels shall be measured at least 350-feet from the boundary of the operation/noise source (from source or sound wall per COGCC) or at the property line of the adjacent land use, whichever is greater.
 - 6. Construction of O&GFs, including drilling/well completions, recompletions, and pipeline installations, shall be subject to the maximum permissible noise levels specified for light industrial zones for the period within which construction is being conducted.
 - 7. Quiet design mufflers (i.e., hospital grade or dual dissipative) or equal to or better than noise mitigation technologies shall be utilized for non-electrically operated equipment.
 - 8. Motors, Generators, and engines shall be enclosed in acoustically insulated housings or covers.
- I. **Dust:**
- 1. **A Fugitive Dust Control Plan** shall be submitted with all O&GF applications. The plan shall disclose techniques and methods to be utilized at the proposed O&GF to prevent or mitigate fugitive dust generated by the construction and operations of the proposed

O&GF and shall demonstrate compliance with and implementation of standards in Sections 17.3.I and 8.11 of this Code.

2. Best management practices (BMPs) for the mitigation of dust associated with on-site operations and traffic activities shall be employed at the facility. The BMPs shall be outlined in the Fugitive Dust Control Plan. Include trip speed limits.
3. Produced water and other process fluids shall not be used for dust suppression unless adequately pretreated so that it does not create odors and has been approved for land application by CDPHE Water Quality Control Division.
4. Safety Data Sheets (SDSs) shall be provided with the application for any proposed chemical based dust suppressants.
5. Unless otherwise approved by the County Health and Engineering Departments, only water will be used for dust suppression activities within 300-feet of the ordinary high-water mark of any body of water.

Commented [KA17]: I prefer that produced water not be used in the County. Its not necessary and is harmful to the environment. Same goes for any chemical containing substance for dust suppression.

J. Access:

1. **A Traffic Impact Analysis and Routing Plan** shall be submitted with all O&GF applications. The plan shall disclose routing alternatives and transportation infrastructure improvements proposed for the proposed O&GF to mitigate projected transportation impacts and demonstrate compliance with and implementation of the standards in this Section 17.3.E.
2. Designs for private access drives shall conform to the Local Low Volume cross section found in the Larimer County Rural Area Road Standards and shall include the following:
 - a. The first 50 feet of access drive from the edge of pavement of the adjacent road will be paved, or made of an approved all weather surface, and the remaining portions of the access drive shall be composed of a minimum of 6 inches of compacted Class 5 road base.
 - b. The access drive entrance shall include returns with a 30-foot radius.
 - c. A mud and debris tracking pad shall be located at the end of the paved portion of the access drive.

K. Chemical Handling:

1. **A Chemical and Hazardous Materials Report and Handling Plan** shall be submitted with all O&GF applications. The plan shall disclose the type of hazardous and non-hazardous materials and chemicals that will be used on the site of the proposed O&GF, including how they will be handled to prevent spills and demonstrate compliance with and implementation of standards in this Section 17.3.K.
2. Prior to any hydraulic fracturing activity, the Operator shall provide the County with a copy of the Chemical Disclosure Registry form provided to the COGCC pursuant to the COGCC's "Hydraulic Fracturing Chemical Disclosure".
3. Drilling and completion chemicals shall be removed from the site within sixty (60) days of the drilling completion.

L. Recycle, Reuse and Disposal of Fluids:

1. **A Waste Management and Disposal Plan** shall be submitted with all O&GF applications. The plan shall document the techniques and methods of the proposed O&GF to manage wastes generated on the site and demonstrate compliance with and implementation of the standards in this Section 17.3.L.
2. Drilling, completion flowback, and produced fluids shall be recycled or reused whenever

technically feasible.

3. If not to be recycled or reused onsite, exploration and production waste may be temporarily stored in tanks for up to 30-days while awaiting transport to licensed disposal or recycling sites.
4. Produced water shall be recycled or reused or shall be transported by pipeline unless easements are not available.
5. The Operator shall take precautions to prevent adverse environmental impacts to air, water, soil, or biological resources to the extent necessary to protect public health, safety and welfare, including the environment and Wildlife Resources to prevent the unauthorized discharge or disposal of oil, gas, Exploration and Production Waste, chemical substances, trash, discarded equipment, or other oil field waste.
6. The requirements of this Section 17.3.L shall not prevent discharges and beneficial uses reviewed and permitted by the CDPHE Water Quality Control Division and the Environmental Protection Agency (EPA).

M. Lighting and Visual Impacts:

1. For all phases of the development of the site, the application shall demonstrate compliance with the visual and aesthetic rules of COGCC and the Larimer County Land Use Code for landscaping, fencing and lighting set forth in Section 8.
2. All O&GFs shall be painted with colors that are matched to or slightly darker than the surrounding landscape, and shall utilize paint with uniform, non-contrasting, nonreflective color tones based upon the Munsell Soil Color Coding System.
3. The location of all outdoor lighting shall be designed to minimize off-site light spillage and glare using best practices recognized by the International Dark-Sky Association. See Section 8.15, Lighting Standards.
4. For all phases of site development, fencing shall be installed for security and visual aesthetics of the use.
5. Sound or screening wall to mitigate for noise during well completion may be required if the O&GF is within 2,000 feet of residential buildings or lots, if electric requirement is appealed.
6. O&GFs applications shall minimize removal of trees and vegetation on the site.
7. Landscaping and/or fencing for screening and visual quality as viewed from public rights-of-way and nearby residential areas shall be required within 6 months from the time of well completion and in accordance with requirements for the zoning district. Use native plants and remove noxious weeds.
8. O&GF applications shall demonstrate compliance with weed control requirements of the County Weed District and Forestry Services Department, including for access roads serving the facility.

Note: Environmental and health advocacy groups would like the next section, Well Plugging and Abandonment, to be more extensive and address noticing requirements and inspections after removal. The industry groups noted that this is down hole regulation and therefore not included in the SB 19-181 granted authority.

N. Well Plugging and Abandonment:

1. A Reclamation Plan shall be submitted. The plan shall demonstrate how well abandonment and reclamation shall comply with the COGCC rules and shall include the

Commented [KA18]: The industry group position would make sense if leaking in to soil and ground water and air emissions weren't a problem with plugged and abandoned wells whether properly plugged or not. Industry should not dictate what is "down hole" and what's not especially when impacts are to air, soil and water.

following information:

- a. Removal of all equipment from the well site,
- b. Restoration of the site surface to the conditions of the site reclamation plan,
- c. Notice to the County LGD of the commencement and completion of such activity, and
- d. Coordinates for the location of the decommissioned well(s), and any associated gathering or flow lines, shall be provided with the notice of the completion of well abandonment.
- e. Question: Should we include water testing/monitoring for a certain amount of time post plugging/abandoned wells to monitor that they are in sound condition and not leaking into water. This could be a condition of approval for certain sites (e.g., nearing high occupancy buildings, water reservoirs, drinking water wells.)
- e-f. If reclaimed site not planned for agriculture, must use native plants for reclamation and remove noxious weeds, shrubs.

Commented [KA19]: Yes. Include surrounding soil testing since that's where contamination seems to first be found and leads to soil and ground water testing. Include all bodies of water. Ground water depth from surface should be noted and ground water should be tested near site and down flow of ground water.

O. Well Liquids Unloading:

1. Best management practices, including artificial lift, automated plunger lifts and at least 98% emission reductions when utilizing combustion to control venting shall be employed at all facilities unless technically infeasible.
2. Approved manual unloading shall require on-site supervision of the unloading process.

P. Flammable Materials:

1. The location of flammable materials on site shall conform to all COGCC safety standards and local fire codes.
2. A minimum 25-foot buffer, free of weeds and dried grasses, shall be required around flammable materials or equipment.

Q. Waste Disposal:

1. **A Waste Management and Disposal Plan** shall be submitted with all O&GF applications. The plan shall document the techniques and methods of the proposed O&GF to manage wastes generated on the site and demonstrate compliance with and implementation of the standards in this Section 17.3.Q.
2. Oil and gas facilities shall remain free of debris and excess materials during all phases of operation.
3. Burning of debris, trash or other flammable material is not allowed.
4. Temporary storage of materials (up to 30-days) may be allowed with installation of screening to mitigate from aesthetic impacts from public rights-of-way or if requested by landowner.

R. Removal of Equipment:

1. There shall be no permanent storage of equipment (i.e., vehicles, trailers, commercial products, chemicals, drums, totes, containers, materials, and all other supplies not necessary for uses on an oil and gas location) on the site of an oil and gas facility.
2. When not in use, or if no longer needed for on-site operations, all equipment not being used on the site shall be removed.

S. Maintenance of Machinery:

1. Statewide Best Management Practices shall be used to prevent contamination of soils and stormwater runoff, including equipment and vehicle maintenance and fluid

- containment.
2. There shall be no maintenance of field equipment involving hazardous materials within 300-feet of a water body.

3. Any fueling on-site shall occur over an impervious surface with a bermed secondary containment and sump in case of a spill and shall not occur during storm events.

T. Flow Lines, Transfer Lines, and Gathering Lines:

1. All off-site lines transporting process materials, production wastes, product and any other items used or generated by the facility shall be located to avoid existing or proposed residential, commercial, and industrial buildings, places of assembly, surface waterbodies and designated open spaces. Buried pipelines shall be a minimum of 4-feet deep and shall be of detectable material which could include the addition of tracer wire to ensure detection during buried utility locating.
2. The location of pipelines shall be evaluated on a case-by-case basis, with the determining locational factor being the size and type of pipeline being proposed.
3. Coordinates of all flow lines, gathering lines, and transfer lines shall be provided.

U. Temporary Water Lines:

1. Temporary waterlines shall be used, unless development is not within a water service area.
2. Temporary waterlines shall be buried at all existing driveway and road crossings, or utilize existing culverts, if available.

V. Financial Assurance:

1. The Applicant shall demonstrate the financial capability to reclaim all disturbed areas during each phase of the site development and following termination of the oil and gas operation on the site. This shall include meeting any state requirements, and any additional requirements the County deems necessary to protect the public health, safety, and welfare.
2. The Applicant shall, for the life of the use, carry customary and usual environmental liability insurance.

Commented [KA20]: Please specify what documents are needed to comply with this requirement.

17.1. XX – Additional Application Requirements.

- A. In addition to the items specified as required in Section 17.3., the applicant shall provide:
 1. A site inventory map.
 2. A Safety Management Plan.
 3. A Site Security Plan.
 4. A surface use agreement.
 5. A statement and proof verifying the legal right to extract the mineral resources.

17.4. – Appeals.

- A. Section 22 of this Code shall provide direction for all appeals to standards, processes and provisions of this Section 17.

17.5. – Enforcement and Inspections.

- A. Applications for O&GFs shall demonstrate compliance with this and all other relevant Sections of this Code. Failure of an Operator to maintain compliance with the County approval of an O&GF may result in the revocation of the approval pursuant to the procedures in Section 12 of the Land Use Code. The County retains the right to seek whatever remedy or redress is legally allowable.
- B. The County reserves the right to inspect the property for compliance.

17.6. – Fees and Security for Reclamation.

- A. The following fees are applicable to oil and gas facilities:
 - a. A Capital Transportation Impact fee.

17.7. – Termination of Use or Modifications.

- A. No modification to an approved O&GF shall be made without obtaining appropriate land use approvals from the County.
- B. Upon termination of use, the O&GF shall be reclaimed pursuant to the reclamation plan provided.

17.8. – Definitions.

- A. Unless otherwise listed herein, the definitions found within the C.R.S. and Colorado Oil and Gas Conservation Commission (COGCC) regulations shall apply.

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17.0. – OIL AND GAS FACILITIES

17.1. – Intent and Purpose.

Note: This section has been updated to better reflect the language in SB 19-181.

- A. **Intent.** The intent of this section of the Land Use Code is to establish a regulatory framework for the surface impacts of new and enlarged oil and gas facilities (O&GFs), ~~including recompletions~~, to be located in the unincorporated areas of Larimer County in a manner that protects the public health, safety and general welfare, protects private property rights, protects environment and wildlife, and minimizes adverse impacts.
- B. **Authority:** C.R.S. 29-20-104-(1) provides the County authority to regulate and review applications pertaining to the surface development of O&GFs.
- C. **Purpose:** These regulations are necessary to:
 - 1. Ensure a comprehensive land use process and transparent public process for the development of new and enlarged O&GFs, ~~including recompletions~~, in the unincorporated areas of the County.
 - 2. Provide for the managed development, installation, maintenance, modification, reclamation and removal of O&GFs without unreasonably discriminating against oil and gas developers and operators, or mineral interest owners.
 - 3. To the extent necessary and reasonable, and consistent with the County’s authority under § 34-60-103(5.5) or other applicable laws:
 - a. Minimize to the maximum extent possible the nuisance effects of O&GFs through the application of best available techniques and technologies.
 - b. Promote and protect the public health, safety and welfare, and protect the environment and wildlife by minimizing the adverse impacts of O&GFs.
 - c. Maximize protection of natural and cultural resources and public facilities.
 - d. Strategically locate O&GFs to locate where adverse impacts from such operations can be avoided, while retaining the applicant’s ability to recover mineral resources.
 - e. Minimize and mitigate the extent and severity of adverse impacts that cannot be avoided.
 - f. ~~Confirm the financial, indemnification and insurance capacities of the oil and gas developer/operator to ensure timely and effective construction, production, removal and reclamation of O&GFs and infrastructure.~~
 - 3-4. These oil and gas regulations should be interpreted and applied in conjunction with applicable state and federal regulations so as to minimize duplications and inconsistencies.
- D. **Applicability:** These regulations shall apply to all new and enlarged O&GFs, ~~including exploration and recompletions~~, to be constructed on any property in all zoning districts in the unincorporated portions of Larimer County. An O&GF is new if no actual physical construction has occurred at the site prior to the effective date of this Chapter 17. An O&GF is enlarged if the final disturbed surface area exceeds 120% of the disturbed surface area of the existing O&GF at the time of permit application.
- E. **Severability:** If any section, clause, provision, or portion of these regulations should be found to be unconstitutional or otherwise invalid by a court of competent jurisdiction, the remainder of

Commented [KW1]: Ensures consistency with Senate Bill 181.

Commented [KW2]: Redundant of state requirements, Land Use Code § 4.5.4 and § 17.3.V.

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the regulations in this section shall not be affected thereby and is hereby declared to be necessary for the public health, safety and welfare.

17.2. – Review Procedures and Required Permits.

Note: Some members of the Task Force and stakeholders provided input that they would like to see a tiered process for reviews, including an administrative process for simpler, smaller projects. The County could consider defining an administrative process (e.g., PSP) for recompletions that do not exceed a

Commented [KW3]: King and Wellington support the creation of a tiered review process. We support the criteria suggested by COGA in their comments on the County’s Version 1. We propose additional criteria in § 17.2.B. O&GFs that meet either criteria should qualify for administrative review.

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certain percentage in size greater than what exists, or perhaps require a building permit only for replacement of equipment.

- A. General Requirements.** No person, firm or corporation shall establish, construct, build a new O&GF or enlarge an existing O&GF as defined in Section 17.1.D, including recompletions, without first having obtained required land use approval(s) and permits as required by this Code. Applications to the County for new O&GFs, including recompletions, may be submitted simultaneously with the Colorado Oil and Gas Conservation Commission (COGCC) permitting process, but approval by ~~the County~~ both agencies must be secured prior to construction. The County will act on O&GF applications without waiting for approval by any other agency.
- B. County Site Plan Review Process:** The following new or enlarged O&GFs in the unincorporated portions of Larimer County shall require approval of a Site Plan Review application for the proposed facility as set forth in Section 6.1 of this Code:
1. New O&GFs where the disturbed area of the surface pad is 2 acres or less. The surface pad area does not include access roads, pipelines, or other disturbances that occur offsite.
 2. Enlarged O&GFs where the disturbed area of the surface pad does not exceed 120% of the disturbed surface at the time of application and the proposed activity does not require the applicant to seek a reissuance of a Construction Permit from the Colorado Department of Public Health and Environment (CDPHE) Air Pollution Control Division increasing the facility's total allowable annual emissions (potential to emit).
 3. The County will take final action on O&GF applications subject to Site Plan Review within 60 days of receipt of a complete application. County approval will not be withheld if the applicant commits to necessary and reasonable measures to minimize adverse impacts.
- ~~B.C.~~ County Special Review Process:** All new or enlarged O&GFs not subject to Section 17.2.B- including recompletions, in the unincorporated portions of Larimer County shall require approval of a Special Review application for the proposed facility as set forth in Section 4.5 of this Code. Application and submittal requirements for O&GFs are specified in the following Community Development Department application handouts:
1. Sketch Plan Review Application and Submittal Requirements for Oil and Gas Facilities.
 2. Neighborhood Meeting Submittal Requirements and Guidelines for Oil and Gas Facilities.
 3. Special Review Application and Submittal Requirements for Oil and Gas Facilities.
 - 3-4. The County will take final action on O&GF applications subject to Special Review within 180 days of receipt of a complete application. County approval will not be withheld if the applicant commits to necessary and reasonable measures to minimize adverse impacts.
- ~~C.D.~~ County Permits.** Prior to the commencement of any construction activity for an O&GF, all required permits for such facilities shall be approved. Required permits include, but are not limited to:
1. Access ~~p~~Permits,
 2. Development ~~e~~Construction ~~p~~Permit,
 3. Building permits for all qualifying buildings and structures,
 4. Electrical permits, and
 5. All federal, state and local permits.
 - 5-6. Within 90 days after the effective date of this Chapter 17, the Planning Department will propose to the Board of County Commissioners a County office or agency to coordinate O&GF application

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processing.

D.E. Non-County Permits: County approval of an O&GF shall not relieve the landowner or applicant of the responsibility for securing other permits or approvals required by any other applicable County Departments, local fire district, municipalities, or other applicable public agencies.

E.F. Technical Expert Review: Applications for O&GFs may involve complex technical issues that require review and input that is beyond the expertise of County staff. If such a situation arises, the Community Development Director may commission a ~~third-party~~ review of the relevant subject matter by an independent, qualified third-party with documented prior experience with the technical issue in question and require the applicant to pay reasonable costs for the third-party review, provided such costs are documented and directly attributable to review of the application. Selection of asuch third-party expert(s) ~~to review portions the proposal~~ will be at the discretion of the County.

17.3. – Standards Required for all Oil and Gas Facilities.

A. General:

1. In addition to the standards and requirements of this Section 17, all other relevant standards and regulations set forth in this Code shall also apply.
2. All applications for new O&GFs, including recompletions, shall meet all applicable federal, state and local standards and regulations pertaining to the development and operation of such facilities. When the standards and regulations contained herein

conflict with the standards and requirements of another agency, the stricter standard shall apply.

3. Where reports or plans are a required element of the application, the applicant may submit a single report or plan for all sites within the scope of the permit.

Note: The setbacks and buffers section below has been added since Draft 1 for Planning Commission and Board of County Commissioner discussion. The Task Force did not review this section.

B. Setbacks:

1. ~~The minimum required setbacks for buildings and structures set forth in the applicable zoning district shall apply to the proposed O&GF.~~
2. ~~In addition to the setbacks in paragraph 3 below, the setbacks set forth in Section 4.9 of this Code shall apply to proposed O&GFs to minimize their impacts on public health, safety, welfare, the environment, and agricultural operations.~~
3. ~~To achieve the intent and purpose of this Section 17, the following minimum setbacks for new and enlarged O&GFs shall be required, unless more restrictive setbacks are required by the rules of the COGCC:~~
 - a. ~~1,000-foot setback from a residential building or platted residential lot~~
 - b. ~~2,000-foot setback from a high occupancy building including schools, registered day cares, nursing homes.~~
 - c. ~~500-foot 300-foot setback from a water body or a designated outside activity area designated by the COGCC and as defined by COGCC Rule 100.~~
4. ~~The Board of County Commissioners may require an increase to these minimum setbacks on a case by case basis after making specific factual findings that such increase is reasonably necessary to~~ To achieve the objectives of Section 17.1.C., the Board of County Commissioners may, on a case by case basis, require an increase to these minimum setbacks.
5. ~~4. The Board of County Commissioners may allow a reduction of the minimum setbacks when it has been determined that the applicant has adequately demonstrated that the setbacks prohibit access to the mineral interests being sought, and the reduced setbacks will achieve to the extent practicable the objectives of this code.~~

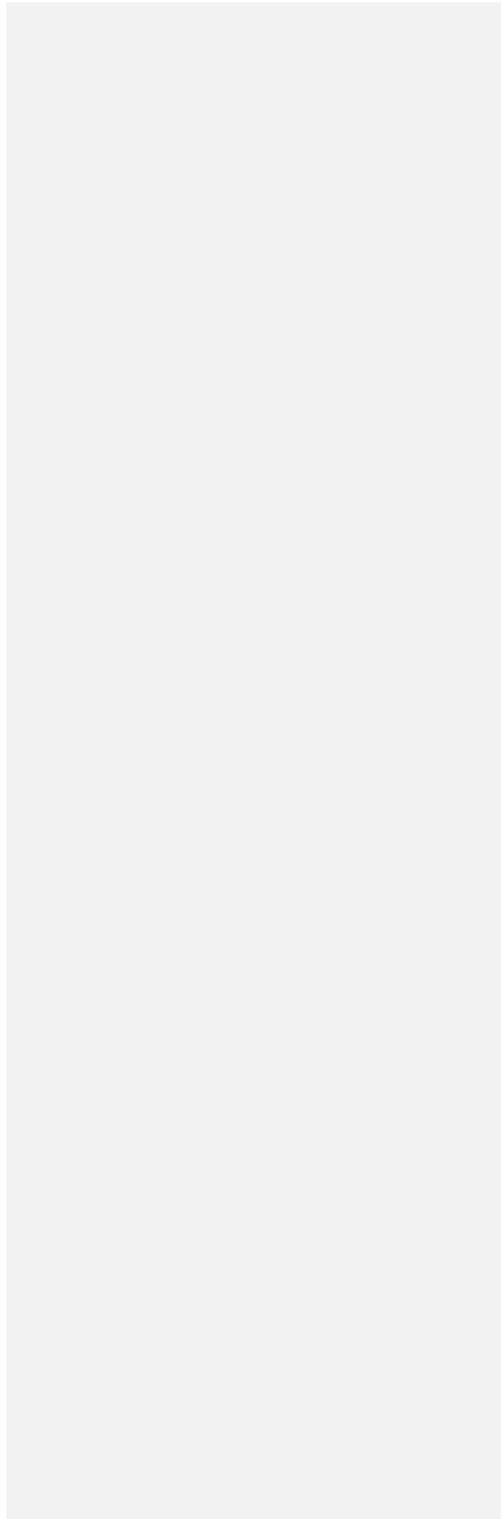
C.B. Air Quality:

1. **An Air Quality Report/Plan** shall be submitted with all O&GF applications. The report/plan shall demonstrate how the development and operation of the facility will avoid and/or mitigate adverse impacts to air quality and demonstrate compliance with and implementation of standards in Sections 17.3.C. and 8.11 of this Code.
2. In addition to all federal and state laws, rules and regulations, applications for O&GFs shall demonstrate how exploration, construction and standard operations of a O&GF, including traffic and construction equipment, will comply with the rules and regulations of the Colorado Air Quality Control Commission (AQCC). Information to be provided shall include copies of all appropriate CDPHE Air Pollution Control Division applications, ef-notifications, and permits for sources of emissions.
3. Reduced Emission Completions shall be used for all completions and well workovers following hydraulic fracturing. Except as necessary for safety reasons, Ssuch completions

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shall include the use of Best Management Practices including, when available, the following unless an equal or better system exists:



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- a. Except for ~~very small productions~~ O&GFs producing less than 25 barrels of oil per day, closed loop, pitless drilling, flowback and completion systems, ~~without permanent on-site storage tanks, for the containment and/or recycling of all drilling, completion and flowback fluids.~~
- b. Flaring of natural gas at the wellhead or separator with pressures equal to or ~~greater~~ greater than 500 psig is only allowed during emergencies or upset conditions or for emissions control purposes. When flaring of natural gas is allowed, ~~routing and control of all emissions it will be routed~~ to a flare or combustor ~~shall provide~~ designed to achieve at least 98% destruction or removal efficiency.
 - ~~e. Natural gas dehydrators must achieve 90% or better destruction or removal efficiency, or utilize zero emission technology. desiccant dehydrators.~~
 - ~~d.c. Emission controls of 90% or better for glycol dehydrators.~~
 - ~~e.d. Pressure suitable s~~ eparators and vapor recovery units, if used, must be pressure-suitable.
 - ~~f.e. No-bleed continuous and intermittent pneumatic devices.~~
 - ~~g.f. Automated tank gauging~~ Storage tank measurement systems to determine the quantity and quality of liquids in the storage tanks, as required by AQCC Regulation No. 7 Part D Section II.C.4.
- ~~4. O&GFs shall be equipped with electric-powered engines for motors, compressors, drilling and production equipment, and pumping systems unless no adequate electricity source is available or it is technically infeasible.~~
- ~~5.4. During exploration and construction, the applicant shall demonstrate that all facilities on the site, including traffic and construction equipment, complies with all AQCC rules and regulations. The demonstration will consist of a copy of any Air Pollutant Emission Notice or Fugitive Dust Control Plan required by the CDPHE Air Pollution Control Division (APCD).~~
- ~~6.5. O&GF applications shall include operational provisions to reduce emissions on Air Quality Action Advisory Days posted by the Colorado Department of Public Health and Environment (CDPHE) for the Front Range area. The provisions shall include how alerts are received, outline specific emission reduction measures, and include requirements for documenting the measures implemented. Measures should include:~~
 - a. Minimizing vehicle traffic and engine idling,
 - b. Reducing truck and worker traffic,
 - c. Delaying vehicle refueling,
 - d. Suspending or delaying use of fossil fuel powered equipment,
 - e. Postponing construction and maintenance activities,
 - f. Postponing well maintenance and liquid unloading that would result in emission releases to the atmosphere, and
 - g. Postponing or reducing operations with high potential to emit VOC’s of NOx’s.
 - ~~g.h. Operators shall have discretion to select appropriate and feasible response actions for a particular Air Quality Action Advisory Day.~~

Commented [KW4]: The County’s proposed language conflicts with AQCC requirements to use emission control devices on storage tanks and truck loadout operations.

Commented [KW5]: The CDPHE Air Pollution Control Division requires the use of flares designed to achieve 98% control efficiency but generally does not allow operators to claim greater than 95% destruction. See AQCC Regulation 7 § II.C.1.c.

Commented [KW6]: Electric drill rigs are uncommon, require high-capacity electric transmission lines, and are a temporary activity.

Commented [KW7]: Paragraph is duplicative of 17.3.B.2.

D.C. Leak Detection and Repair:

- 1. **An Air Quality Leak Detections and Repair Plan** shall be submitted with all O&GF applications. The plan shall disclose techniques, methods and protocols that will be

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- utilized at the proposed O&GF to identify, prevent, contain, document, repair and report leaks of methane and volatile organic compounds (VOCs), and it shall demonstrate how it will comply with and implement the standards in this Section 17.1.3.F.
2. Operators shall conduct leak detection and repair inspections at the frequency required by the APCD for the emission source using modern leak detection technologies and equipment. The results of said inspections, including all corrective actions taken, shall be reported to the Larimer County Department of Health and Environment (LCDHE) and County Local Government Designee (LGD) upon request.
 3. All ~~verified~~ "leaks requiring repair," as defined by AQCC Regulation No. 7 Part D section II.E.6. at an O&GF shall be reported to the LCDHE and LGD within 24-hours of the detection of the leak.

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- 4. Repair of ~~verified~~ leaks requiring repair shall occur within 72 hours of detection, unless one or more circumstances exist that would extend the time for repair under AQCC Regulation No. 7 Part D section II.E.7. If it is anticipated that a repair will take longer than 72 hours, the operator shall provide a written explanation to the LCDHE and the LGD as to why more time is required and how the leak will be contained. If a leak is not repaired within 72-hours or the extended deadline, the County may order the O&GF shall to be shut-in until the leak is repaired.
- 5. Equipment leaks that pose an imminent safety risk to persons, wildlife, or the environment shall undergo an emergency shut down as provided in the applicant’s Emergency Response Plan and not be allowed to operate until the operator has provided evidence that the leak has been repaired.
- 6. At least annually, operators shall provide a 2-week notice of a routine leak inspection during County business hours to the LCDHE and LGD inviting them to attend and observe the inspection.

Commented [KW8]: AQCC rules extend the repair times in certain situations, such as when the leak cannot be repaired without shutting down equipment, because purging the equipment during shutdown often emits much more pollution than the leak.

E.D. **Odors:**

- 1. **An Odor Mitigation Plan** shall be required for all O&GF applications indicating how the operations will prevent odors from adversely impacting the public and wildlife and further demonstrating compliance with the standards in this Section ~~17.1.3.H~~ 17.3.E.
- 2. Oil and gas operations shall comply with the CDPHE, AQCC, Regulation No. 2 Odor Emission, 5 Code of Colorado Regulations 1001-4.
- 3. Proposed O&GFs shall provide protocols for immediate response to odor complaints that include implementation of the Section 17.3.E.5 Odor Mitigation Plan. If a facility is determined to be the source of the odor and the odor persists after implementation of the Odor Mitigation Plan, the protocols shall also include options for safely ceasing operations, notification of affected residents, and temporary relocation of residents until the source of the odor is identified and resolved.
- 4. The operator shall communicate the schedule/timing of well completion activities to adjacent and nearby residents which could include an online portal. As part of the application, provide information on how notifications will be communicated to the public.
- 5. The Odor Mitigation Plan shall include control strategies ese which shall be implemented upon receipt of an odor complaint(s) or as required by the County. These Odor control strategies may include the following:
 - a. Odorants, ~~that are not a masking agent~~, shall be added to chillers and mud systems unless the additive creates a separate odor or causes the emission of a regulated pollutant.
 - b. Operators shall not use odor masking agents or additives.
 - c. Filtration systems and/or additives to minimize, ~~not mask~~, odors from drilling and fracturing fluids shall be utilized in the drilling and flowback processes.
 - ~~d. Additives intended to eliminate odors generated by the operations of an O&GF shall not create a separate odor.~~
 - e.d. Enclosed shale shakers shall be utilized to contain fumes from exposed mud.
 - f.e. Drilling activities shall utilize minimum low odor Category III drilling fluid or non-diesel-based drilling muds that do not contain benzene, toluene, ethylbenzene or xylene (BTEX).

Commented [KW9]: Duplicates 17.3.E.5.b.

Commented [KW10]: Reconciles 17.3.E.5.a with 17.3.E.5.d.

~~g. Wipe down drill pipe as they exit the well bore each time.~~

Commented [KW11]: Wiping down moving or spinning drill pipe creates a worker safety risk.

F.E. Water Quality and Water Bodies:

1. **A Water Quality Report/Plan** shall be submitted with all O&GF applications. The report/plan shall demonstrate how the development and operations of the facility will avoid impacts to surface and ground waters in Larimer County, and demonstrate compliance with and implementation of standards in Sections 17.3.D. and 8.12 of this Code.

2. Baseline and subsequent water source tests, as typically required by and submitted to the COGCC and CDPHE, shall be provided to the LCDHE and the LGD for the life of the facility and any post-closure assessments, if approved by the owner(s) of the water well. It is recommended that the operator also post these reports online for public/access transparency.
3. The application shall provide documentation indicating how the COGCC water quality protection standards (as described in the COGCC 300 series rules) are being implemented.
4. Locating O&GFs within a Federal Emergency Management Agency (FEMA) designated 100-year floodplain shall not be allowed unless no other location is feasible, and all other appropriate permissions are obtained.
5. ~~New wastewater injection wells shall not be allowed.~~
- 6.5. The requirements of this Section ~~17.4.D~~17.4.F shall not prevent discharges reviewed and permitted by the CDPHE Water Quality Control Division or another agency with jurisdiction, the EPA, and the Army Corps of Engineers.

G.F. Spills and Releases:

1. A Spill Prevention Control and Countermeasure Plan shall be submitted with all O&GF applications. The plan shall ~~disclose techniques, methods, and protocols to be utilized at the proposed O&GF to prevent, contain, document and report any spills or releases, comply with the SPCC plan requirements of 40 C.F.R. section 112.8~~ and shall demonstrate compliance with and implementation of the standards in this Section ~~17.3.E~~17.3.G.
2. An Emergency Response Plan shall be provided that includes an analysis of potential emergency conditions, evacuation plans and routes (if needed), inventory of emergency response supplies, notification requirements and annual open house training for emergency services personnel to become familiar with the site.
3. Secondary containment shall be required which is capable of holding 125% of the total capacity of ~~on-site~~the largest containment vessel within the area of secondary containment vessels and storage tanks.
4. UnloadingFluid unloading areas shall be designed to contain potential spills or direct spills into other secondary containment areas
5. Containment systems ~~constructed of steel rimmed berms~~utilizing ductile, impermeable membranes, or similar impervious surfaces-materials that are equal to or better, shall be used for all secondary containment areas.
6. Any spill or release ~~from an O&GF of greater than the COGCC reporting threshold 25-gallons on an O&GF, including those the thresholds reportable to the COGCC,~~ shall upon discovery, be immediately reported to the following Local Emergency Response Authorities in Larimer County:
 - a. Larimer County Sheriff – Public Safety Answering Point (PSAP) (9-1-1)
 - b. Larimer County Department of Health and Environment,
 - c. Local Fire Department/District,
 - d. Local Municipal Police Department if within in mile of a City or Town,
 - e. Larimer County Oil and Gas LGD, and
 - f. Larimer County Local Emergency Planning Committee (within 24-hours).
7. All spills or releases, whether reportable or not, shall be cleaned up immediately and to

Commented [KW12]: Injection well permits are governed by the federal Safe Drinking Water Act and EPA’s Underground Injection Control (UIC) permit program. While EPA has authorized the COGCC to issue UIC Class II permits on its behalf, state and local governments cannot refuse to issue UIC permits. 40 C.F.R. § 145.33(a)(2)(ii). In addition, it is our understanding that Larimer County does not intend to regulate downhole activities.

Commented [KW13]: A facility may have multiple and distinct areas of secondary containment.

Commented [KW14]: Steel tends to leak at the seams.

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the satisfaction of the local emergency response authorities, listed in the Spill Prevention Control and Countermeasure Plan.

H.G. Noise:

1. **A Noise Report and Mitigation Plan** shall be required for all O&GF applications. The plan shall demonstrate how the operations will mitigate noise impacts to comply with

the noise standards contained in this Section 17.3.G. The report and plan shall include the following:

- a. A three-day (one day being a weekend day) baseline noise analysis.
 - b. Modeled decibel levels for various phases of development shall be presented using contour maps to radii of 350 feet from the site of operation/noise source (per COGCC) or at the property line of an adjacent land use, whichever is closer.
 - c. A plan of proposed mitigation measures to be implemented by the oil and gas operations during all stages of compliance with the maximum permissible noise levels as listed in Section G.2 below.
2. Noise generated from O&GFs shall comply with the following maximum permissible noise levels appropriate for the zoning and adjacent land uses at determined by the County:

<u>ZONE AREA DESIGNATIONS</u>	<u>7:00 am to next 7:00 pm</u>	<u>7:00 pm to next 7:00 am</u>
Residential/Agricultural/Rural	55 db(A)	50 db(A)
Commercial	60 db(A)	55 db(A)
Light Industrial	70 db(A)	65 db(A)
Industrial	80 db(A)	75 db(A)

In the hours between 7:00 a.m. and the next 7:00 p.m., the noise levels permitted above may be increased by ten (10) db(A) for a single period of not to exceed fifteen minutes in any one-hour period. Night-time levels between 7:00 p.m. and the next 7:00 a.m. shall not be exceeded therefore requiring strategic planning of noise-inducing activities to be conducted during daytime hours at the site.

- 3. Decibel levels produced by the O&GF shall meet the identified level for the appropriate zoning area designation of the adjacent land use. Zones as defined by Article 12 – Noise abatement of the Colorado Revised Statutes (C.R.S.) 25-12-102 will be considered as part of the County’s determination for surrounding land uses.
- 4. In remote locations, where there is no reasonably proximate occupied structure or Designated Outside Activity Area designated by the (COGCC), the light industrial standard may be applicable as determined by the County.
- 5. Decibel levels shall be measured at least 350-feet from the boundary of the operation/noise source (from source or sound wall per COGCC) or at the property line of the adjacent land use, whichever is greater.
- 6. Construction of O&GFs, including drilling/well completions, recompletions, and pipeline installations, shall be subject to the maximum permissible noise levels specified for light industrial zones for the period within which construction is being conducted.
- 7. Quiet design mufflers (i.e., hospital grade or dual dissipative) or equal to or better than noise mitigation technologies shall be utilized for non-electrically operated equipment.
- 8. Motors, Generators, and engines shall be enclosed in acoustically insulated housings or covers as necessary.

Commented [KW15]: King and Wellington request clarification of the muffler standard.

H. Dust:

- 1. A **Fugitive Dust Control Plan** shall be submitted with all O&GF applications. The plan shall disclose techniques and methods to be utilized at the proposed O&GF to prevent or mitigate fugitive dust generated by the construction and operations of the proposed

O&GF and shall demonstrate compliance with and implementation of standards in Sections 17.3.I and 8.11 of this Code.

2. Best Management Practices (BMPs) consistent with COGCC Rule 805.c for the mitigation of dust associated with on-site operations and traffic activities shall be employed at the facility. The BMPs shall be outlined in the Fugitive Dust Control Plan.
3. Produced water and other process fluids shall not be used for dust suppression unless adequately pretreated so that it does not create odors and has been approved for land application by CDPHE Water Quality Control Division or other agency with jurisdiction. “Produced water” does not include waters that are pumped from a permitted water well, are authorized for discharge, or are the subject of a water court decree.
4. Safety Data Sheets (SDSs) shall be provided with the application for any proposed chemical based dust suppressants.
5. Unless otherwise approved by the County Health and Engineering Departments, only water will be used for dust suppression activities within 300-feet of the ordinary high-water mark of any body of water.

J.I. Access:

1. **A Traffic Impact Analysis and Routing Plan** shall be submitted with all O&GF applications. The plan shall disclose routing alternatives and transportation infrastructure improvements proposed for the proposed O&GF to mitigate projected transportation impacts and demonstrate compliance with and implementation of the standards in this Section 17.3.E.
2. Designs for private access drives shall conform to the Local Low Volume cross section found in the Larimer County Rural Area Road Standards and shall include the following:
 - a. For roads in use more than 30 days, the first 50 feet of access drive from the edge of pavement of the adjacent road will be paved, or made of an approved all weather surface, and the remaining portions of the access drive shall be composed of a minimum of 6 inches of compacted Class 5 road base.
 - b. The access drive entrance shall include returns with a 30-foot radius.
 - c. A mud and debris tracking pad shall be located at the end of the paved portion of the access drive.

Commented [KW16]: Paving the first 50 feet of roads for very short-lived facilities, such as exploration wells that are found to be dry, damages land that could be reclaimed.

K.J. Chemical Handling:

1. **A Chemical and Hazardous Materials Report and Handling Plan** shall be submitted with all O&GF applications. The plan shall disclose the type of hazardous and non-hazardous materials and chemicals that will be used on the site of the proposed O&GF, including how they will be handled to prevent spills and demonstrate compliance with and implementation of standards in this Section 17.3.K.
2. Prior to any hydraulic fracturing activity, the Operator shall provide the County with a copy of the Chemical Disclosure Registry form provided to the COGCC pursuant to the COGCC’s “Hydraulic Fracturing Chemical Disclosure”.
3. Drilling and completion chemicals shall be removed from the site within sixty (60) days of the drilling completion.

L.K. Recycle, Reuse and Disposal of Fluids:

1. **A Waste Management and Disposal Plan** shall be submitted with all O&GF applications.

The plan shall document the techniques and methods of the proposed O&GF to manage wastes generated on the site and demonstrate compliance with and implementation of the standards in this Section 17.3.L.

- 2. Drilling, completion flowback, and produced fluids shall be ~~recycled or~~ reused onsite whenever technically feasible.
- 3. If not to be recycled or reused onsite, exploration and production waste may be temporarily stored in tanks for up to 30-days while awaiting transport to licensed disposal or recycling sites. The operator shall notify the County if unable to transport waste off-site within 30 days.
- 4. Produced water shall be recycled or reused or shall be transported by pipeline unless easements are not available or the applicant proposes methods of handling produced water that are equal to or better than recycling, reuse, or transporting by pipeline.
- 5. The Operator shall take precautions to prevent adverse environmental impacts to air, water, soil, or biological resources to the extent reasonably necessary to protect public health, safety and welfare, including the environment and Wildlife Resources to prevent the unauthorized discharge or disposal of oil, gas, Exploration and Production Waste, chemical substances, trash, discarded equipment, or other oil field waste.
- 6. The requirements of this Section 17.3.L shall not prevent discharges ~~and or~~ beneficial uses of water reviewed and permitted by the CDPHE Water Quality Control Division ~~and the Environmental Protection Agency (EPA) or another agency with jurisdiction.~~

Commented [KW17]: Recycling does not occur onsite.

Commented [KW18]: Ensures consistency with SB 19-181.

M.L. Lighting and Visual Impacts:

- 1. For all phases of the development of the site, the application shall demonstrate compliance with the visual and aesthetic rules of COGCC and the Larimer County Land Use Code for landscaping, fencing and lighting set forth in Section 8.
- 2. All O&GFs shall be painted with colors that are matched to or slightly darker than the surrounding landscape, and shall utilize paint with uniform, non-contrasting, nonreflective color tones based upon the Munsell Soil Color Coding System.
- 3. The location of all outdoor lighting shall be designed to minimize off-site light spillage and glare using best practices recognized by the International Dark-Sky Association. See Section 8.15, Lighting Standards.
- 4. For all the production phases of site development, fencing shall be installed for security and visual aesthetics of the use.
- 5. Sound or screening wall to mitigate for noise during well completion may be required if the O&GF is within 2,000 feet of residential buildings or lots, if electric requirement is appealed.
- 6. O&GFs applications shall minimize removal of trees and vegetation on the site.
- 7. Landscaping and/or fencing for screening and visual quality as viewed from public rights-of-way and nearby residential areas shall be required within 6 months from the time of well completion and in accordance with requirements for the zoning district.
- 8. O&GF applications shall demonstrate compliance with weed control requirements of the County Weed District and Forestry Services Department, including for access roads serving the facility.

Commented [KW19]: Fencing interferes with sound walls and site access/egress during the pre-production phases (drilling and completion). Permanent fencing is undesirable at facilities that turn out to be dry wells.

Commented [KW20]: Relocate paragraph to 17.3.H.

Commented [KW21]: Consider relocating this paragraph.

Note: Environmental and health advocacy groups would like the next section, Well Plugging and Abandonment, to be more extensive and address noticing requirements and inspections after removal. The industry groups noted that this is down hole regulation and therefore not included in the SB 19-181 granted authority.

N.M. Well Plugging and Abandonment:

1. **A Reclamation Plan** shall be submitted. The plan shall demonstrate how well abandonment and reclamation shall comply with the COGCC rules and shall include the following information:
 - a. Removal of all equipment from the well site,
 - b. Restoration of the site surface to the conditions of the site reclamation plan,
 - c. Notice to the County LGD of the commencement and completion of such activity, and
 - d. Coordinates for the location of the decommissioned well(s), and any associated gathering or flow lines, shall be provided with the notice of the completion of well abandonment.
 - e. ~~Question: Should we include water testing/monitoring for a certain amount of time post plugging/abandoned wells to monitor that they are in sound condition and not leaking into water. This could be a condition of approval for certain sites (e.g., nearing high occupancy buildings, water reservoirs, drinking water wells.)~~

Commented [KW22]: Section 17.3.N.1.e is outside the scope of Chapter 17 because it relates to downhole matters.

Q.N. Well Liquids Unloading:

1. Best ~~m~~Management ~~p~~Practices for wellbore liquids unloading, including such as artificial lift, automated plunger lifts and at least 98% emission reductions when utilizing combustion to control venting an appropriately sized and designed combustion device shall be employed at all facilities unless technically infeasible.
2. Approved manual unloading shall require on-site supervision of the uploading process.

Commented [KW23]: 98% reduction may not be achievable. Manufacturers certify combustion devices to achieve a minimum destruction efficiency under certain operating conditions. The flow of hydrocarbons to the combustor during well liquids unloading is uneven. The flow rate, pressure, gas content, or other operating parameters may unavoidably deviate from the range where the combustor achieves its certified destruction efficiency.

P.O. Flammable Materials:

1. The location of flammable materials on site shall conform to all COGCC safety standards and local fire codes.
2. A minimum 25-foot buffer, free of weeds and dried grasses, shall be required around flammable materials or equipment unless the landowner objects.

Commented [KW24]: The proposed 25-foot buffer requires a larger surface disturbance and may consume cropland.

Q.P. Waste Disposal:

1. **A Waste Management and Disposal Plan** shall be submitted with all O&GF applications. The plan shall document the techniques and methods of the proposed O&GF to manage wastes generated on the site and demonstrate compliance with and implementation of the standards in this Section 17.3.Q.
2. Oil and gas facilities shall remain free of debris and excess materials during all phases of operation.
3. Burning of debris, trash or other flammable material is not allowed. This provision does not apply to the authorized flaring or combustion of hydrocarbons.
4. Temporary storage of materials (up to 30-days) may be allowed with installation of screening to mitigate from aesthetic impacts from public rights-of-way or if requested by landowner.

R.Q. Removal of Equipment:

Larimer County – Land Use Code Regulations – New Chapter 17
King Operating Corporation’s and Wellington Operating Company’s Comments
January 24, 2020

Attachment A

1. There shall be no permanent storage of equipment (i.e., vehicles, trailers, commercial products, chemicals, drums, totes, containers, materials, and all other supplies not necessary for uses on an oil and gas location) on the site of an oil and gas facility.
2. When not in use, or if no longer needed for on-site operations, all equipment not being used on the site shall be removed.

S-R. Maintenance of Machinery:

1. Statewide Best Management Practices shall be used to prevent contamination of soils and stormwater runoff, including equipment and vehicle maintenance and fluid containment.
2. There shall be no maintenance of mobile or portable field equipment involving hazardous materials within 300-feet of a water body. This section does not apply to production equipment at an existing facility located within 300 feet of a water body or maintenance performed within a secondary containment berm.

Commented [KW25]: The term “water body” is not defined in this rule. We understand the County is considering alternative language and reserve the right to comment on future revisions.

3. Any fueling on-site shall occur over an impervious surface with a bermed secondary containment and sump in case of a spill and shall not occur during storm events.

T.S. Flow Lines, Transfer Lines, and Gathering Lines:

1. ~~This Section 17.3.T applies only to lines owned or operated by the permit applicant that serve the O&G covered by the application and are not separately permitted.~~
2. All off-site lines transporting process materials, production wastes, product and any other items used or generated by the facility shall be located to avoid existing or ~~proposed~~ permitted residential, commercial, and industrial buildings, places of assembly, surface waterbodies and designated open spaces.
- 1-3. Buried pipelines shall ~~be a minimum of 4 feet deep~~ comply with the depth requirements established by the federal Pipeline and Hazardous Materials Safety Administration, COGCC or Colorado Public Utilities Commission, as applicable, and shall be of detectable material which could include the addition of tracer wire to ensure detection during buried utility locating.
- 2-4. The location of pipelines shall be evaluated on a case-by-case basis by the ~~Planning Department~~, with the determining locational factor being the size and type of pipeline being proposed.
- 3-5. Coordinates of all flow lines, gathering lines, and transfer lines shall be provided to the Planning Department.

Commented [KW26]: Operators are unable to determine whether buildings have been proposed.

U.T. Temporary Water Lines:

1. Temporary waterlines shall be used to supply water during construction, drilling and completion, unless development is not within a water service area.
2. Temporary waterlines shall be buried at all existing driveway and road crossings, or utilize existing culverts, if available.

V.U. Financial Assurance:

1. The Applicant shall demonstrate the financial capability to reclaim all disturbed areas during each phase of the site development and following termination of the oil and gas operation on the site. This shall include meeting any state requirements, and any additional requirements the County deems reasonably necessary to protect the public health, safety, and welfare.
2. The Applicant shall, for the life of the use, carry customary and usual environmental liability insurance.

Commented [KW27]: Ensures consistency with SB 19-181.

17.1. XX – Additional Application Requirements.

- A. In addition to the items specified as required in Section 17.3., the applicant shall provide:
 1. A site inventory map.
 2. A Safety Management Plan.
 3. A Site Security Plan.
 4. A surface ~~use~~ Use Agreement.
 5. A statement verifying the legal right to extract the mineral resources.

17.4. – Appeals.

- A. Section 22 of this Code shall provide direction for all appeals to standards, processes and provisions of this Section 17. Only applicants or aggrieved parties who suffer a personal or particularized harm may appeal a decision or issue arising from this Chapter 17.

17.5. – Enforcement and Inspections.

- A. Applications for O&GFs shall demonstrate compliance with this and all other relevant Sections of this Code. Failure of an Operator to maintain compliance with the County approval of an O&GF may result in the revocation of the approval pursuant to the procedures in Section 12 of the Land Use Code. The County retains the right to seek whatever remedy or redress is legally allowable.
- B. The County reserves the right to inspect the property for compliance.

Larimer County – Land Use Code Regulations – New Chapter 17
King Operating Corporation's and Wellington Operating Company's Comments
January 24, 2020

Attachment A

17.6. – Fees and Security for Reclamation.

- A. The following fees are applicable to oil and gas facilities:
 - a. A Capital Transportation Impact fee.

17.7. – Termination of Use or Modifications.

- A. ~~Where the No~~-modification ~~to~~of an approved O&GF requires land use approval from the County, no modification shall be made without first obtaining such approval.~~appropriate land use approvals from the County.~~
- B. Upon termination of use, the O&GF shall be reclaimed pursuant to the reclamation plan provided.

17.8. – Definitions.

- A. Unless otherwise listed herein, the definitions found within the C.R.S. and Colorado Oil and Gas Conservation Commission (COGCC) regulations shall apply.

January 6, 2020 Draft
Comments by COGA

Attachment A: Section 17 Draft

17.0. – OIL AND GAS FACILITIES

17.1. – Intent and Purpose.

Note: This section has been updated to better reflect the language in SB 19-181.

- A. **Intent.** The intent of this section of the Land Use Code is to establish a regulatory framework for new oil and gas facilities (O&GFs), including recompletions to be located in the unincorporated areas of Larimer County in a manner that protects the public health, safety and general welfare, protects private property rights, protects environment and wildlife, and minimizes adverse impacts.
- B. **Authority:** C.R.S. 29-20-104-(1) provides the County authority to regulate and review applications pertaining to the surface development of O&GFs.
- C. **Purpose:** These regulations are necessary to:
1. Ensure a comprehensive land use process and transparent public process for the development of new O&GFs, including recompletions, in the unincorporated areas of the County.
 2. Provide for the managed development, installation, maintenance, modification, reclamation and removal of O&GFs without unreasonably discriminating against oil and gas developers and operators, or mineral interest owners.
 3. Minimize to the maximum extent possible the nuisance effects of O&GFs through the application of best available techniques and technologies.
 4. Promote and protect the public health, safety and welfare, and protect the environment and wildlife by minimizing the adverse impacts of O&GFs.
 5. Maximize protection of natural and cultural resources and public facilities.
 6. Strategically locate O&GFs to locate where adverse impacts from such operations can be avoided.
 7. Minimize and mitigate the extent and severity of adverse impacts that cannot be avoided.
 8. Confirm the financial, indemnification and insurance capacities of the oil and gas developer/operator to ensure timely and effective construction, production, removal and reclamation of O&GFs and infrastructure.
- D. **Applicability:** These regulations shall apply to all new O&GFs, including exploration and

recompletions, to be constructed on any property in all zoning districts in the unincorporated portions of Larimer County.

- E. **Severability:** If any section, clause, provision, or portion of these regulations should be found to be unconstitutional or otherwise invalid by a court of competent jurisdiction, the remainder of the regulations in this section shall not be affected thereby and is hereby declared to be necessary for the public health, safety and welfare.

17.2. **Review Procedures and Required Permits.**

Note: Some members of the Task Force and stakeholders provided input that they would like to see a tiered process for reviews, including an administrative process for simpler, smaller projects. The County could consider defining an administrative process (e.g., PSP) for recompletions that do not exceed a certain percentage in size greater than what exists, or perhaps require a building permit only for replacement of equipment.

- A. **General Requirements.** No person, firm or corporation shall establish, construct, build a new O&GF, including recompletions, without first having obtained required land use approval(s) and permits as required by this Code. Applications to the County for new O&GFs, including recompletions, may be submitted simultaneously with the Colorado Oil and Gas Conservation Commission (COGCC) permitting process, but approval by the County must be secured prior to construction.

- B. **County Review Process:** All new O&GFs, including recompletions, in the unincorporated portions of Larimer County shall require approval of a Special Review application for the proposed facility as set forth in Section 4.5 of this Code. Application and submittal requirements for O&GFs are specified in the following Community Development Department application handouts:

1. Sketch Plan Review Application and Submittal Requirements for Oil and Gas Facilities.
2. Neighborhood Meeting Submittal Requirements and Guidelines for Oil and Gas Facilities.
3. Special Review Application and Submittal Requirements for Oil and Gas Facilities.
4. An Analysis of Alternative Sites from which the minerals can be accessed that includes for each site:
 - a. Location;
 - b. Zoning;
 - c. Natural and manmade features;
 - d. Water source;
 - e. Distance of proposed oil and gas facility to residences, occupied buildings, parks, and open space, water bodies; floodways, and roadways;
 - f. Justification of a preferred alternative site and/or reason why a site is not proposed as a viable alternative.

- C. **County Permits.** Prior to the commencement of any construction activity for an O&GF, all required permits for such facilities shall be approved. Required permits include, but are not limited to:

1. Access permits,
2. Development construction permit,
3. Building permits for all qualifying buildings and structures,
4. Electrical permits, and

Commented [JG1]: COGA recommends an administrative approval tract for (1) recompletions, (2) modifications (3) and new applications that fulfill the drafted setback distances outlined in 17.3.B.3.

Commented [JG2]: As referenced in 17.3.B.4, COGA suggests including an alternative siting analysis in the County's review process if COGCC setback rules are not mirrored in these regulations.

- 5. All federal, state and local permits.
- D. **Non-County Permits:** County approval of an O&GF shall not relieve the landowner or applicant of the responsibility for securing other permits or approvals required by any other applicable County Departments, local fire district, municipalities, or other applicable public agencies.
- E. **Technical Expert Review:** Applications for O&GFs may involve complex technical issues that require review and input that is beyond the expertise of County staff. If such a situation arises, the Community Development Director ~~may shall consult the COGCC and/or CDPHE for technical guidance. If the COGCC and/or CDPHE are unable to provide the County with the required guidance, the Director may~~ commission a third-party review of the relevant subject matter and require the applicant to pay reasonable costs for the third-party review. Selection of a third-party expert(s) to review portions the proposal will be at the discretion of the County, ~~but the Applicant shall agree to the third-party expert and associated estimated costs.-~~

17.3. – Standards Required for all Oil and Gas Facilities.

A. General:

- 1. In addition to the standards and requirements of this Section 17, all other relevant standards and regulations set forth in this Code shall also apply.
- 2. All applications for new O&GFs, including recompletions, shall meet all applicable federal, state and local standards and regulations pertaining to the development and operation of such facilities. When the standards and regulations contained herein conflict with the standards and requirements of another agency, the stricter standard shall apply.

Note: The setbacks and buffers section below has been added since Draft 1 for Planning Commission and Board of County Commissioner discussion. The Task Force did not review this section.

B. Setbacks:

- 1. The minimum required setbacks for buildings and structures set forth in the applicable zoning district shall apply to the proposed O&GF.
- 2. In addition to the setbacks in paragraph 3 below, the setbacks set forth in Section 4.9 of this Code shall apply to proposed O&GFs to minimize their impacts on public health, safety, welfare, the environment, and agricultural operations.
- 3. To achieve the intent and purpose of this Section 17, ~~the following minimum setbacks for O&GF setbacks shall conform to the s shall be required, unless more restrictive setbacks are required by the~~ rules of the COGCC:
 - a. ~~1,000 foot setback from a residential building or platted residential lot~~
 - b. ~~2,000 foot setback from a high occupancy building including schools, registered day cares, nursing homes;~~
 - c. ~~500 foot setback from a water body or designated outside activity area~~
- 4. ~~To achieve the objectives of Section 17.1.C., the Board of County Commissioners may, on a case by case basis, require an increase to these minimum setbacks.~~
- 5. ~~The Board of County Commissioners may allow a reduction of the minimum setbacks when it has been determined that the applicant has adequately demonstrated that the setbacks prohibit access to the mineral interests being sought, and the reduced setbacks~~

Commented [JG3]: COGA recommends the County adhere to COGCC setback requirements in these regulations and that staff move the setbacks outlined in 17.3.B.3.a and 17.3.B.3.c and the siting restrictions in 17.3.F.4 out of the regulations and make those siting preferences. If the preferences are implemented by the operator, then the application can be administratively approved. If not, then a hearing is required.

will achieve to the extent practicable the objectives of this code.

4. The Board of County Commissioners may decide a different setback is more appropriate based on the Alternative Site Analysis.

C. Air Quality:

1. An Air Quality Report/Plan shall be submitted with all O&GF applications. The report/plan shall demonstrate how the development and operation of the facility will avoid and/or mitigate adverse impacts to air quality and demonstrate compliance with and implementation of standards in Sections 17.3.C. and 8.11 of this Code.
2. In addition to all federal and state laws, rules and regulations, applications for O&GFs shall demonstrate how exploration, construction and standard operations of a O&GF, including traffic and construction equipment, will comply with the rules and regulations of the Colorado Air Quality Control Commission (AQCC). Information to be provided shall include all appropriate applications of notifications and permits for sources of emissions.
3. Reduced Emission Completions shall be used for all completions and well workovers following hydraulic fracturing. Such completions shall include the use of Best Management Practices including, when available, the following unless an equal or better system exists:
 - a. Except for very small productions, closed loop, pitless drilling, completion systems, without permanent on-site storage tanks, for the containment and/or recycling of all drilling, completion and flowback fluids.
 - b. Flaring only allowed during emergencies or upset conditions. When allowed, routing and control of all emissions to a flare or combustor shall provide at least 98% destruction or removal efficiency.
 - c. Zero emission desiccant dehydrators.
 - d. Emission controls of 90% or better for glycol dehydrators.
 - e. Pressure-suitable separator and vapor recovery units.
 - f. No-bleed continuous and intermittent pneumatic devices.
 - g. Automated tank gauging.
4. O&GFs shall be equipped with electric-powered engines for motors, compressors, drilling and production equipment, and pumping systems unless no adequate electricity source is available or it is technically infeasible.
5. During exploration and construction, the applicant shall demonstrate that all facilities on the site, including traffic and construction equipment, complies with all AQCC rules and regulations.
6. O&GF applications shall include operational provisions to reduce emissions on Air Quality Action Advisory Days posted by the Colorado Department of Public Health and Environment (CDPHE) for the Front Range area. The provisions shall include how alerts are received, outline specific emission reduction measures, and include requirements for documenting the measures implemented. Measures should may include:
 - a. Minimizing vehicle traffic and engine idling,
 - b. Reducing truck and worker traffic,
 - c. Delaying vehicle refueling,
 - d. Suspending or delaying use of fossil fuel powered equipment,
 - e. Postponing construction and maintenance activities,

Commented [JG4]: If the County is unamenable to mirroring COGCC setback requirements, then COGA requests the County include an alternative siting analysis from which different setbacks may be determined more appropriate.

Commented [JG5]: The standards in Section 17.3 require 12 plans to be submitted. We recommend that the County allow staff and operators to jointly develop templates for these plans to ensure they provide the required information in a consistent, relevant, and efficient manner.

Commented [JG6]: Is this during the completions or production phase? Industry is accepting of not storing water on location for frac'ing, but would like the flexibility to have production tanks on location.

Commented [JG7]: Is this demonstrated through self-reporting?

- f. Postponing well maintenance and liquid unloading that would result in emission releases to the atmosphere, and
- g. Postponing or reducing operations with high potential to emit VOC’s ofNOx’s.

D. Leak Detection and Repair:

1. A Leak Detections and Repair Plan shall be submitted with all O&GF applications. The plan shall disclose techniques, methods and protocols that will be utilized at the proposed O&GF to identify, prevent, contain, document, repair and report leaks, and it shall demonstrate how it will comply with and implement the standards in this Section 17.1.3.F.
2. Operators shall conduct leak detection and repair inspections at the frequency required by the APCD for the emission source using modern leak detection technologies and equipment. The results of said inspections, including all corrective actions taken, shall be reported to the Larimer County Department of Health and Environment (LCDHE) and County Local Government Designee (LGD) upon request.
3. All verified, COGCC reportable leaks at an O&GF shall be reported to the LCDHE and LGD within 24-hours of the detection of the leak.
4. Repair of verified leaks shall occur within 72 hours of detection. If it is anticipated that a repair will take longer than 72 hours, the operator shall provide a written explanation to the LCDHE and the LGD as to why more time is required and how the leak will be contained. If a leak is not repaired within 72-hours, the O&GF shall be shut-in until the leak is repaired.
5. Equipment leaks that pose an imminent safety risk to persons, wildlife, or the environment shall undergo emergency shut down and not be allowed to operate until the operator has provided evidence that the leak has been repaired.
6. At least annually, operators shall provide a 2-week notice of a routine leak inspection to the LCDHE and LGD inviting them to attend and observe the inspection.

Commented [JG8]: Should be "D"

E. Odors:

1. An Odor Mitigation Plan shall be required for all O&GF applications indicating how the operations will prevent odors from adversely impacting the public and wildlife and further demonstrating compliance with the standards in this Section 17.1.3.H.
2. Oil and gas operations shall comply with the CDPHE, AQCC, Regulation No. 2 Odor Emission, 5 Code of Colorado Regulations 1001-4.
3. Proposed O&GFs shall provide protocols for immediate response to verified odor complaints that include options for ceasing-modifying operations, notification of affected residents, and temporary relocation of residents until the source of the odor is identified and resolved.
4. The operator shall communicate the schedule/timing of well completion activities to adjacent and nearby residents within ¼ mile, which could include an online portal. As part of the application, provide information on how notifications will be communicated to the public.
5. The Odor Mitigation Plan shall include control strategiestrategies which shall be implemented upon receipt of an odor complaint(s) or as required by the County. These Odor control strategies may include the following:
 - a. Odorants, that are not a masking agent, shall be added to chillers and mud systems.

Commented [JG9]: Can this be based on a sample for each operator and not every single location in the County?

Commented [JG10]: Should be "E"

Commented [JG11]: This bullet seems to belong in a different section

Commented [JG12]: Should be "strategies"

- b. Operators shall not use odor masking agents or additives.
- c. Filtration systems and/or additives to minimize, not mask, odors from drilling and fracturing fluids shall be utilized in the drilling and flowback processes.
- d. Additives intended to eliminate odors generated by the operations of an O&GF shall not create a separate odor.
- ~~e. Enclosed shale shakers shall be utilized to contain fumes from exposed mud.~~
- ~~f.e.~~ Drilling activities within 2000' of residences shall utilize minimum low odor Category III drilling fluid or non-diesel-based drilling muds that do not contain benzene, toluene, ethylbenzene or xylene (BTEX).
- ~~g.f.~~ Wipe down drill pipe as they exit the well bore each time.

Commented [JG13]: This is not technically feasible. Covering shale shakers would trap gas coming off of the oil as it comes up to surface from the rock being developed, essentially creating an enclosed space containing flammable, pressurized gas, creating a flammable/explosion hazard.

Commented [JG14]: It is unnecessary to require low odor drilling muds in situations where there are no nearby residents. COGA recommends a minimum buffer of 2000' to implementing this requirement.

F. Water Quality and Water Bodies:

- ~~1.~~ A Water Quality Report/Plan shall be submitted with all O&GF applications. The report/plan shall demonstrate how the development and operations of the facility will avoid impacts to surface and ground waters in Larimer County, and demonstrate compliance with and implementation of standards in Sections 17.3.D. and 8.12 of this Code.
- ~~2-1.~~ Baseline and subsequent water source tests, as typically required by and submitted to the COGCC and CDPHE, shall be provided to the LCDHE and the LGD for the life of the facility and any post-closure assessments, if approved by the owner(s) of the water well. It is recommended that the operator also post these reports online for public/access transparency.
- ~~3-2.~~ The application shall provide documentation indicating how the COGCC water quality protection standards are being implemented.
- ~~4-3.~~ Locating O&GFs within a Federal Emergency Management Agency (FEMA) designated 100-year ~~floodplain~~ floodway shall not be allowed unless no other location is feasible, and all other appropriate permissions are obtained.
- ~~5-4.~~ New wastewater injection wells shall not be allowed.
- ~~6-5.~~ The requirements of this Section 17.4.D shall not prevent discharges reviewed and permitted by the CDPHE Water Quality Control Division, the EPA, and the Army Corps of Engineers.

Commented [JG15]: This data is already available through the COGCC's website. But if the County decides to keep this requirement, it is recommended the County create a page for operators to upload these reports so this data is in one place for all operators.

G. Spills and Releases:

- 1. A Spill Prevention Control and Countermeasure Plan shall be submitted with all O&GF applications. The plan shall disclose techniques, methods, and protocols to be utilized at the proposed O&GF to prevent, contain, document and report any spills or releases, and shall demonstrate compliance with and implementation of the standards in this Section 17.3.E.
- 2. An Emergency Response Plan shall be provided that includes evacuation plans and routes, inventory of emergency response supplies, notification requirements and annual open house training for emergency services personnel to become familiar with the site.
- 3. Secondary containment shall be required which is capable of holding ~~125% of the total capacity of on-site containment vessels and storage tanks~~ 150% of the capacity of the largest on-site containment vessel.
- 4. Unloading areas shall be designed to contain potential spills or direct spills into other secondary containment areas

Commented [JG16]: Should be "G"

Commented [JG17]: This is excessive. This would force operators to make much larger pads so that they would have storage capacity to hold everything. For this scenario to occur, all separators and tanks would have to be leaking all at once. That never happens. 150% of the largest tank makes much more sense. For comparison, the EPA's requirement is 110% of largest vessel.

5. Containment systems constructed of steel rimmed berms, or similar impervious surfaces that are equal to or better, shall be used for all secondary containment areas.
6. Any spill or release of greater than ~~25 gallons~~ 5 barrels inside containment or 1 barrel outside containment on an O&GF that poses a threat to waterways, drinking water, or sensitive wildlife habitat, including those thresholds reportable to the COGCC, shall upon discovery, be immediately reported to the following Local Emergency Response Authorities in Larimer County:
 - a. Larimer County Sheriff – Public Safety Answering Point (PSAP) (9-1-1)
 - b. Larimer County Department of Health and Environment,
 - c. Local Fire Department/District,
 - d. Local Municipal Police Department if within in mile of a City or Town,
 - e. Larimer County Oil and Gas LGD, and
 - f. Larimer County Local Emergency Planning Committee (within 24-hours).
7. All spills or releases, whether reportable or not, shall be cleaned up immediately and to the satisfaction of the local emergency response authorities, listed in the Spill Prevention Control and Countermeasure Plan.

Commented [JG18]: It is unnecessary for all of these agencies to be notified for every spill. What does the fire department or sheriff want to know about a fresh water spill that's less than a barrel? This is excessive notification and could potentially dilute the response time if a real event actually did occur. COGA recommends aligning with the COGCC requirement of 5 barrels inside containment or 1 barrel outside containment.

H. Noise:

1. **A Noise Report and Mitigation Plan** shall be required for all O&GF applications. The plan shall demonstrate how the operations will mitigate noise impacts to comply with the noise standards contained in this Section 17.3. ~~G.H.~~ The report and plan shall include the following:
 - a. A three-day (one day being a weekend day) baseline noise analysis.
 - b. Modeled decibel levels for various phases of development shall be presented using contour maps to radii of 350 feet from the site of operation/noise source (per COGCC) or at the property line of an adjacent land use, whichever is closer.
 - c. A plan of proposed mitigation measures to be implemented by the oil and gas operations during all stages of compliance with the maximum permissible noise levels as listed in Section G.2 below.
2. Noise generated from O&GFs shall comply with the following maximum permissible noise levels appropriate for the zoning and adjacent land uses at determined by the County:

Commented [JG19]: Should be "H"

<u>ZONE AREA DESIGNATIONS</u>	<u>7:00 am to next 7:00 pm</u>	<u>7:00 pm to next 7:00 am</u>
Residential/Agricultural/Rural	55 db(A)	50 db(A)
Commercial	60 db(A)	55 db(A)
Light Industrial	70 db(A)	65 db(A)
Industrial	80 db(A)	75 db(A)

In the hours between 7:00 a.m. and the next 7:00 p.m., the noise levels permitted above may be increased by ten (10) db(A) for a single period of not to exceed fifteen minutes in any one-hour period. Night-time levels between 7:00 p.m. and the next 7:00 a.m. shall not be exceeded therefore requiring strategic planning of noise-inducing activities to be conducted during daytime hours at the site.

3. Decibel levels produced by the O&GF shall meet the identified level for the appropriate zoning area designation of the adjacent land use. Zones as defined by Article 12 –Noise abatement of the Colorado Revised Statutes (C.R.S.) 25-12-102 will be considered as

part of the County’s determination for surrounding land uses.

- 4. In remote locations, where there is no reasonably proximate occupied structure or Designated Outside Activity Area (COGCC), the light industrial standard may be applicable as determined by the County.
- 5. Decibel levels shall be measured at least 350-feet from the boundary of the operation/noise source (from source or sound wall per COGCC) or at the property line of the adjacent land use, whichever is greater.
- 6. Construction of O&GFs, including drilling/well completions, recompletions, and pipeline installations, shall be subject to the maximum permissible noise levels specified for light industrial zones for the period within which construction is being conducted.
- 7. Quiet design mufflers (i.e., hospital grade or dual dissipative) or equal to or better than noise mitigation technologies shall be utilized for non-electrically operated equipment specific to oil and gas operations.
- 8. Motors, Generators, and engines shall be enclosed in acoustically insulated housings or covers.

Commented [JG20]: This is overly broad. What is non-electrically operated equipment? A light truck on location has to use these mufflers? We suggest adding "... specific to oil and gas operations."

I. **Dust:**

- 1. A Fugitive Dust Control Plan shall be submitted with all O&GF applications. The plan shall disclose techniques and methods to be utilized at the proposed O&GF to prevent or mitigate fugitive dust generated by the construction and operations of the proposed O&GF and shall demonstrate compliance with and implementation of standards in Sections 17.3.I and 8.11 of this Code.
- 2. Best management practices (BMPs) for the mitigation of dust associated with on-site operations and traffic activities shall be employed at the facility. The BMPs shall be outlined in the Fugitive Dust Control Plan.
- 3. Produced water and other process fluids shall not be used for dust suppression unless adequately pretreated so that it does not create odors and has been approved for land application by CDPHE Water Quality Control Division.
- 4. Safety Data Sheets (SDSs) shall be provided with the application for any proposed chemical based dust suppressants.
- 5. Unless otherwise approved by the County Health and Engineering Departments, only water will be used for dust suppression activities within 300-feet of the ordinary high-water mark of any body of water.

Commented [JG21]: Same comment here. Is this production equipment? If so, please specify. This is not a standard anywhere else and would require a lot of expense and time and what if equipment is noise compliant and not needed? COGA recommends a change that outlines certain BMPs if operators are out of compliance.

J. **Access:**

- 1. A Traffic Impact Analysis and Routing Plan shall be submitted with all O&GF applications. The plan shall disclose routing alternatives and transportation infrastructure improvements proposed for the proposed O&GF to mitigate projected transportation impacts and demonstrate compliance with and implementation of the standards in this Section 17.3.E.
- 2. Designs for private access drives shall conform to the Local Low Volume cross section found in the Larimer County Rural Area Road Standards and shall include the following:
 - a. The first 50 feet of access drive from the edge of pavement of the adjacent road will be paved, or made of an approved all weather surface, and the remaining portions of the access drive shall be composed of a minimum of 6 inches of compacted Class 5 road base.

Commented [JG22]: Should be "J"

- b. The access drive entrance shall include returns with a 30-foot radius.
- c. A mud and debris tracking pad shall be located at the end of the paved portion of the access drive.

K. Chemical Handling:

- 1. A Chemical and Hazardous Materials Report and Handling Plan shall be submitted with all O&GF applications. The plan shall disclose the type of hazardous and non-hazardous materials and chemicals that will be used on the site of the proposed O&GF, including how they will be handled to prevent spills and demonstrate compliance with and implementation of standards in this Section 17.3.K.
- 2. ~~Prior to any hydraulic fracturing activity, the Operator shall provide the County with a copy of the Chemical Disclosure Registry form provided to the COGCC pursuant to the COGCC's "Hydraulic Fracturing Chemical Disclosure".~~
- 2. Prior to any hydraulic fracturing activity, the Operator shall provide the County with a list of chemicals planned for use.
- 3. The Operator shall provide the County with a copy of the Chemical Disclosure Registry form provided to the COGCC pursuant to the COGCC's "Hydraulic Fracturing Chemical Disclosure". Such information shall be provided as soon as possible within 30 days following the conclusion of the hydraulic fracturing treatment and in no case later than 90 days after the commencement of such hydraulic fracturing treatment.
- 3.4. ~~Drilling and completion chemicals shall be removed from the site within sixty (60) days of the drilling completion.~~

Commented [JG23]: The Chemical Disclosure Registry represents what actually went downhole. Industry cannot share that information pre-frac. Only what chemicals are planned for use.

L. Recycle, Reuse and Disposal of Fluids:

- 1. A Waste Management and Disposal Plan shall be submitted with all O&GF applications. The plan shall document the techniques and methods of the proposed O&GF to manage wastes generated on the site and demonstrate compliance with and implementation of the standards in this Section 17.3.L.
- 2. Drilling, completion flowback, and produced fluids shall be recycled or reused whenever technically feasible.
- 3. If not to be recycled or reused onsite, exploration and production waste may be temporarily stored in tanks for up to 30-days while awaiting transport to licensed disposal or recycling sites.
- 4. ~~Produced water shall be recycled or reused or shall be transported by pipeline or truck outside the County, unless easements are not available.~~
- 5. The Operator shall take precautions to prevent adverse environmental impacts to air, water, soil, or biological resources to the extent necessary to protect public health, safety and welfare, including the environment and Wildlife Resources to prevent the unauthorized discharge or disposal of oil, gas, Exploration and Production Waste, chemical substances, trash, discarded equipment, or other oil field waste.
- 6. The requirements of this Section 17.3.L shall not prevent discharges and beneficial uses reviewed and permitted by the CDPHE Water Quality Control Division and the Environmental Protection Agency (EPA).

Commented [JG24]: COGA strongly recommends allowing truck transport for wastewater disposal as pipeline infrastructure may not exist to transport wastewater to wastewater injection facilities outside the County.

M. Lighting and Visual Impacts:

- 1. For all phases of the development of the site, the application shall demonstrate compliance with the visual and aesthetic rules of COGCC and the Larimer County Land Use Code for landscaping, fencing and lighting set forth in Section 8.

- 2. All O&GFs shall be painted with colors that are matched to or slightly darker than the surrounding landscape, and shall utilize paint with uniform, non-contrasting, nonreflective color tones based upon the Munsell Soil Color Coding System.
- 3. The location of all outdoor lighting shall be designed to minimize off-site light spillage and glare using best practices recognized by the International Dark-Sky Association. See Section 8.15, Lighting Standards.
- 4. For all phases of site development, chain-link fencing shall be installed for security and visual aesthetics of the use.
- 5. Sound or screening wall to mitigate for noise during well completion may be required if the O&GF is within 2,000 feet of residential buildings or lots, if electric requirement is appealed.
- 6. O&GFs applications shall minimize removal of trees and vegetation on the site.
- 7. Landscaping and/or fencing for screening and visual quality as viewed from public rights-of-way and nearby residential areas shall be required within 6 months from the time of well completion and in accordance with requirements for the zoning district.
- 8. O&GF applications shall demonstrate compliance with weed control requirements of the County Weed District and Forestry Services Department, including for access roads serving the facility.

Note: Environmental and health advocacy groups would like the next section, Well Plugging and Abandonment, to be more extensive and address noticing requirements and inspections after removal. The industry groups noted that this is down hole regulation and therefore not included in the SB 19-181 granted authority.

N. Well Plugging and Abandonment:

- 1. **A Reclamation Plan** shall be submitted. The plan shall demonstrate how well abandonment and reclamation shall comply with the COGCC rules and shall include the following information:
 - a. Removal of all equipment from the well site,
 - b. Restoration of the site surface to the conditions of the site reclamation plan,
 - c. Notice to the County LGD of the commencement and completion of such activity, and
 - d. Coordinates for the location of the decommissioned well(s), and any associated gathering or flow lines, shall be provided with the notice of the completion of well abandonment.
 - e. Question: Should we include water testing/monitoring for a certain amount of time post plugging/abandoned wells to monitor that they are in sound condition and not leaking into water. This could be a condition of approval for certain sites (e.g., nearing high occupancy buildings, water reservoirs, drinking water wells.)

O. Well Liquids Unloading:

- 1. Best management practices, including artificial lift, automated plunger lifts and at least 98% emission reductions when utilizing combustion to control venting shall be employed at all facilities unless technically infeasible.
- 2. Approved manual unloading shall require on-site supervision of the unloading process.

P. Flammable Materials:

Commented [JG25]: COGA has no objection to post P/A water testing for the situations outlined, though we would like to see a stipulation included the testing is pending landowner permission.

1. The location of flammable materials on site shall conform to all COGCC safety standards and local fire codes.
2. A minimum 25-foot buffer, free of weeds and dried grasses, shall be required around flammable materials or equipment.

Q. Waste Disposal:

1. **A Waste Management and Disposal Plan** shall be submitted with all O&GF applications. The plan shall document the techniques and methods of the proposed O&GF to manage wastes generated on the site and demonstrate compliance with and implementation of the standards in this Section 17.3.Q.
2. Oil and gas facilities shall remain free of debris and excess materials during all phases of operation.
3. Burning of debris, trash or other flammable material is not allowed.
4. Temporary storage of materials (up to 30-days) may be allowed with installation of screening to mitigate from aesthetic impacts from public rights-of-way or if requested by landowner.

R. Removal of Equipment:

1. There shall be no permanent storage of equipment (i.e., vehicles, trailers, commercial products, chemicals, drums, totes, containers, materials, and all other supplies not necessary for uses on an oil and gas location) on the site of an oil and gas facility.
2. When not in use, or if no longer needed for on-site operations, all equipment not being used on the site shall be removed.

S. Maintenance of Machinery:

1. Statewide Best Management Practices shall be used to prevent contamination of soils and stormwater runoff, including equipment and vehicle maintenance and fluid containment.
2. There shall be no maintenance of field equipment involving hazardous materials within 300-feet of a water body.
3. Any fueling on-site shall occur over an impervious surface with a bermed secondary containment and sump in case of a spill and shall not occur during storm events.

T. Flow Lines, Transfer Lines, and Gathering Lines:

1. All off-site lines transporting process materials, production wastes, product and any other items used or generated by the facility shall be located to avoid existing or proposed residential, commercial, and industrial buildings, places of assembly, surface waterbodies and designated open spaces. Buried pipelines shall be a minimum of 4-feet deep and shall be of detectable material which could include the addition of tracer wire to ensure detection during buried utility locating.
2. The location of pipelines shall be evaluated on a case-by-case basis, with the determining locational factor being the size and type of pipeline being proposed.
3. Coordinates of all flow lines, gathering lines, and transfer lines shall be provided.

U. Temporary Water Lines:

1. Temporary waterlines shall be used, unless development is not within a water service area.
2. Temporary waterlines shall be buried at all existing driveway and road crossings, or utilize existing culverts, if available.

V. Financial Assurance:

1. The Applicant shall demonstrate the financial capability to reclaim all disturbed areas during each phase of the site development and following termination of the oil and gas operation on the site. This shall include meeting any state requirements, ~~and any additional requirements the County deems necessary to protect the public health, safety, and welfare. The County, too, shall create a stakeholder group, including members from the COGCC, to discuss and debate additional requirements prior to implementation.~~
2. The Applicant shall, for the life of the use, carry customary and usual environmental liability insurance.

Commented [JG26]: This is much too broad and open-ended. COGA recommends convening a group of stakeholders to assess those additional requirements before they be assessed.

17.1. XX – Additional Application Requirements.

- A. In addition to the items specified as required in Section 17.3., the applicant shall provide:
 1. A site inventory map.
 2. A Safety Management Plan.
 3. A Site Security Plan.
 4. A surface use agreement.
 5. A statement verifying the legal right to extract the mineral resources.

17.4. – Appeals.

- A. Section 22 of this Code shall provide direction for all appeals to standards, processes and provisions of this Section 17.

17.5. – Enforcement and Inspections.

- A. Applications for O&GFs shall demonstrate compliance with this and all other relevant Sections of this Code. Failure of an Operator to maintain compliance with the County approval of an O&GF may result in the revocation of the approval pursuant to the procedures in Section 12 of the Land Use Code. The County retains the right to seek whatever remedy or redress is legally allowable.
- B. The County reserves the right to inspect the property for compliance.

17.6. – Fees and Security for Reclamation.

- A. The following fees are applicable to oil and gas facilities:
 - a. ~~A Capital Transportation Impact fee.~~

Commented [JG27]: At what phase of development would this be assessed? COGA strongly encourages the County to impose this fee after interim reclamation. We also assume the industrial rate would apply? Post-interim reclamation the average multi-well pad measures approximately 1.5 acres (or approx.. 65000 sq. ft.) With a TCEF of \$1,336 per 1000sq.ft. industrial floor space, It is estimated Operators would pay around \$90,000 per well pad. If this is the intent, COGA would like to see this more clearly defined in 17.6.A.

17.7. – Termination of Use or Modifications.

- A. ~~No modification to an approved O&GF shall be made without obtaining appropriate land use approvals from the County. Operators shall not disturb adjacent or nearby land not already approved for the O&GF or make major changes to the location without obtaining appropriate land use approvals from the County. Operators may replace equipment of the same quantities without approval. Major changes shall include adding a well, adding tanks, adding separators, or otherwise adding large equipment needed for operations. Modifications requiring approval may be administratively approved.~~
- B. Upon termination of use, the O&GF shall be reclaimed pursuant to the reclamation plan provided.

Commented [JG28]: "No modification" is overly broad and unnecessary. Upgrading existing equipment to be more efficient, better control emissions, or otherwise implement new technology should not require County approval.

17.8. – Definitions.

Draft – January 3, 2019

- A. Unless otherwise listed herein, the definitions found within the C.R.S. and Colorado Oil and Gas Conservation Commission (COGCC) regulations shall apply.

January 6, 2020 Draft
Letter by COGA



1800 GLENARM PL.

SUITE 1100

DENVER, CO 80202

Phone 303.861.0362

Fax 303.861.0373

WWW.COGA.ORG

January 24, 2020

VIA EMAIL – NO ORIGINAL TO FOLLOW

Matt Lafferty, Principle Planner
Lesli Ellis, Community Development Director

Larimer County
200 W. Oak St.
Fort Collins, CO 80521

RE: Colorado Oil & Gas Association – Comments on Larimer County’s draft Oil and Gas Regulations, version 2.

Dear Larimer County staff,

The Colorado Oil & Gas Association (“COGA”) respectfully submits comments to Larimer County for consideration regarding the County’s draft Oil and Gas Regulations, version 2 (“Proposed Regulations”).

Founded in 1984, COGA’s mission is to be the unified political and regulatory voice for the oil and natural gas industry in Colorado, and to support our members through advocacy, partnerships, education and stakeholder engagement. Our vision is to create a thriving, innovative and respected oil and natural gas industry in Colorado that embodies the values of our communities, prioritizes the protection of our environment, and provides the natural resources that advance our society.

COGA has identified several areas of concern within the Proposed Regulations, as detailed in the attached redline, but our key issues are highlighted below.

Section 17.2 – Review Procedures and Required Permits

- COGA recommends an administrative approval tract for (1) recompletions, (2) modifications, and (3) new applications that fulfill the drafted setback distances outlined in 17.3.B.3.

Section 17.2.B. – County Review Process

- COGA recommends the County adhere to COGCC setback requirements in these regulations and that staff move the setbacks outlined in 17.3.B.3.a and

17.3.B.3.c and the siting restrictions in 17.3.F.4 out of the regulations and make those siting preferences. If the preferences are implemented by the operator, then the application can be administratively approved. If not, then a hearing is required.

- If the County is unamenable to mirroring COGCC setback requirements, then COGA requests the County require an Alternative Site Analysis from which different setbacks may be determined more appropriate.

Section 17.3.E.5.e – Enclosed shale shaker requirement

- This is not technically feasible. Covering shale shakers would trap gas, creating an enclosed space containing flammable, pressurized hydrocarbons and therefore create a flammable/explosion hazard.

Section 17.3.E.5.f – Low-odor drilling fluids

- It is unnecessary to require low odor drilling muds in situations where there are no nearby residents. COGA recommends a buffer threshold of 2000' before implementing this requirement.

Section 17.3.G.3 – Secondary containment holding capacity

- This would force operators to make much larger pads so that they would have storage capacity to hold everything. For this scenario to occur, all separators and tanks would have to be leaking all at once. That never happens. COGA's preference is to modify this requirement to mandate that secondary containment be required to hold 150% of the largest tank. For comparison, the EPA's requirement is 110% of the largest vessel.

Section 17.7 – Termination of Use or Modifications

- "No modification" is overly broad and unnecessary. Upgrading existing equipment to be more efficient, better control emissions, or otherwise implement new technology should not require County approval. COGA recommends narrowing the scope of 17.7.A.

COGA and its members respectfully request that the County give due consideration to their reasonable and practical concerns raised herein and incorporate the provided recommendations in the next version of the draft regulations.

COGA continues to offer itself as a resource to the County. Please contact me with any questions you may have or to schedule a meeting.

Sincerely,

Jason Grubb
Community Outreach Coordinator

cc: Rich Coolidge – Director of Regulatory Affairs, COGA

January 6, 2020 Draft
Letter by Colorado
Rising

COLORADO RISING

*P.O. Box 370
Eastlake, CO 80614-0370
Phone: (303) 895-7044
Email: joe@corising.org*

January 24, 2020

Larimer County Board of County Commissioners
Attn: Commissioners Johnson, Kefalas, and Donnelly
PO Box 1190
Fort Collins, CO 80522-1190

Re: Public Comment on Second Draft of Oil and Gas Regulations

Dear Commissioners:

Colorado Rising for Communities is a 501(c)(3) nonprofit organization dedicated to protecting our communities and our environment from fossil fuel extraction. Please allow this letter to serve as our public comment on your Second Draft of the proposed oil and gas regulations.

A review of your proposed regulations demonstrates that the Commission misapprehends the mandates of SB 19-181, and appears to favor the oil and gas industry's interests over that of its residents. This argument is not without support.

First, it is noted that input for these regulations comes from the Larimer County Oil & Gas Task Force. This task force is heavily influenced by members with interests in the fossil fuel industry. You, as commissioners, have received complaints from community members about the heavily industry-influenced task force. It is astounding that despite these complaints, the Commission has allowed this task force to continue in its present form.

Second, the task force's charter, adopted on March 20, 2019, is out of compliance with state law. In the Purpose and Authority section of the charter, it states: "The County recognizes that oil and gas has been determined to be a matter of statewide concern and that the Colorado Oil and Gas Conservation Commission ('COGCC'), along with other state agencies, is responsible for the regulation of oil and gas development and operations at the state level."

Indeed, with the passage of SB 19-181, the task force charter is not in compliance with state law, the charter has not been changed, and it appears as though the task force abdicated its

responsibility to meaningfully consider the effects of SB 19-181 after it became law on April 16, 2019. Any recommendations coming from this industry-laden task force should be viewed as suspect, at best.

In fact, the heavy industry influence is seen in your second draft of regulations. For example, while the second draft mentions public health, safety, “general” welfare,¹ private property rights, protects environment and welfare, and minimizes adverse impacts, there is no mention of cumulative impacts. It is unfortunate that such respected elected bodies, such as this Commission, fail/refuse to understand that oil and gas operations have a cumulative, disastrous impact on our environment and communities. These proposed rules must abide by the new protective changes in state law, but also reflect the scientific understanding that fossil fuel extraction is harming our planet to the point that we are at an existential crisis.

With that said, and coming from a position of truly protecting our environment and the public, we offer the following comments related to the second draft of proposed rules.

Proposed Rule 17.2(E)

With respect to Proposed Rule 17.2(E), this proposed regulation allows for a biased third-party to be retained by the Commission for technical expert review. We invite the Commission to change the language to an “neutral third-party” who has the technical knowledge about oil and gas operations, but will honor the mandates of SB 19-181, which protects public health, safety, welfare, environment, and wildlife resources above the interests of the industry.

Proposed Rule 17.3(B)

Proposed Rule 17.3 wholly fails to protect community and the environment. One of our functions as an environmental protection nonprofit is to litigate cases to protect communities from the hazards of fossil fuel extraction. One such case involves a community organization we represented in Broomfield, Colorado. At the beginning of 2019, and in the course of litigating this case against an oil and gas operator in front of the COGCC, we sought and received discovery from the operator related to public health and safety. To our surprise, the operator had numerous documents that discussed health impacts and an academic study on Colorado’s setback rules. A copy of those documents can be accessed via the following Dropbox link:
<https://www.dropbox.com/sh/zbuuw8ktunv5wf0/AADP7Omnex-nZOk4zoX572wca?dl=0>.

Setback Study:

The setback study focused on three states: Colorado, Texas, and Pennsylvania. The purpose of the study was to catalogue the numerous oil and gas accidents occurring in each state, the radius of the accident, and whether the state’s setback rules were sufficiently protective of human populations. The study examined: 1) Blowouts and Evacuations; 2) Thermal Modeling; 3) Vapor Dispersion; and 4) Air Pollution. It should be noted that the study was published in 2016. Since that time there literally have been dozens of oil and gas accidents in Colorado, some leading to fatalities and evacuations of communities. The conclusion of the study was that

¹ It is unknown what is meant by “general” welfare in the second draft of the proposed regulations. SB 19-181 does not remotely add the word “general” before “welfare.” It seems, then, that the inclusion of the word “general” is meant to water down the protective language of SB 19-181.

Colorado's setback regulations are not nearly protective of communities. A copy of the study is provided for your convenience.

The proposed setbacks in the second draft are woeful. The setbacks appear to be from actual structures and not from property boundary lines. Many properties not only have buildings situated on their properties, but also playgrounds, sports fields, or other similar areas where children play and community congregate. Your rules literally allow oil and gas operations to exist feet away from these areas simply because you are measuring from the building and not the property line. Such setbacks are entirely anathema to public health, safety, welfare, environment, and wildlife resources.

Risk Assessment:

Also received from the oil and gas operator was a risk assessment of oil and gas drilling within the City and County of Broomfield published in August 2017. As you may be aware, Broomfield has had significant problems with one oil and gas operator. The risk assessment commissioned by Broomfield looked at accidents throughout the nation and in Colorado involving oil and gas activities. Some of the accidents resulted in a loss of hundreds of millions of dollars and a loss in life. The conclusion of the risk assessment was as follows:

Onshore oil and gas drilling operations present significant risk exposure, whether it is potential harm to the environment, citizens, contractors, or property. This requires higher limits of insurance and robust mitigations. Broomfield is a special case, as it faces the abovementioned risks, while having drilling operations in close proximity to residential areas with growing density. This adds a new layer of risk to citizens, their property, and quality of life and makes comparisons to existing loss data challenging.

At first glance, the insurance and bonding recommendations herein may seem high, but after analyzing loss data and the special circumstances faced, we are convinced that they are necessary. These requirements not only serve Broomfield and its citizens, but also the operators and their contractors and subcontractors by requiring higher coverage to finance losses in an increasingly risky environment for which they may not otherwise have given consideration.

It should not escape your attention that oil and gas operators have been penalized numerous times over the past couple of years for safety violations. Such information should weigh heavily on your decision making process.

Environment and Health Studies:

Additionally, the Dropbox file provides a number of climate and health studies for your review. These studies are as recent as 2018. Of course, many other studies have come out since the initial litigation, and demonstrate the adverse climate and health consequences related to fracking operations. For example, the University of Colorado School of Public Health published

a study in July 2019 linking oil and gas operations and child heart defects.² Larimer County has a lot of young ones and a lot of families looking to have children. You can draw your own conclusions about how Larimer County families might feel with fracking operations 1,000 feet from their neighborhoods, and knowing that Larimer County was aware of this concerning study. The bottom line is that the overwhelming evidence demonstrates that fracking is having a dire effect on our environment and on the health of our communities.

Colorado Rising cannot underscore how every fracking operation is a catastrophic accident waiting to happen. Having served as an elected official, I understand the importance of balancing interests. However, I know that the environment and the health of our communities outweighs all other interests. The proposed setbacks are not sufficient to protect Larimer County's communities and, sadly, the first big accident will prove my point if the Commission does not listen to reason and the evidence.

Proposed Rule 17.3(C)(3)(b), (4) and (6)

It appears by the proposed language of these rules, the Commission wishes to continue under the old regime of the Colorado Oil and Gas Conservation Act (the "Act"), instead of adhering to the changes made by SB 19-181. Flaring is not acceptable. It is wasteful. It has adverse impacts on the environment. Your proposed rule allows for flaring in emergencies or "upset conditions." There is no definition provided or guardrails related to such language. At any given point, the oil and gas industry will use the terms "emergency" or "upset conditions" to justify flaring. The Commission need to be unambiguous as to what these terms mean.

Also, the Commission uses the term "technically infeasible." This language was specifically taken out of the Act. Your attempts to place the language in your proposed rules is a violation of SB 19-181. As local governments have been advised, SB 19-181 establishes a floor of protection. Larimer County does not have the authority to go below the floor or to create a basement. The "technically feasible" language must be removed from the proposed regulations.

Along the same vein of ambiguous language, Proposed Rule 17.3(C)(3)(b)(6)(a)-(g) is rife with terminology that is vague and ambiguous. Exactly what is meant by "minimizing," "reducing," and "delaying"? Are there baselines by which you can measure whether something was minimized, reduced, or delayed? What exactly are the enforcement mechanisms? Vague and ambiguous language is not tolerated by Colorado courts. We would recommend that the Commission rework this language so that violations can be measured and enforcement be implemented.

Proposed Rule 17.3(F)

This proposed rule fails to take into account the cumulative impacts on water supply and those effects on public health, safety, welfare, environment, and wildlife resources. At least one court has taken notice that one well requires approximately 10 million gallons of water for fracking operations. That does not take into account the multiple wells on one pad and the number of times one well might be fracked. Obviously, such an enormous amount of water takes from the public water supply, from the environment, and from wildlife resources. In many, if not

² <https://www.cpr.org/2019/07/19/cu-anschutz-study-suggests-link-between-oil-and-gas-developments-and-child-heart-defects/>

all cases, the water used in fracking operations cannot be safely returned to our natural cycle. Larimer County does not have the right to ignore these impacts. Water is a precious property right in the state of Colorado. But, no property right can be used in a manner that harms community. *Keystone Bituminous Coal Assoc. v. DeBenedictis*, 480 U.S. 470, 491-92 (1987) (“Long ago it was recognized that ‘all property in this country is held under the implied obligation that the owner’s use of it shall not be injurious to the community.’”).

Thus, the County must include a provision that addresses not only water quality, but also water supply.

Additionally, this proposed rule fails to take into account radioactive brine and toxic waste produced by oil and gas activities. In a stunning *Rolling Stones* report issued just three days ago, it was found that the oil and gas industry, specifically involving fracking, produced a trillion gallons of toxic waste per year.³

Public health, safety, welfare, environment, and wildlife resource protections must include some regulation surrounding the safe storage and removal of radioactive and toxic materials produced as a result of oil and gas activities. A failure to proposed such regulations is a detriment to Larimer County and its residents.

Proposed Rule 17.3(V)

This proposed language simply is unacceptable. Larimer County, if only to protect public welfare, must require that oil and gas operators provide detailed financial information about the health of their respective companies. Such information should include, but is not limited to: 1) assets; debts; revenues; stock market information; and loans. The information provided should be more than the general information found in SEC filings.

As the Commission must be aware, there is a dramatic increase in oil and gas bankruptcy filings.⁴ Colorado has suffered the bust of this industry several times over, and at least once within the past decade. Without adequate financial assurances, Larimer County runs the risk of granting permit applications to an oil and gas producer who begins operations, files for bankruptcy and leaves local and state taxpayers to foot the bill for its messes. You, as Commissioners, have a fiduciary duty to protect Larimer County and its residents from having to foot the bill of an operator that is not financially capable of responsibly engaging in fossil fuel extraction.

With respect to bonding, in Colorado, an oil and gas operator is required to place a \$10,000-\$20,000 bond on individuals wells, depending on depth; a \$60,000 state-wide blanket bond for less than 100 wells, or \$100,000 state-wide blanket bond for more than 100 wells.⁵

There are several purposes for the bond, but one being to plug abandon wells and to remediate damages caused by oil and gas operations. In addition, operators are required to maintain general liability insurance of \$1 million per occurrence to cover property damage and

³ <https://www.rollingstone.com/politics/politics-features/oil-gas-fracking-radioactive-investigation-937389/>

⁴ <https://www.wsj.com/articles/oil-and-gas-bankruptcies-grow-as-investors-lose-appetite-for-shale-11567157401>

⁵ https://cogcc.state.co.us/documents/about/TF_Summaries/GovTaskForceSummary_Permitting_Bonding.pdf

bodily injury to third parties.⁶ The problem with these bonding and insurance rates is that they are utterly inadequate for what is required.

In a Denver Post report, COGCC estimated that each abandoned vertical well in Colorado would cost \$82,500 to plug and reclaim.⁷ In 2018, then-Governor Hickenlooper signed an executive order directing COGCC to categorize each orphaned well site and aim to clean up high and medium priority sites by July 2023.⁸ In the Executive Order, it was estimated that the total cost to plug, remediate, and reclaim these orphaned wells and sites is over \$25 million.⁹ A striking fact is that the Commission's data showed "the average cost to plug an orphaned well is six times greater than the amount of financial assurance held by the State."¹⁰

In 2018, the Colorado Legislature changed the law to allow the COGCC to spend more money on plugging and remediating orphaned wells and sites. The previous annual limit was just \$445,000, and it was increased to \$5 million.¹¹ The legislature's appropriation was for 263 orphaned wells and 365 associated orphaned identified sites.¹² This \$5 million figure represents taxpayer dollars being spent to clean up the mess left by the oil and gas industry. Yet, what is missing from the equation is that Colorado is home to approximately 60,000 active oil and gas wells and over 20,000 abandoned wells.¹³ The abysmally low bonding amount means that taxpayers will be shouldering additional hundreds of millions of dollars to clean up after this industry for decades to come.

On a national level, a study commissioned by the Center for Western Priorities finds that reclaiming oil and gas wells on U.S. public lands could cost a potential \$6.1 billion, which is far more than the \$162 million in reclamation bonds paid by oil and gas operators.¹⁴

With this said, and along the lines of your honoring your fiduciary duties, Larimer County must require each operator to provide a minimum bond of \$270,000 per well, which is the average cost the federal government is spending to plug and remediate each abandoned horizontal well.¹⁵ Your failure to require adequate bonding, financial assurances, and insurance will violate the mandate that public health, safety, and welfare must be paramount concerns over industry interests.

In sum, Commissioners, I understand the great amount of work required to draft these regulations. This second draft falls short of the mandates of SB 19-181. In fact, to truly protect the public health, safety, welfare, environment, and wildlife resources from the cumulative adverse effects of fossil fuel extraction, a ban or moratoria should be debated rather than

⁶ *Id.*

⁷ <https://www.denverpost.com/2018/07/14/orphan-oil-gas-wells-growing-problem/>

⁸ https://www.colorado.gov/governor/sites/default/files/executive_orders/d_2018-012_directing_the_colorado_oil_and_gas_conservation_commission_to_act_to_plug_remediate_and_reclaim_orphaned_oil_and_gas_wells_and_sites.pdf

⁹ *Id.*

¹⁰ *Id.*

¹¹ <https://apnews.com/b10ea1ccbca9425abac258aff389b0f4>

¹² https://cogcc.state.co.us/documents/library/Technical/Orphan/Orphaned_Well_Program_FY2018_Annual_Report_20180831.pdf

¹³ <https://www.denverpost.com/2017/05/01/oil-gas-wells-colorado-map/>

¹⁴ <http://westernpriorities.org/bondingreport/>

¹⁵ <https://www.gao.gov/assets/700/691810.pdf>

regulations allowing further fossil fuel extraction. SB 19-181 gives local governments the power to enact bans and moratoria.

Should you have any question or comments, please do not hesitate to contact me at your earliest convenience at (303) 895-7044. I thank you for your time and attention in this matter.

Sincerely,



Joseph A. Salazar
Executive Director

January 6, 2020 Draft
Letter by LOGIC-Larimer Alliance



Larimer County Commissioners
 CC: Matt Lafferty, Leslie Ellis, Tom Gonzales
 200 W. Oak Street
 Ft. Collins, CO 80521

RE: Larimer County's Second Draft of its "Oil And Gas Facilities" Proposed Regulations

Dear Commissioners Johnson, Donnelly and Kefalas, and Mr. Lafferty, Mr. Gonzales, and Ms. Ellis,

The League of Oil and Gas Impacted Coloradans (LOGIC) and groups aligned under the Larimer Alliance for Health, Safety and the Environment (Larimer Alliance) appreciates the opportunity to submit the following comments regarding Larimer County's second draft of its regulations for Oil and Gas Facilities.

LOGIC and the Larimer Alliance submitted extensive comments on the original draft of these regulations. While we appreciate that County staff has made some attempt to incorporate some of these comments into this second draft, it is still woefully inadequate. The second draft fails to protect public health and safety, the environment, and wildlife resources. It fails to comply with SB181's mandates and standards, and it leaves Larimer County's residents vulnerable to adverse impacts from the oil and gas industry.

SB181 made it abundantly clear that local governments have the authority to deny applications that adversely impact public health and safety. Larimer County can enact any regulation that is designed to protect public health and safety, yet this draft is riddled with loopholes and weak language designed to let oil and gas development take priority over people.

This draft fails to take advantage of the County's authority to deny applications. We understand that the County believes that denying an application would leave it vulnerable to a lawsuit from industry applicants. However, LOGIC has already submitted a letter to Larimer County outlining the legal authority to deny applications without fear of litigation. Takings lawsuits are extremely rare, and almost never successful. Even after the state of New York banned fracking entirely, there were no successful takings claims brought against the state. We strongly encourage the County to re-read our letter on takings, and embrace its denial authority to protect its residents.

Compliance with the Act is crucial. SB19-181 removed the economically viable and technically feasible language from the Act. The current draft of the Larimer County regulations is still reliant on the pre-181 paradigm, and as such would likely not have any meaningful impact. SB181 allows local governments to regulate above and beyond the state floor. The way these regulations are currently drafted, they do not rise above that floor. The second draft includes some variation on “when possible,” “when available,” or “if feasible” on nearly a dozen occasions. This language is unacceptable, and inconsistent with SB181, and must be stricken.

Even worse, County staff has made it clear that the County has no intention of actually enacting setbacks that could actually protect residents. The health impact study released by CDPHE makes it clear that living within 2,000’ of oil and gas facilities is hazardous to human health. Other studies have shown adverse health impacts at even greater distances.

There are numerous other issues with this draft. It fails to provide notice to residents of development near their homes or schools, it fails to establish a public process for leasing county-owned minerals or development on open spaces, and lacks any meaningful public accountability mechanisms.

LOGIC and the Larimer Alliance submit the following redline suggestions to address issues with the purpose and intent sections, the authority to deny applications, and health and safety-based setbacks. We have also gone through the entire draft rules and removed every example of the “where possible” and “technically feasible” language and replaced it with more protective language where appropriate.

We are deeply disappointed that the County is not taking the recommendations of its residents seriously. We respectfully request that you reassess the comments submitted on the previous draft and adopt the reasonable suggestions provided by the community.

17.1.A - INTENT

Issue: Public Health, Safety, and Welfare, the Environment, and Wildlife Resources(PHSWEW) are not properly prioritized.

Suggested Redline:

The intent of this section of the Land Use Code is to **protect public health, safety, and general welfare, the environment, and wildlife resources, protect private property rights, and minimize adverse impacts, by**

establishing a regulatory framework for new oil and gas facilities (O&GFs), including recompletions to be located in the unincorporated areas of Larimer County. ~~in a manner that protects the public health, safety and general welfare, protects private property rights, protects environment and wildlife, and minimizes adverse impacts.~~

Rationale: This simple change reorders the intent section of the draft regulations to reflect the SB19-181 mandate.

17.1.C - PURPOSE

Issue: PHSWEW is not properly prioritized.

Suggested Redline:

Purpose: These regulations are necessary to:

1. Promote and protect the public health, safety and welfare, and protect the environment and wildlife by avoiding and minimizing the adverse impacts of O&GFs.
2. Incorporate the power to deny oil applications, for O&GFs where necessary to protect public health safety, and welfare, the environment, and wildlife resources as granted by the State of Colorado in the Colorado Oil and Gas Act into these Larimer County Land Use Code Regulations.
4. ~~3.~~ Ensure a comprehensive land use process and transparent public process for the development of new O&GFs, including recompletions, in the unincorporated areas of the County.
- ~~2.~~ ~~4.~~ Provide for the managed development, installation, maintenance, modification, reclamation and removal of O&GFs. ~~without unreasonably discriminating against oil and gas developers and operators, or mineral interest owners.~~
- ~~3.~~ ~~5.~~ Minimize to the maximum extent possible the nuisance effects of O&GFs through the application of best available techniques and technologies.
- ~~4.~~ ~~Promote and protect the public health, safety and welfare, and protect the environment and wildlife by minimizing the adverse impacts of O&GFs.~~
- ~~5.~~ ~~6.~~ Maximize protection of natural and cultural resources and public facilities.
- ~~6.~~ ~~7.~~ Strategically locate O&GFs to locate where adverse impacts from such operations can be avoided.
- ~~7.~~ ~~9.~~ Minimize and mitigate the extent and severity of adverse impacts that cannot be avoided.
- ~~8.~~ ~~10.~~ Confirm the financial, indemnification and insurance capacities of the oil and gas developer/operator to ensure timely and effective

construction, production, removal and reclamation of O&GFs and infrastructure.

Rationale for Suggested Redline: The second draft of these regulations are not aligned with current state law. SB19-181 amended the Colorado Oil and Gas Act to clearly prioritize protection of PHSWEW over oil and gas development. It also changed the definition of waste to exclude the non-production of oil and gas to PHSWEW. The proposed redline above moves the PHSWEW concept to the top of the list, and adds the word *protect*. This change is necessary to reflect the new paradigm at the state.

This suggested redline also adds the concept of denying applications where necessary to protect PHSWEW to the purpose section. This addition does not *require* the denial of any specific applications at this point, it simply acknowledges the fact that the state of Colorado has granted local governments the authority to deny applications were necessary to protect PHSWEW. Adding this concept to the purpose section is necessary to lay the framework for more specific regulations later in the Code.

17.2.B COUNTY REVIEW (DENIAL)

Issue: The current draft does not contemplate the ability to deny applications that would adversely impact PHSWEW.

Proposed Redline:

17.2. – Review Procedures and Required Permits

B. County Review Process:

1. All new O&GFs, including recompletions, in the unincorporated portions of Larimer County shall require approval of a Special Review application for the proposed facility as set forth in Section 4.5 of this Code. **In addition to the requirements and review procedure laid out in Section 4.5 of this Code, the following review criteria will apply specifically to all O&G facilities applications:**
 - a. **If an applicant cannot demonstrate an ability to comply with all relevant requirements in this code, the Commissioners will deny the application.**
 - b. **If the applicant cannot mitigate the impacts to public health, safety, and general welfare, the environment, and wildlife as required by this code, the Commissioners will deny the application.**

2. Application and submittal requirements for O&GFs are specified in the following Community Development Department application handouts:
 - a. Sketch Plan Review Application and Submittal Requirements for Oil and Gas Facilities.
 - b. Neighborhood Meeting Submittal Requirements and Guidelines for Oil and Gas Facilities.
 - c. Special Review Application and Submittal Requirements for Oil and Gas Facilities

Rationale for Suggested Redline: The ability to deny a permit is an absolutely necessary tool for a local government to protect PHSWEW, and Larimer County has the unambiguous authority to deny applications that are not protective of PHSWEW. However, Larimer County has expressed concerns about exercising this authority based on fear of running afoul of regulatory takings laws. In the most basic sense, a “regulatory taking” is when a regulation destroys the value of private property.

Larimer County’s fear is unwarranted in this case. Baked into the law on regulatory takings is a broad exception for regulations with a legitimate public purpose, such as protecting public health and safety, or the environment. SB19-181 made the ability to deny an application even more clear by changing the definition of waste to expressly exclude the non-production of oil and gas resources if necessary to protect PHSWEW. That essentially means that as long as the County is denying an application to protect PHSWEW, then it is not a taking.

The County must establish clear denial criteria in order to protect their residents from adverse impacts from oil and gas development. SB19-181 did not say that the state and local governments should protect PHSWEW when convenient for operators. It clearly states that PHSWEW is the priority, and production is secondary. This current draft is inconsistent with this state law.

17.3.B - SETBACKS

Issue: The second draft of the oil and gas regulations DO include setback from homes, high occupancy buildings (like schools, nursing homes, etc), and water bodies. Unfortunately, they propose a set of tiered setback distances that are not adequately protective, and do not account for health impact data from the State and other reliable sources. They also allow for variances and exceptions that further reduce protections.

Proposed Redline:

B. Setbacks:

1. The minimum required setbacks for buildings and structures set forth in the applicable zoning district shall apply to the proposed O&GF.
2. In addition to the setbacks in paragraph 3 below, the setbacks set forth in Section 4.9 of this Code shall apply to proposed O&GFs to minimize their impacts on public health, safety, welfare, the environment, and agricultural operations.
3. To achieve the intent and purpose of this Section 17, the following minimum setbacks for O&GFs shall be required, unless more restrictive setbacks are required by the rules of the COGCC:
 - a. ~~1,000~~-2,000-foot setback from a residential building or platted residential lot
 - b. 2,000-foot setback from a high occupancy building including schools, registered day cares, nursing homes.
 - c. ~~500~~2,000-foot setback from a water body or designated outside activity area
4. To achieve the objectives of Section 17.1.C., the Board of County Commissioners may, on a case by case basis, require an increase to these minimum setbacks.
5. ~~The Board of County Commissioners may allow a reduction of the minimum setbacks when it has been determined that the applicant has adequately demonstrated that the setbacks prohibit access to the mineral interests being sought, and the reduced setbacks will achieve to the extent practicable the objectives of this code.~~

Rationale for Proposed Redline: According to the most recent health impact data from the Colorado Department of Public Health and the Environment (CDPHE), living within 2,000 feet of an oil and gas facility is hazardous to our health. At the very least, Larimer County's setback for all residences/residential structures should be 2,000 feet to address this fact. There is no point in adopting setbacks that do not accomplish the basic goals of the regulations.

17.3.C - AIR QUALITY

3. Reduced Emission Completions shall be used for all completions and well workovers following hydraulic fracturing. Such completions shall include the use of Best Management Practices including, ~~when available~~, the following unless an equal or better system exists:

4. O&GFs shall be equipped with electric-powered engines for motors, compressors, drilling and production equipment, and pumping systems ~~unless an adequate electricity source is available or it is technically infeasible.~~

Other Air Quality Recommendations

- Larimer County should strongly consider enacting 24/7 monitoring requirements for emissions and air quality data, with regular reporting periods to protect public health and safety.
- Larimer County should develop a fee and penalty framework for operators violating air quality standards

17.3.E - ODORS

3. The Odor Mitigation Plan shall include control strategic which shall be implemented upon receipt of an odor complaint(s) or as required by the County. These Odor control strategies ~~may~~ **shall** include the following, **along with any other site-specific requirements recommended by staff to mitigate impacts:**

17.3.F - WATER QUALITY AND WATER BODIES

Issue: The current draft is not adequately protective of surface and groundwater resources. In addition to the too-low setbacks discussed above, the current draft also allows development within the FEMA 100-year floodplain and does not require public disclosure of water quality test results.

Proposed Redline:

1. A Water Quality Report/Plan shall be submitted with all O&GF applications. The report/plan shall demonstrate how the development and operations of the facility will avoid impacts to surface and ground waters in Larimer County, and demonstrate compliance with and implementation of standards in Sections 17.3.D. and 8.12 of this Code.
2. Baseline and subsequent water source tests, as typically required by and submitted to the COGCC and CDPHE, shall be provided to the LCDHE and the LGD for the life of the facility and any post-closure assessments, if approved by the owner(s) of the water well. ~~It is recommended that the operator also post these reports online for public/access transparency.~~ **For greater transparency, the operator will make these reports available online for public access.**
3. The application shall provide documentation indicating how the COGCC water quality protection standards are being implemented.
4. Locating O&GFs within a Federal Emergency Management Agency (FEMA) designated 100-year floodplain shall not be allowed. ~~unless no~~

~~other location is feasible, and all other appropriate permissions are obtained.~~

5. New wastewater injection wells shall not be allowed.

6. The requirements of this Section 17.4.D shall not prevent discharges reviewed and permitted by the CDPHE Water Quality Control Division, the EPA, and the Army Corps of Engineers.

Rationale for Proposed Redline: With the adoption of the increased 2,000-foot setback for surface water resources, the water quality and water resources section of the draft regulations is much stronger, and requires significantly less revision. The one significant change proposed here is that no exceptions be made for O&G facilities in floodplains. This is based, once again, on the concepts enshrined in SB19-181 that require prioritization of PHSWEW over extraction of oil and gas resources. The lack of acceptable locations *outside* the floodplain is not a good enough reason to allow development *inside* the floodplain. This is the prime case of denial of an application. If no protective locations are possible, then the County must deny the application, not grant exceptions to rules designed to protect PHSWEW.

17.3.L - RECYCLE, REUSE, and DISPOSAL OF FLUIDS

2. Drilling, completion flowback, and produced fluids shall be recycled or reused ~~whenever technically feasible.~~

4. Produced water shall be recycled or reused or shall be transported by pipeline. ~~unless easements are not available.~~ **If easements for pipelines cannot be obtained, applicant must prove to County staff and Commissioners that an alternative transportation plan will not adversely impact the health and safety of Larimer County residents and the environment.**

17.3.O WELL LIQUIDS UNLOADING

1. Best management practices, including artificial lift, automated plunger lifts and at least 98% emission reductions when utilizing combustion to control venting shall be employed at all facilities. ~~unless technically infeasible~~

Drilling in Open Spaces

Issue: Nothing in the oil and gas regulations specifically protects open spaces from oil and gas development.

Proposed Redlines:

17.1.C.5 - Maximize protection of natural and cultural resources, ~~and~~ public facilities, **and Larimer County Open Spaces.**

17.2.B.3.d - 500-foot setback from Larimer County Open Spaces

Other Proposed Suggestions:

Larimer County must amend the land use regulations to prevent oil and gas development in open spaces.

Rationale for Proposed Redlines: Preserving the rural character of open space, and unincorporated Larimer County in general is a concept enshrined throughout the Larimer County Land Use Code. Oil and gas development is not consistent with that concept. Therefore, the County must reconsider the allowed activities within its open spaces. Preserving the open spaces themselves is a good first step, and protecting them with a 500-foot setback is necessary to ensure that oil and gas development does not encroach upon these important resources.

PUBLIC PROCESS FOR LEASING COUNTY-OWNED MINERALS

Issue: Decisions around the management of county-owned minerals must be made in view of the public, the same as any other major decision. Currently, decisions around leasing these minerals are not made during public meetings, but rather at an administrative matter meeting.

Suggest Amendment: (somewhere in the county code) xx.xx.xThe County shall not sell, lease, or dispose of county-owned buildings or real property in use for public purposes without first obtaining the approval of a majority of the commissioners. Any real property acquired or maintained by the County as open space is deemed to be in use for a public purpose.

January 6, 2020 Draft
Comments by Mary Bodesky

17.0. – OIL AND GAS FACILITIES

17.1. – Intent and Purpose.

Note: This section has been updated to better reflect the language in SB 19-181.

- A. Intent.** The intent of this section of the Land Use Code is to establish a regulatory framework for new oil and gas facilities (O&GFs), including recompletions to be located in the unincorporated areas of Larimer County in a manner that protects the public health, safety and general welfare, protects environment and wildlife, **protects private property rights**, and minimizes adverse impacts.

I would at least move this language further in the list if not remove it altogether, it seems more in line with “fostering” than “regulating”

- B. Authority:** C.R.S. 29-20-104-(1) provides the County authority to regulate and review applications pertaining to the surface development of O&GFs. *I would add the authority to condition, deny or delay any permitting in order to fulfill the intent and purpose.*
- C. Purpose:** These regulations are necessary to:
1. Ensure a comprehensive land use process and transparent public process for the development of new O&GFs, including recompletions, in the unincorporated areas of the County.
 2. Provide for the managed development, installation, maintenance, modification, reclamation and removal of O&GFs **without unreasonably discriminating against oil and gas developers and operators, or mineral interest owners.** *Fostering type language as mentioned in intent and I recommend removing to be in line with SB181*
 3. Minimize to the maximum extent possible the nuisance effects of O&GFs through the application of best available techniques and technologies.
 4. Promote and protect the public health, safety and welfare, and protect the environment and wildlife by minimizing the adverse impacts of O&GFs.
 5. Maximize protection of natural and cultural resources and public facilities.
 6. Strategically locate O&GFs to locate where adverse impacts from such operations can be avoided.
 7. Minimize and mitigate the extent and severity of adverse impacts that cannot be avoided.
 8. Confirm the financial, indemnification and insurance capacities of the oil and gas developer/operator to ensure timely and effective construction, production, removal and reclamation of O&GFs and infrastructure. *How will this be done? I agree it should be, but how do we consider when applicants sell off in the future?*
- D. Applicability:** These regulations shall apply to all new O&GFs, **including exploration and recompletions**, to be constructed on any property in all zoning districts in the unincorporated portions of Larimer County. *I agree with including exploration and recompletions. These activities can have a significant impact on the surrounding area and it cannot be assumed they won't without full evaluation of the applications. If rigs are involved, drilling, fracking, these need to be considered in the same context.*
- E. Severability:** If any section, clause, provision, or portion of these regulations should be found to be unconstitutional or otherwise invalid by a court of competent jurisdiction, the remainder of the regulations in this section shall not be affected thereby and is hereby declared to be

necessary for the public health, safety and welfare.

17.2. – Review Procedures and Required Permits.

Note: Some members of the Task Force and stakeholders provided input that they would like to see a tiered process for reviews, including an administrative process for simpler, smaller projects. The County could consider defining an administrative process (e.g., PSP) for recompletions that do not exceed a

certain percentage in size greater than what exists, or perhaps require a building permit only for replacement of equipment.

- A. General Requirements.** No person, firm or corporation shall establish, construct, build a new O&GF, including recompletions, without first having obtained required land use approval(s) and permits as required by this Code. Applications to the County for new O&GFs, including recompletions, may be submitted simultaneously with the Colorado Oil and Gas Conservation Commission (COGCC) permitting process, but approval by the County must be secured prior to construction.
- B. County Review Process:** All new O&GFs, including recompletions, in the unincorporated portions of Larimer County shall require approval of a **Special Review application** for the proposed facility as set forth in Section 4.5 of this Code. Application and submittal requirements for O&GFs are specified in the following Community Development Department application handouts: *Until the process can be fully evaluated with experience processing applications, I agree all should go through special review and would ask for O&G specific requirements be added to that process which expand the notification radius for meetings to 2500ft.*
1. Sketch Plan Review Application and Submittal Requirements for Oil and Gas Facilities.
 2. Neighborhood Meeting Submittal Requirements and Guidelines for Oil and Gas Facilities.
 3. Special Review Application and Submittal Requirements for Oil and Gas Facilities.
- C. County Permits.** Prior to the commencement of any construction activity for an O&GF, all required permits for such facilities shall be approved. Required permits include, but are not limited to:
1. Access permits,
 2. Development construction permit,
 3. Building permits for all qualifying buildings and structures,
 4. Electrical permits, and
 5. All federal, state and local permits.
- D. Non-County Permits:** County approval of an O&GF shall not relieve the landowner or applicant of the responsibility for securing other permits or approvals required by any other applicable County Departments, local fire district, municipalities, or other applicable public agencies.
- E. Technical Expert Review:** Applications for O&GFs may involve complex technical issues that require review and input that is beyond the expertise of County staff. If such a situation arises, the Community Development Director may commission a third-party review of the relevant subject matter and require the applicant to pay reasonable costs for the third-party review. Selection of a third-party expert(s) to review portions the proposal will be at the discretion of the County.

17.3. – Standards Required for all Oil and Gas Facilities.

- A. General:**
1. In addition to the standards and requirements of this Section 17, all other relevant standards and regulations set forth in this Code shall also apply.
 2. All applications for new O&GFs, including recompletions, shall meet all applicable federal, state and local standards and regulations pertaining to the development and

operation of such facilities. When the standards and regulations contained herein

conflict with the standards and requirements of another agency, the stricter standard shall apply.

Note: The setbacks and buffers section below has been added since Draft 1 for Planning Commission and Board of County Commissioner discussion. The Task Force did not review this section.

B. Setbacks:

1. The minimum required setbacks for buildings and structures set forth in the applicable zoning district shall apply to the proposed O&GF.
2. In addition to the setbacks in paragraph 3 below, the setbacks set forth in Section 4.9 of this Code shall apply to proposed O&GFs to minimize their impacts on public health, safety, welfare, the environment, and agricultural operations.
3. To achieve the intent and purpose of this Section 17, the following minimum setbacks for O&GFs shall be required, unless more restrictive setbacks are required by the rules of the COGCC:
 - a. 1,000-foot setback from a residential building or platted residential lot
 - b. 2,000-foot setback from a high occupancy building including schools, registered day cares, nursing homes.
 - c. 500-foot setback from a water body or designated outside activity area
4. To achieve the objectives of Section 17.1.C., the Board of County Commissioners may, on a case by case basis, require an increase to these minimum setbacks.
5. *Reciprocal setbacks for any new development adjacent to existing O&G facility minimum 1,000ft and excluded from potential to recomplete or add on to site in the future, excluding properly decommissioned sites*
6. The Board of County Commissioners may allow a reduction of the minimum setbacks when it has been determined that the applicant has adequately demonstrated that the setbacks prohibit access to the mineral interests being sought, and the reduced setbacks will achieve **to the extent practicable** the objectives of this code. *Would remove this type of pre-SB181 language.*

Setbacks should be included beyond current state minimums in order to protect public health, safety, welfare, wildlife and the environment. It is my opinion in order to do so, taking into consideration available data to date, the setback from residential, high occupancy building (excluding schools and daycare) or platted residential should be at least 2,000ft and at least 2,000ft from the property line of schools and daycares and any designated outside activity area. Children will be most vulnerable to acute health effects during outdoor play or sports. The CDPHE health effects study “Human Health Risks Assessment for Oil and Gas Operations in Colorado” states: ‘For the acute assessment, the most-exposed individuals were those simulated to be outdoors...’ This study finding health risk potential out to the greatest measured distance of 2,000ft. Also not mentioned, I see need for protecting CPW sensitive wildlife habitats and our county open spaces to the extent possible.

C. Air Quality:

1. **An Air Quality Report/Plan** shall be submitted with all O&GF applications. The report/plan shall demonstrate how the development and operation of the facility will avoid and/or mitigate adverse impacts to air quality and demonstrate compliance with and implementation of standards in Sections 17.3.C. and 8.11 of this Code.

2. In addition to all federal and state laws, rules and regulations, applications for O&GFs shall demonstrate how exploration, construction and standard operations of a O&GF, including traffic and construction equipment, will comply with the rules and regulations of the Colorado Air Quality Control Commission (AQCC). Information to be provided shall include all appropriate applications of notifications and permits for sources of emissions.
3. Reduced Emission Completions shall be used for all completions and well workovers following hydraulic fracturing. Such completions shall include the use of Best Management Practices including, when available, the following unless an equal or better system exists:

- a. Except for very small productions, closed loop, pitless drilling, completion systems, without permanent on-site storage tanks, for the containment and/or recycling of all drilling, completion and flowback fluids.
 - b. Flaring only allowed during emergencies or **upset conditions**. When allowed, routing and control of all emissions to a flare or combustor shall provide at least 98% destruction or removal efficiency. *Please define this. I would suggest only in emergency situations with reporting to county for all occurrences.*
 - c. Zero emission desiccant dehydrators.
 - d. Emission controls of 90% or better for glycol dehydrators.
 - e. Pressure-suitable separator and vapor recovery units.
 - f. No-bleed continuous and intermittent pneumatic devices.
 - g. Automated tank gauging.
4. O&GFs shall be equipped with electric-powered engines for motors, compressors, drilling and production equipment, and pumping systems unless no adequate electricity source is available **or it is technically infeasible**. *As Andy Peterson mentioned, it is always technically feasible so I would remove this language. It would have to be something considered in context with the entire application if an operator is not going to do this.*
 5. During exploration and construction, the applicant shall demonstrate that all facilities on the site, including traffic and construction equipment, complies with all AQCC rules and regulations.
 6. O&GF applications shall include operational provisions to reduce emissions on Air Quality Action Advisory Days posted by the Colorado Department of Public Health and Environment (CDPHE) for the Front Range area. The provisions shall include how alerts are received, outline specific emission reduction measures, and include requirements for documenting the measures implemented. Measures should include:
 - a. Minimizing vehicle traffic and engine idling,
 - b. Reducing truck and worker traffic,
 - c. Delaying vehicle refueling,
 - d. Suspending or delaying use of fossil fuel powered equipment,
 - e. Postponing construction and maintenance activities,
 - f. Postponing well maintenance and liquid unloading that would result in emission releases to the atmosphere, and
 - g. Postponing or reducing operations with high potential to emit VOC's or NOx's.
 7. *Applicant will contribute to the cost of a continuous air monitoring system selected by the county with an "air quality monitoring fee" of ___/well. I am in support of continuous air monitoring- we need more accurate data.*

D. Leak Detection and Repair:

1. **A Leak Detections and Repair Plan** shall be submitted with all O&GF applications. The plan shall disclose techniques, methods and protocols that will be utilized at the proposed O&GF to identify, prevent, contain, document, repair and report leaks, and it shall demonstrate how it will comply with and implement the standards in this Section 17.1.3.F.
2. Operators shall conduct leak detection and repair inspections at the frequency required by the APCD for the emission source using modern leak detection technologies and

equipment. The results of said inspections, including all corrective actions taken, shall be reported to the Larimer County Department of Health and Environment (LCDHE) and County Local Government Designee (LGD) upon request.

3. All verified leaks at an O&GF shall be reported to the LCDHE and LGD within 24-hours of the detection of the leak. *And made available to the public on county website.*

4. Repair of verified leaks shall occur within 72 hours of detection. If it is anticipated that a repair will take longer than 72 hours, the operator shall provide a written explanation to the LCDHE and the LGD as to why more time is required and how the leak will be contained. If a leak is not repaired within 72-hours, the O&GF shall be shut-in until the leak is repaired.
5. Equipment leaks that pose an imminent safety risk to persons, wildlife, or the environment shall undergo emergency shut down and not be allowed to operate until the operator has provided evidence that the leak has been repaired.
6. At least annually, operators shall provide a 2-week notice of a routine leak inspection to the LCDHE and LGD inviting them to attend and observe the inspection.

I support the County purchasing an infrared camera to do their own inspections of facilities with costs of camera and staffing incorporated into applications fee.

E. Odors:

1. **An Odor Mitigation Plan** shall be required for all O&GF applications indicating how the operations will prevent odors from adversely impacting the public and wildlife and further demonstrating compliance with the standards in this Section 17.1.3.H.
2. Oil and gas operations shall comply with the CDPHE, AQCC, Regulation No. 2 Odor Emission, 5 Code of Colorado Regulations 1001-4.
3. Proposed O&GFs shall provide protocols for immediate response to odor complaints that include options for ceasing operations, notification of affected residents, and temporary relocation of residents until the source of the odor is identified and resolved.
4. The operator shall communicate the schedule/timing of well completion activities to adjacent and nearby residents which could include an online portal. As part of the application, provide information on how notifications will be communicated to the public.
5. The Odor Mitigation Plan shall include control strategic which shall be implemented upon receipt of an odor complaint(s) or as required by the County. These Odor control strategies may include the following:
 - a. Odorants, that are not a masking agent, shall be added to chillers and mud systems.
 - b. Operators shall not use odor masking agents or additives.
 - c. Filtration systems and/or **additives to minimize**, not mask, odors from drilling and fracturing fluids shall be utilized in the drilling and flowback processes.
What is the safety profile of such additive?
 - d. Additives intended to eliminate odors generated by the operations of an O&GF shall not create a separate odor.
 - e. Enclosed shale shakers shall be utilized to contain fumes from exposed mud.
 - f. Drilling activities shall **utilize minimum low odor Category III drilling fluid** or non-diesel-based drilling muds that do not contain benzene, toluene, ethylbenzene or xylene (BTEX). *No hydrocarbon based drilling fluid/muds should be allowed*
 - g. Wipe down drill pipe as they exit the well bore each time.

I'm concerned about enforcement of this category. I imagine adequate setbacks would significantly decrease chemical and emission odor complaints from occurring. Perhaps this would be good data to pull from COGCC on existing sites within 2,000ft.

F. Water Quality and Water Bodies:

1. **A Water Quality Report/Plan** shall be submitted with all O&GF applications. The report/plan shall demonstrate how the development and operations of the facility will avoid impacts to surface and ground waters in Larimer County, and demonstrate compliance with and implementation of standards in Sections 17.3.D. and 8.12 of this Code.

2. Baseline and subsequent water source tests, as typically required by and submitted to the COGCC and CDPHE, shall be provided to the LCDHE and the LGD for the life of the facility and any post-closure assessments, if approved by the owner(s) of the water well. It is recommended that the operator also post these reports online for public/access transparency. *Please heed Thomas Borch's advice on water quality testing and setbacks from water sources. He has done extensive research on this subject and has seen first hand the inadequacies and consequences of the current system.*
 3. The application shall provide documentation indicating how the COGCC water quality protection standards are being implemented.
 4. Locating O&GFs within a Federal Emergency Management Agency (FEMA) designated 100-year floodplain shall not be allowed **unless no other location is feasible, and all other appropriate permissions are obtained.** *remove this portion. It puts our county, residents and wildlife at too great a risk to allow here.*
 5. New wastewater injection wells shall not be allowed.
 6. The requirements of this Section 17.4.D shall not prevent discharges reviewed and permitted by the CDPHE Water Quality Control Division, the EPA, and the Army Corps of Engineers.
- G. Spills and Releases:**
1. **A Spill Prevention Control and Countermeasure Plan** shall be submitted with all O&GF applications. The plan shall disclose techniques, methods, and protocols to be utilized at the proposed O&GF to prevent, contain, document and report any spills or releases, and shall demonstrate compliance with and implementation of the standards in this Section 17.3.E.
 2. An Emergency Response Plan shall be provided that includes evacuation plans and routes, inventory of emergency response supplies, notification requirements and annual open house training for emergency services personnel to become familiar with the site.
 3. Secondary containment shall be required which is capable of holding 125% of the total capacity of on-site containment vessels and storage tanks.
 4. Unloading areas shall be designed to contain potential spills or direct spills into other secondary containment areas
 5. Containment systems constructed of steel rimmed berms, or similar impervious surfaces that are equal to or better, shall be used for all secondary containment areas.
 6. Any spill or release of greater than 25 gallons on an O&GF, including those thresholds reportable to the COGCC, shall upon discovery, be immediately reported to the following Local Emergency Response Authorities in Larimer County:
 - a. Larimer County Sheriff – Public Safety Answering Point (PSAP) (9-1-1)
 - b. Larimer County Department of Health and Environment,
 - c. Local Fire Department/District,
 - d. Local Municipal Police Department if within in mile of a City or Town,
 - e. Larimer County Oil and Gas LGD, and
 - f. Larimer County Local Emergency Planning Committee (within 24-hours).
 7. All spills or releases, whether reportable or not, shall be cleaned up immediately and to the satisfaction of the local emergency response authorities, listed in the Spill Prevention Control and Countermeasure Plan. *Will local emergency response be inspecting?*

H. Noise:

1. **A Noise Report and Mitigation Plan** shall be required for all O&GF applications. The plan shall demonstrate how the operations will mitigate noise impacts to comply with

the noise standards contained in this Section 17.3.G. The report and plan shall include the following:

- a. A three-day (one day being a weekend day) baseline noise analysis.
 - b. Modeled decibel levels for various phases of development shall be presented using contour maps to radii of 350 feet from the site of operation/noise source (per COGCC) or at the property line of an adjacent land use, whichever is closer.
 - c. A plan of proposed mitigation measures to be implemented by the oil and gas operations during all stages of compliance with the maximum permissible noise levels as listed in Section G.2 below.
2. Noise generated from O&GFs shall comply with the following maximum permissible noise levels appropriate for the zoning and adjacent land uses as determined by the County:

<u>ZONE AREA DESIGNATIONS</u>	<u>7:00 am to next 7:00 pm</u>	<u>7:00 pm to next 7:00 am</u>
Residential/Agricultural/Rural	55 db(A)	50 db(A)
Commercial	60 db(A)	55 db(A)
Light Industrial	70 db(A)	65 db(A)
Industrial	80 db(A)	75 db(A)

In the hours between 7:00 a.m. and the next 7:00 p.m., the noise levels permitted above may be increased by ten (10) db(A) for a single period of not to exceed fifteen minutes in any one-hour period. Night-time levels between 7:00 p.m. and the next 7:00 a.m. shall not be exceeded therefore requiring strategic planning of noise-inducing activities to be conducted during daytime hours at the site.

- 3. Decibel levels produced by the O&GF shall meet the identified level for the appropriate zoning area designation of the adjacent land use. Zones as defined by Article 12 – Noise abatement of the Colorado Revised Statutes (C.R.S.) 25-12-102 will be considered as part of the County’s determination for surrounding land uses.
- 4. In remote locations, where there is no reasonably proximate occupied structure or Designated Outside Activity Area (COGCC), the light industrial standard may be applicable as determined by the County.
- 5. Decibel levels shall be measured at least 350-feet from the boundary of the operation/noise source (from source or sound wall per COGCC) or at the property line of the adjacent land use, whichever is greater.
- 6. Construction of O&GFs, including drilling/well completions, recompletions, and pipeline installations, shall be subject to the maximum permissible noise levels specified for light industrial zones for the period within which construction is being conducted.
- 7. Quiet design mufflers (i.e., hospital grade or dual dissipative) or equal to or better than noise mitigation technologies shall be utilized for non-electrically operated equipment.
- 8. Motors, Generators, and engines shall be enclosed in acoustically insulated housings or covers.
- 9. *How are vibrational impacts addressed? This has been an issue for residents beyond COGCC current setbacks.*

I. Dust:

- 1. **A Fugitive Dust Control Plan** shall be submitted with all O&GF applications. The plan

shall disclose techniques and methods to be utilized at the proposed O&GF to prevent or mitigate fugitive dust generated by the construction and operations of the proposed

O&GF and shall demonstrate compliance with and implementation of standards in Sections 17.3.I and 8.11 of this Code.

2. Best management practices (BMPs) for the mitigation of dust associated with on-site operations and traffic activities shall be employed at the facility. The BMPs shall be outlined in the Fugitive Dust Control Plan.
3. Produced water and other process fluids shall not be used for dust suppression **unless adequately pretreated so that it does not create odors and has been approved for land application by CDPHE Water Quality Control Division.** *I do not think this should be allowed within the county. The risk for contamination is too high even if treated* <https://earthworks.org/cms/assets/uploads/2019/04/CDPHE-TENORM-4.19.19.pdf>
4. Safety Data Sheets (SDSs) shall be provided with the application for any proposed chemical based dust suppressants.
5. Unless otherwise approved by the County Health and Engineering Departments, only water will be used for dust suppression activities within 300-feet of the ordinary high-water mark of any body of water.

J. Access:

1. **A Traffic Impact Analysis and Routing Plan** shall be submitted with all O&GF applications. The plan shall disclose routing alternatives and transportation infrastructure improvements proposed for the proposed O&GF to mitigate projected transportation impacts and demonstrate compliance with and implementation of the standards in this Section 17.3.E.
2. Designs for private access drives shall conform to the Local Low Volume cross section found in the Larimer County Rural Area Road Standards and shall include the following:
 - a. The first 50 feet of access drive from the edge of pavement of the adjacent road will be paved, or made of an approved all weather surface, and the remaining portions of the access drive shall be composed of a minimum of 6 inches of compacted Class 5 road base.
 - b. The access drive entrance shall include returns with a 30-foot radius.
 - c. A mud and debris tracking pad shall be located at the end of the paved portion of the access drive.

K. Chemical Handling:

1. **A Chemical and Hazardous Materials Report and Handling Plan** shall be submitted with all O&GF applications. The plan shall disclose the type of hazardous and non-hazardous materials and chemicals that will be used on the site of the proposed O&GF, including how they will be handled to prevent spills and demonstrate compliance with and implementation of standards in this Section 17.3.K.
2. Prior to any hydraulic fracturing activity, the Operator shall provide the County with a copy of the Chemical Disclosure Registry form provided to the COGCC pursuant to the COGCC's "Hydraulic Fracturing Chemical Disclosure".
3. Drilling and completion chemicals shall be removed from the site within sixty (60) days of the drilling completion.

L. Recycle, Reuse and Disposal of Fluids:

1. **A Waste Management and Disposal Plan** shall be submitted with all O&GF applications. The plan shall document the techniques and methods of the proposed O&GF to manage wastes generated on the site and demonstrate compliance with and implementation of

the standards in this Section 17.3.L.

2. Drilling, completion flowback, and produced fluids shall be recycled or reused whenever technically feasible.
3. If not to be recycled or reused onsite, exploration and production waste may be temporarily stored in tanks for up to 30-days while awaiting transport to licensed disposal or recycling sites.
4. Produced water shall be recycled or reused or shall be transported by pipeline unless easements are not available.
5. The Operator shall take precautions to prevent adverse environmental impacts to air, water, soil, or biological resources to the extent necessary to protect public health, safety and welfare, including the environment and Wildlife Resources to prevent the unauthorized discharge or disposal of oil, gas, Exploration and Production Waste, chemical substances, trash, discarded equipment, or other oil field waste.
6. The requirements of this Section 17.3.L shall not prevent discharges and beneficial uses reviewed and permitted by the CDPHE Water Quality Control Division and the Environmental Protection Agency (EPA).

I have concerns about the safety aspects of this section. Please consider any input from Thomas Borch on this section, as well.

M. Lighting and Visual Impacts:

1. For all phases of the development of the site, the application shall demonstrate compliance with the visual and aesthetic rules of COGCC and the Larimer County Land Use Code for landscaping, fencing and lighting set forth in Section 8.
2. All O&GFs shall be painted with colors that are matched to or slightly darker than the surrounding landscape, and shall utilize paint with uniform, non-contrasting, nonreflective color tones based upon the Munsell Soil Color Coding System.
3. The location of all outdoor lighting shall be designed to minimize off-site light spillage and glare using best practices recognized by the International Dark-Sky Association. See Section 8.15, Lighting Standards.
4. For all phases of site development, fencing shall be installed for security and visual aesthetics of the use.
5. Sound or screening wall to mitigate for noise during well completion may be required if the O&GF is within 2,000 feet of residential buildings or lots, if electric requirement is appealed.
6. O&GFs applications shall minimize removal of trees and vegetation on the site.
7. Landscaping and/or fencing for screening and visual quality as viewed from public rights-of-way and nearby residential areas shall be required within 6 months from the time of well completion and in accordance with requirements for the zoning district.
8. O&GF applications shall demonstrate compliance with weed control requirements of the County Weed District and Forestry Services Department, including for access roads serving the facility.

Note: Environmental and health advocacy groups would like the next section, Well Plugging and Abandonment, to be more extensive and address noticing requirements and inspections after removal. The industry groups noted that this is down hole regulation and therefore not included in the SB 19-181 granted authority.

N. Well Plugging and Abandonment:

1. **A Reclamation Plan** shall be submitted. The plan shall demonstrate how well abandonment and reclamation shall comply with the COGCC rules and shall include the following information:
 - a. Removal of all equipment from the well site,
 - b. Restoration of the site surface to the conditions of the site reclamation plan,
 - c. Notice to the County LGD of the commencement and completion of such activity, and
 - d. Coordinates for the location of the decommissioned well(s), and any associated gathering or flow lines, shall be provided with the notice of the completion of well abandonment.
 - e. Question: Should we include water testing/monitoring for a certain amount of time post plugging/abandoned wells to monitor that they are in sound condition and not leaking into water. This could be a condition of approval for certain sites (e.g., nearing high occupancy buildings, water reservoirs, drinking water wells.)

O. Well Liquids Unloading:

1. Best management practices, including artificial lift, automated plunger lifts and at least 98% emission reductions when utilizing combustion to control venting shall be employed at all facilities unless technically infeasible.
2. Approved manual unloading shall require on-site supervision of the unloading process.

P. Flammable Materials:

1. The location of flammable materials on site shall conform to all COGCC safety standards and local fire codes.
2. A minimum 25-foot buffer, free of weeds and dried grasses, shall be required around flammable materials or equipment.

Q. Waste Disposal:

1. **A Waste Management and Disposal Plan** shall be submitted with all O&GF applications. The plan shall document the techniques and methods of the proposed O&GF to manage wastes generated on the site and demonstrate compliance with and implementation of the standards in this Section 17.3.Q.
2. Oil and gas facilities shall remain free of debris and excess materials during all phases of operation.
3. Burning of debris, trash or other flammable material is not allowed.
4. Temporary storage of materials (up to 30-days) may be allowed with installation of screening to mitigate from aesthetic impacts from public rights-of-way or if requested by landowner.

R. Removal of Equipment:

1. There shall be no permanent storage of equipment (i.e., vehicles, trailers, commercial products, chemicals, drums, totes, containers, materials, and all other supplies not necessary for uses on an oil and gas location) on the site of an oil and gas facility.
2. When not in use, or if no longer needed for on-site operations, all equipment not being used on the site shall be removed.

S. Maintenance of Machinery:

1. Statewide Best Management Practices shall be used to prevent contamination of soils

and stormwater runoff, including equipment and vehicle maintenance and fluid containment.

2. There shall be no maintenance of field equipment involving hazardous materials within 300-feet of a water body *or drinking water source*

3. Any fueling on-site shall occur over an impervious surface with a bermed secondary containment and sump in case of a spill and shall not occur during storm events.

T. Flow Lines, Transfer Lines, and Gathering Lines:

1. All off-site lines transporting process materials, production wastes, product and any other items used or generated by the facility shall be located to avoid existing or proposed residential, commercial, and industrial buildings, places of assembly, surface waterbodies and designated open spaces. Buried pipelines shall be a minimum of 4-feet deep and shall be of detectable material which could include the addition of tracer wire to ensure detection during buried utility locating.
2. The location of pipelines shall be evaluated on a case-by-case basis, with the determining locational factor being the size and type of pipeline being proposed.
3. Coordinates of all flow lines, gathering lines, and transfer lines shall be provided. *New and existing to be used*

U. Temporary Water Lines:

1. Temporary waterlines shall be used, unless development is not within a water service area.
2. Temporary waterlines shall be buried at all existing driveway and road crossings, or utilize existing culverts, if available.

V. Financial Assurance:

1. The Applicant shall demonstrate the financial capability to reclaim all disturbed areas during each phase of the site development and following termination of the oil and gas operation on the site. This shall include meeting any state requirements, and any additional requirements the County deems necessary to protect the public health, safety, and welfare. *Adequate per well bonding needs to be required. The state requirements are currently insufficient to cover all costs associated with reclamation. Please protect the county from bearing the cost if an operator goes bankrupt.*
2. The Applicant shall, for the life of the use, **carry customary and usual environmental liability insurance.** *Again, we can see a potential issue if the site is sold off to another operator based on this language.*

17.1. XX – Additional Application Requirements.

- A. In addition to the items specified as required in Section 17.3., the applicant shall provide:
 1. A site inventory map.
 2. A Safety Management Plan.
 3. A Site Security Plan.
 4. A surface use agreement.
 5. A statement verifying the legal right to extract the mineral resources. *What is this? What will the county require as verification that all mineral owners were properly notified prior?*

17.4. – Appeals.

- A. Section 22 of this Code shall provide direction for all appeals to standards, processes and provisions of this Section 17.

17.5. – Enforcement and Inspections.

- A. Applications for O&GFs shall demonstrate compliance with this and all other relevant Sections of this Code. Failure of an Operator to maintain compliance with the County approval of an

O&GF may result in the revocation of the approval pursuant to the procedures in Section 12 of the Land Use Code. The County retains the right to seek whatever remedy or redress is legally allowable.

- B. The County reserves the right to inspect the property for compliance.

17.6. – Fees and Security for Reclamation.

- A. The following fees are applicable to oil and gas facilities:
- a. A Capital Transportation Impact fee.

In addition, please consider all costs to the county associated with allowing O&G operations to move forward including substantial staffing needs and air monitoring system and any other equipment. Those costs should be the applicant's responsibility, not the citizens of the county

17.7. – Termination of Use or Modifications.

- A. No modification to an approved O&GF shall be made without obtaining appropriate land use approvals from the County.
- B. Upon termination of use, the O&GF shall be reclaimed pursuant to the reclamation plan provided.

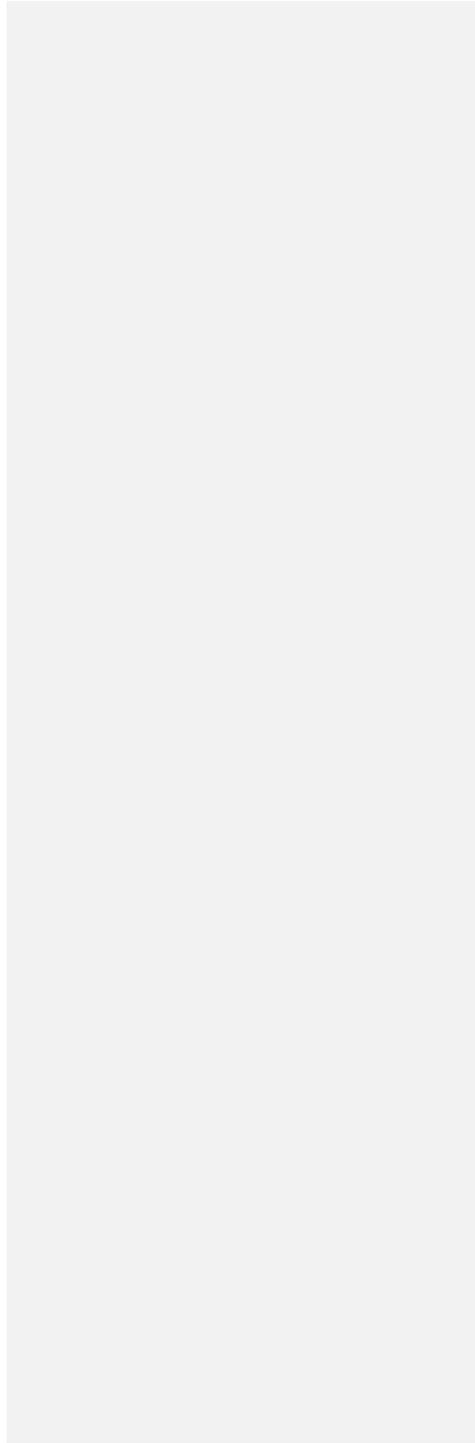
17.8. – Definitions.

- A. Unless otherwise listed herein, the definitions found within the C.R.S. and Colorado Oil and Gas Conservation Commission (COGCC) regulations shall apply.

Other considerations not included: Please include how multiple applications from an applicant or operator agreements will be processed. If simultaneous applications allowed, please put some additional processing time and notification requirements in place to allow adequate processing for each site.

January 6, 2020 Draft
Comments by Occidental
Petroleum

Attachment A: Section 17 Draft



17.0. – OIL AND GAS FACILITIES

17.1. – Intent and Purpose.

Note: This section has been updated to better reflect the language in SB 19-181.

- A. **Intent.** The intent of this section of the Land Use Code is to establish a regulatory framework for new oil and gas facilities (O&GFs), including recompletions to be located in the unincorporated areas of Larimer County in a manner that protects the public health, safety and general welfare, protects private property rights, protects environment and wildlife, and minimizes adverse impacts.
- B. **Authority:** C.R.S. 29-20-104-(1) provides the County authority to regulate and review applications pertaining to the surface development of O&GFs.
- C. **Purpose:** These regulations are necessary to:
 1. Ensure a comprehensive land use process and transparent public process for the development of new O&GFs, including recompletions, in the unincorporated areas of the County.
 2. Provide for the managed development, installation, maintenance, modification, reclamation and removal of O&GFs ~~and the reasonable accommodation of~~ oil and gas developers and operators, or mineral interest owners.
 3. Minimize to the maximum extent possible the nuisance effects of O&GFs through the application of best ~~management~~ techniques and technologies.
 4. Promote and protect the public health, safety and welfare, and protect the environment and wildlife by minimizing the adverse impacts of O&GFs ~~to the extent practical~~ be.
 5. Maximize protection of natural and cultural resources and public facilities.
 6. Strategically locate O&GFs to locate where adverse impacts from such operations can be ~~minimized or~~ avoided.
 7. Minimize and mitigate the extent and severity of adverse impacts that cannot be avoided.
 8. Confirm the financial, indemnification and insurance capacities of the oil and gas developer/operator to ensure timely and effective construction, production, removal and reclamation of O&GFs and infrastructure.
- D. **Applicability:** These regulations shall apply to all new O&GFs, including exploration and recompletions, to be constructed on any property in all zoning districts in the unincorporated portions of Larimer County. ~~These regulations do not apply to gathering lines that are not constructed in conjunction with O&GFs.~~
- E. **Severability:** If any section, clause, provision, or portion of these regulations should be found to be unconstitutional or otherwise invalid by a court of competent jurisdiction, the remainder of the regulations in this section shall not be affected thereby and is hereby declared to be necessary for the public health, safety and welfare.

Deleted: without unreasonably discriminating against...

Deleted: available

Commented [MK1]: Definitions not specifically defined in this code will be taken from the COGCC definitions. The COGCC definition of OGF does not include gathering. Clarifying this in these regulations

Commented [DK2]: Recommend an administrative approval tract for (1) recompletions,(2) modifications that require county approval (see section 17.7.A for more detail related to modifications), and (3) maybe those applications that fulfill staff's preferred setback distances (see Section 17.3.B for more detail related to this)

17.2. – Review Procedures and Required Permits.

Note: Some members of the Task Force and stakeholders provided input that they would like to see a tiered process for reviews, including an administrative process for simpler, smaller projects. The County could consider defining an administrative process (e.g., PSP) for recompletions that do not exceed a

certain percentage in size greater than what exists, or perhaps require a building permit only for replacement of equipment.

- A. **General Requirements.** No person, firm or corporation shall establish, construct, build a new O&GF, including recompletions, without first having obtained required land use approval(s) and permits as required by this Code. Applications to the County for new O&GFs, including recompletions, may be submitted simultaneously with the Colorado Oil and Gas Conservation Commission (COGCC) permitting process, but approval by the County must be secured prior to construction.
- B. **County Review Process:** All new O&GFs, including recompletions, in the unincorporated portions of Larimer County shall require approval of a Special Review application for the proposed facility as set forth in Section 4.5 of this Code. Application and submittal requirements for O&GFs are specified in the following Community Development Department application handouts:
 - 1. Sketch Plan Review Application and Submittal Requirements for Oil and Gas Facilities.
 - 2. Neighborhood Meeting Submittal Requirements and Guidelines for Oil and Gas Facilities.
 - 3. Special Review Application and Submittal Requirements for Oil and Gas Facilities.
- C. **County Permits.** Prior to the commencement of any construction activity for an O&GF, all required permits for such facilities shall be approved. Required permits include, but are not limited to:
 - 1. Access permits,
 - 2. Development construction permit,
 - 3. Building permits for all qualifying buildings and structures,
 - 4. Electrical permits, and
 - 5. All federal, state and local permits.
- D. **Non-County Permits:** County approval of an O&GF shall not relieve the landowner or applicant of the responsibility for securing other permits or approvals required by any other applicable County Departments, local fire district, municipalities, or other applicable public agencies.
- E. **Technical Expert Review:** *Applications for O&GFs may involve complex technical issues that require review and input that is beyond the expertise of County Staff. If such a situation arises, the Community Development Director may first reach out to the technical experts at the Colorado Oil and Gas Conservation Commission or the Colorado Department of Public Health and Environment for guidance and help. If this is not possible, then the Community Development Director may commission a third-party review that has a demonstrated technical background in the relevant subject matter and, upon notice to the Applicant, require the applicant to pay reasonable costs for the third-party review. All analysis and recommendations from the third-party expert must be based on technical facts. Selection of a third-party expert(s) to review portions of the proposal will be at the discretion of the County.*

17.3. – Standards Required for all Oil and Gas Facilities.

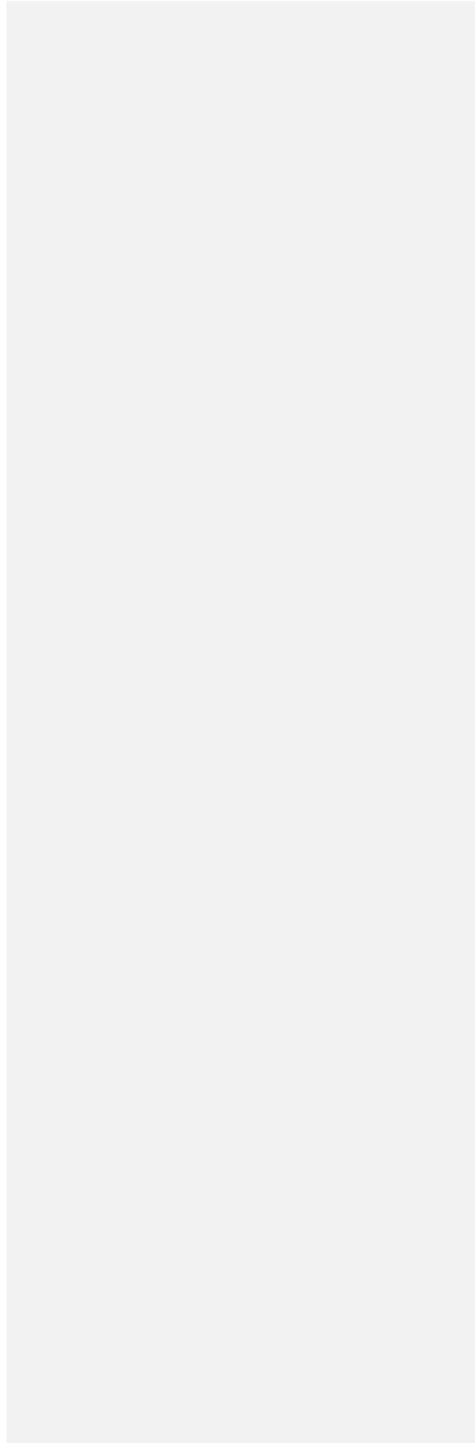
- A. **General:**
 - 1. In addition to the standards and requirements of this Section 17, all other relevant standards and regulations set forth in this Code shall also apply.
 - 2. All applications for new O&GFs, including recompletions, shall meet all applicable federal, state and local standards and regulations pertaining to the development

Deleted: Applications for O&GFs may involve complex technical issues that require review and input that is beyond the expertise of County staff. If such a situation arises, the Community Development Director may commission a third-party review of the relevant subject matter and require the applicant to pay reasonable costs for the third-party review. Selection of a third-party expert(s) to review portions the proposal will be at the discretion of the County.

Larimer County - Land Use Code Regulations – New Chapter 17

Attachment A

and operation of such facilities. When the standards and regulations contained herein



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3

conflict with the standards and requirements of another agency, the stricter standard shall apply.

Note: The setbacks and buffers section below has been added since Draft 1 for Planning Commission and Board of County Commissioner discussion. The Task Force did not review this section.

B. **Setbacks:**

C. **Air Quality:**

1. **An Air Quality Report/Plan** shall be submitted with all O&GF applications. The report/plan shall demonstrate how the development and operation of the facility will avoid and/or mitigate adverse impacts to air quality and demonstrate compliance with and implementation of standards in Sections 17.3.C. and 8.11 of this Code.
2. In addition to all federal and state laws, rules and regulations, applications for O&GFs shall demonstrate how exploration, construction and standard operations of a O&GF, including traffic and construction equipment, will comply with the rules and regulations of the Colorado Air Quality Control Commission (AQCC). Information to be provided shall include all appropriate applications of notifications and permits for sources of emissions.
3. **Green Completions** shall be used for all completions and well workovers following hydraulic fracturing. Such completions shall include the use of Best Management Practices including, when available, the following unless an equal or better system exists:

Commented [DK3]: Consider a "Siting Guidance" document that will include these four requirements as preferences of staff/guidance but not as a regulatory standard. This could allow for an administrative approval tract if all of these preferences are implemented by the operator.

Additionally, we recommend the County include an Alternative Location Analysis. This will also lend to collaboration with a likely state ALA process.

Deleted: <#>The minimum required setbacks for buildings and structures set forth in the applicable zoning district shall apply to the proposed O&GF. ¶
<#>In addition to the setbacks in paragraph 3 below, the setbacks set forth in Section 4.9 of this Code shall apply to proposed O&GFs to minimize their impacts on public health, safety, welfare, the environment, and agricultural operations. ¶
<#>To achieve the intent and purpose of this Section 17, the following minimum setbacks for O&GFs shall be required, unless more restrictive setbacks are required by the rules of the COGCC: ¶
<#>1,000-foot setback from a residential building or platted residential lot ¶
<#>2,000-foot setback from a high occupancy building including schools, registered day cares, nursing homes. ¶
<#>500-foot setback from a water body or designated outside activity area ¶
<#>To achieve the objectives of Section 17.1.C., the Board of County Commissioners may, on a case by case basis, require an increase to these minimum setbacks. ¶
<#>The Board of County Commissioners may allow a reduction of the minimum setbacks when it has been determined that the applicant has adequately demonstrated that the setbacks prohibit access to the mineral interests being sought, and the reduced setbacks will achieve to the extent practicable the objectives of this code. ¶

Commented [DK4]: The standards in Section 17.3 require 12 plans to be submitted. Recommend that the County allow staff and operators to jointly development templates for these plans to ensure they provide the required information in a consistent, relevant, and efficient manner.

Commented [MK5]: As the regulated community operators are required to comply with all regulations required by CDPHE and other agencies. Permits may not be available at the time of application. Clarify what is necessary to secure completeness with Larimer County's process.

Commented [MK6]: Is the County referring to "Green Completions" as defined by the COGCC? Recommend the county defer to the COGCC for "downhole" operations including hydraulic fracturing.

Deleted: Reduced Emission

- a. Except for very small productions, closed loop, pitless drilling, completion systems, without permanent on-site storage tanks, for the containment and/or recycling of all drilling, completion and flowback fluids.
- b. Production flaring will only be allowed during emergencies or upset conditions. When allowed, routing and control of all emissions to a flare or combustor shall provide at least 98% destruction or removal efficiency.
- 4. O&GFs shall be equipped with electric-powered engines for motors, compressors, drilling and production equipment, and pumping systems unless no adequate electricity source is available, or it is technically and economically infeasible.
- 5. During exploration and construction, the applicant shall demonstrate that all facilities on the site, including traffic and construction equipment, complies with all AQCC rules and regulations.
- 6. O&GF applications shall include operational provisions to reduce emissions on Air Quality Action Advisory Days posted by the Colorado Department of Public Health and Environment (CDPHE) for the Front Range area. The provisions shall include how alerts are received, outline specific emission reduction measures, and include requirements for documenting the measures implemented. Measures should include:
 - a. Minimizing vehicle traffic and engine idling,
 - b. Reducing truck and worker traffic,
 - c. Delaying vehicle refueling,
 - d. Suspending or delaying use of fossil fuel powered equipment,
 - e. Postponing construction and maintenance activities,
 - f. Postponing well maintenance and liquid unloading that would result in emission releases to the atmosphere, and
 - g. Postponing or reducing operations with high potential to emit VOC's of NOx's.

D. Leak Detection and Repair:

- 1. A **Leak Detections and Repair Plan** shall be submitted with all O&GF applications. The plan shall disclose techniques, methods and protocols that will be utilized at the proposed O&GF to identify, prevent, contain, document, repair and report leaks, and it shall demonstrate how it will comply with and implement the standards in this Section 17.1.3. D.F.
- 2. Operators shall conduct leak detection and repair inspections at the frequency required by the APCD for the emission source using modern leak detection technologies and equipment. The results of said inspections, including all corrective actions taken, shall be reported to the Larimer County Department of Health and Environment (LCDHE) and County Local Government Designee (LGD) upon request.
- 3. All verified leaks at an O&GF shall be reported to the LCDHE and LGD within 24-hours of the detection of the leak.

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Commented [MK7]: For safety and environmental reasons a flare is necessary during drilling operations

Deleted: <#>Zero emission desiccant dehydrators

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<#>Emission controls of 90% or better for glycol dehydrators.¶
<#>Pressure-suitable separator and vapor recovery units.¶
<#>No-bleed continuous and intermittent pneumatic devices.¶
<#>Automated tank gauging.¶

Deleted: facilities on

Commented [MK9]: Some comment as above. Operator is required to comply with state regulations. Intent of this provision?

Commented [MK10]: Recommend that reporting requirements be tied to conditions 4 & 5

- 4. Repair of verified leaks shall occur within 72 hours of detection. If it is anticipated that a repair will take longer than 72 hours, the operator shall provide a written explanation to the LCDHE and the LGD as to why more time is required and how the leak will be contained. If a leak is not repaired within 5 calendar days, the O&GF shall be shut-in until the leak is repaired.
- 5. Equipment leaks that pose an imminent safety risk to persons, wildlife, or the environment shall undergo emergency shut down and not be allowed to operate until the operator has provided evidence that the leak has been repaired. “Grade 1 Gas Leak” means a gas leak that represents an existing or probable hazard to persons or property and requires immediate repair or continuous action until the conditions are no longer hazardous.
- 6. At least annually, operators shall provide a 2-week notice of a routine leak inspection to the LCDHE and LGD inviting them to attend and observe the inspection.

E. Odors:

- 1. An Odor Mitigation Plan shall be required for all O&GF applications indicating how the operations will mitigate odors from adversely impacting the public and wildlife and further demonstrating compliance with the standards in this Section 17.1.3.E.
- 2. Oil and gas operations shall comply with the CDPHE, AQCC, Regulation No. 2 Odor Emission, 5 Code of Colorado Regulations 1001-4.
- 3. Proposed O&GFs shall provide protocols for appropriate response to odor complaints.
- 4. The Odor Mitigation Plan shall include control strategies which may be implemented upon receipt of an odor complaint(s) or as required by the County. These Odor control strategies may include the following:
 - a. Odorants, that are not a masking agent, may be added to chillers and mud systems.
 - b. Operators shall not use odor masking agents or additives.
 - c. ↓
 - d. Additives intended to eliminate odors generated by the operations of an O&GF shall not create a separate odor.
 - e. ↓
 - f. Wipe down drill pipe as they exit the well bore each time.

F. Water Quality and Water Bodies:

- 1. A Water Quality Report/Plan shall be submitted with all O&GF applications. The report/plan shall demonstrate how the development and operations of the facility will avoid impacts to surface and ground waters in Larimer County, and demonstrate compliance with and implementation of standards in Sections 17.3.D. and 8.12 of this Code.

Deleted: 72-hours

Commented [MK11]: CDPHE has a 5 day requirement for wells to be shut-in until repaired. Request county regs are consistent with CDPHE.

Commented [MK12]: COGCC definition of “Grade one gas leak”

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Deleted: that include options for ceasing operations, notification of affected residents, and temporary relocation of residents until the source of the odor is identified and resolved

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Deleted: <#>The operator shall communicate the schedule/timing of well completion activities to adjacent and nearby residents which could include an online portal. As part of the application, provide information on how notifications will be communicated to the public.¶

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Deleted: <#>strategic

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Commented [MK15]: Not the best technology does not necessarily address odor.

Deleted: Filtration systems and/or additives to minimize, not mask, odors from drilling and fracturing fluids shall be utilized in the drilling and flowback processes

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Deleted: Enclosed shale shakers shall be utilized to contain fumes from exposed mud.

Deleted: <#>Drilling activities shall utilize minimum low odor Category III drilling fluid or non-diesel-based drilling muds that do not contain benzene, toluene, ethylbenzene or xylene (BTEX...)-¶

Deleted: <#>.¶

- 2. Baseline and subsequent water source tests, as typically required by and submitted to the COGCC and CDPHE, shall be provided to the LCDHE and the LGD for the life of the facility and any post-closure assessments, if approved by the owner(s) of the water well. It is recommended that the operator also post these reports online for public/access transparency.
- 3. The application shall provide documentation indicating how the COGCC waterquality protection standards are being implemented.
- 4. Locating O&GFs within a Federal Emergency Management Agency (FEMA) designated 100-year flood way shall not be allowed unless no other location is feasible, and all other appropriate permissions are obtained.
- 5. New wastewater injection wells shall not be allowed.
- 6. The requirements of this Section 17.4.E shall not prevent discharges reviewed and permitted by the CDPHE Water Quality Control Division, the EPA, and the Army Corps of Engineers.

Commented [DK19]: Recommend that County create a page for operators to upload these so this data is in one place for all operators.

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G. Spills and Releases:

- 1. A Spill Prevention Control and Countermeasure Plan shall be submitted within 6 months of the well's being put on production. The plan shall disclose techniques, methods, and protocols to be utilized at the proposed O&GF to prevent, contain, document and report any spills or releases, and shall demonstrate compliance with and implementation of the standards in this Section 17.3.G.
- 2. An Emergency Response Plan shall be provided that includes evacuation plans and routes, inventory of emergency response supplies and notification requirements.
- 3. Secondary containment shall be required.
- 4. Unloading areas shall be designed to contain potential spills or direct spills into other secondary containment areas
- 5. Containment systems constructed of steel rimmed berms, or similar impervious surfaces that are equal to or better, shall be used for all secondary containment areas.
- 6. Any spill or release reportable to the COGCC, shall upon discovery, be reported to the following Local Emergency Response Authorities in Larimer County concurrent with reporting to the COGCC:
 - a. Larimer County Sheriff – Public Safety Answering Point (PSAP) (9-1-1)
 - b. Larimer County Department of Health and Environment,
 - c. Local Fire Department/District,
 - d. Local Municipal Police Department if within in mile of a City or Town,
 - e. Larimer County Oil and Gas LGD, and
 - f. Larimer County Local Emergency Planning Committee (within 24-hours).
- 7. All spills or releases, whether reportable or not, shall be cleaned up immediately and to the satisfaction of the local emergency response authorities listed in the Spill Prevention Control and Countermeasure Plan.

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Deleted: and annual open house training for emergency services personnel to become familiar with the site....

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Commented [MK23]: COGCC reportable threshold is one barrel. The 25 gallon requirement is used for refined products and are not located at a O&GF. Spills at a location are generally water (fresh or produced)

Deleted: of greater than 25 gallons on an O&GF, including those thresholds

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Commented [MK24]: What is the criteria for this?

H. Noise:

- 1. A Noise Report and Mitigation Plan shall be required for all O&GF applications. The plan shall demonstrate how the operations will mitigate noise impacts to comply with

the noise standards contained in this Section 17.3.H.G. The report and plan shall include the following:

Commented [DK25]: This should be "H"

- a. A three-day (one day being a weekend day) baseline noise analysis.
 - b. Modeled decibel levels for various phases of development shall be presented using contour maps to radii of 350 feet from the site of operation/noise source (per COGCC) or at the property line of an adjacent land use, whichever is closer.
 - c. A plan of proposed mitigation measures to be implemented by the oil and gas operations during all stages of compliance with the maximum permissible noise levels as listed in Section H.2 below.
2. Noise generated from O&GFs shall comply with the following maximum permissible noise levels appropriate for the zoning and adjacent land uses as determined by the County except as required by 17.1.H.6:

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<u>ZONE AREA DESIGNATIONS</u>	<u>7:00 am to next 7:00 pm</u>	<u>7:00 pm to next 7:00 am</u>
Residential/Agricultural/Rural	55 db(A)	50 db(A)
Commercial	60 db(A)	55 db(A)
Light Industrial	70 db(A)	65 db(A)
Industrial	80 db(A)	75 db(A)

In the hours between 7:00 a.m. and the next 7:00 p.m., the noise levels permitted above may be increased by ten (10) db(A) for a single period of not to exceed fifteen minutes in any one-hour period. Night-time levels between 7:00 p.m. and the next 7:00 a.m. shall not be exceeded therefore requiring strategic planning of noise-inducing activities to be conducted during daytime hours at the site.

- 3. Decibel levels produced by the O&GF shall meet the identified level for the appropriate zoning area designation of the adjacent land use. Zones as defined by Article 12 –Noise abatement of the Colorado Revised Statutes (C.R.S.) 25-12-102 will be considered as part of the County's determination for surrounding land uses.
- 4. In remote locations, where there is no reasonably proximate occupied structure or Designated Outside Activity Area (COGCC), the light industrial standard may be applicable as determined by the County.
- 5. Decibel levels shall be measured at least 350-feet from the boundary of the operation/noise source (from source or sound wall per COGCC) or at the property line of the adjacent land use, whichever is greater.
- 6. Construction of O&GFs, including drilling/well completions, recompletions, and pipeline installations, shall be subject to the maximum permissible noise levels specified for light industrial zones for the period within which construction is being conducted.
- 7. Quiet design mufflers (i.e., hospital grade or dual dissipative) or equal to or better than noise mitigation technologies shall be utilized for non-electrically operated equipment.

I. Dust:

- 1. **A Fugitive Dust Control Plan** shall be submitted with all O&GF applications. The plan shall disclose techniques and methods to be utilized at the proposed O&GF to prevent or mitigate fugitive dust generated by the construction and operations of the proposed

Deleted: <#>Motors, Generators, and engines shall be enclosed in acoustically insulated housings or covers...¶
¶

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O&GF and shall demonstrate compliance with and implementation of standards in Sections 17.3.I and 8.11 of this Code.

- 2. Best management practices (BMPs) for the mitigation of dust associated with on-site operations and traffic activities shall be employed at the facility. The BMPs shall be outlined in the Fugitive Dust Control Plan.
- 3. Produced water and other process fluids shall not be used for dust suppression unless adequately pretreated so that it does not create odors and has been approved for land application by CDPHE Water Quality Control Division.
- 4. Safety Data Sheets (SDSs) shall be provided with the application for any proposed chemical based dust suppressants.
- 5. Unless otherwise approved by the County Health and Engineering Departments, only water will be used for dust suppression activities within 300-feet of the ordinary high-water mark of any body of water.

J. Access:

- 1. **A Traffic Impact Analysis and Routing Plan** shall be submitted with all O&GF applications. The plan shall disclose routing alternatives and transportation infrastructure improvements proposed, if applicable, for the proposed O&GF to mitigate projected transportation impacts and demonstrate compliance with and implementation of the standards in this Section 17.3.I.
- 2. Designs for private access drives shall conform to the Local Low Volume cross section found in the Larimer County Rural Area Road Standards and shall include the following:
 - a. The first 50 feet of access drive from the edge of pavement of the adjacent road will be paved, or made of an approved all-weather surface, and the remaining portions of the access drive shall be composed of a minimum of 6 inches of compacted Class 5 road base.
 - b. The access drive entrance shall include returns with a 30-foot radius.
 - c. A mud and debris tracking pad shall be located at the end of the paved portion of the access drive.

Commented [MK27]: O&G traffic is temporary and generally does not necessitate additional infrastructure. More appropriate would be a traffic route plan and a plan that addresses impacts from the operators long term development.

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K. Chemical Handling:

- 1. **A Chemical and Hazardous Materials Report and Handling Plan** shall be submitted with all O&GF applications. The plan shall disclose the type of hazardous and non-hazardous materials and chemicals that will be used on the permanent site of the proposed O&GF, including how they will be handled to prevent spills and demonstrate compliance with and implementation of standards in this Section 17.3.K.
- 2. Prior to any hydraulic fracturing activity, the Operator shall provide the LGD, with a copy of the Chemical Disclosure Registry form provided to the COGCC pursuant to the COGCC's "Hydraulic Fracturing Chemical Disclosure".
- 3. Drilling and completion chemicals shall be removed from the site within sixty (60) days of the drilling completion.

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L. Recycle, Reuse and Disposal of Fluids:

- 1. **A Waste Management and Disposal Plan** shall be submitted with all O&GF applications. The plan shall document the techniques and methods of the proposed O&GF to manage wastes generated on the site and demonstrate compliance with and implementation of the standards in this Section 17.3.L.
- 2. Drilling, completion flowback, and produced fluids shall be recycled or reused whenever

- Technically and economically feasible.
3. If not to be recycled or reused onsite, exploration and production waste may be temporarily stored in tanks for up to 30-days while awaiting transport to licensed disposal or recycling sites.
 4. Produced water shall be recycled or reused or shall be transported by pipeline unless infeasible.
 5. The Operator shall take precautions to minimize adverse environmental impacts to air, water, soil, or biological resources to the extent necessary to protect public health, safety and welfare, including the environment and Wildlife Resources to prevent the unauthorized discharge or disposal of oil, gas, Exploration and Production Waste, chemical substances, trash, discarded equipment, or other oil field waste.
 6. The requirements of this Section 17.3.L shall not prevent discharges and beneficial uses reviewed and permitted by the CDPHE Water Quality Control Division and the Environmental Protection Agency (EPA).

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Commented [MK29]: Prevent is not feasible standard for any type of development

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Commented [MK30]: COGCC definition?

Commented [MK31]: COGCC definition/

M. Lighting and Visual Impacts:

1. For all phases of the development of the site, the application shall demonstrate compliance with the visual and aesthetic rules of COGCC and the Larimer County Land Use Code for landscaping, fencing and lighting set forth in Section 8.
2. All O&GFs shall be painted with colors that are matched to or slightly darker than the surrounding landscape, and shall utilize paint with uniform, non-contrasting, nonreflective color tones based upon the Munsell Soil Color Coding System.
3. The location of all outdoor lighting shall be designed to minimize off-site light spillage and glare using best practices. See Section 8.15, Lighting Standards.
4. For all phases of site development, fencing shall be installed for security and visual aesthetics of the use.
5. Sound or screening wall to mitigate for noise during well completion may be required if the O&GF is within 2,000 feet of residential buildings.
6. O&GFs applications shall minimize removal of trees and vegetation on the site.
7. Landscaping and/or fencing for screening and visual quality as viewed from public rights-of-way and nearby residential areas shall be required within 6 months from the time of well completion and in accordance with requirements for the zoning district.
8. O&GF applications shall demonstrate compliance with weed control requirements of the County Weed District and Forestry Services Department, including for access roads serving the facility.

Deleted: recognized by the International Dark-Sky Association...

Commented [MK32]: Why necessary to mitigate noise for a vacant lot? County is applying a standard for noise measures taken to reach that standard would be part of operators plan and not dictated by the county.

Deleted: or lots, if electric requirement is appealed...

Deleted: <#>Well Plugging and Abandonment: ¶ <#>A Reclamation Plan shall be submitted. The plan shall demonstrate how well abandonment and reclamation shall comply with the COGCC rules and shall include the following information: ¶ <#>Removal of all equipment from the well site, ¶ <#>Restoration of the site surface to the conditions of the site reclamation plan, ¶ <#>Notice to the County LGD of the commencement and completion of such activity, and ¶ <#>Coordinates for the location of the decommissioned well(s), and any associated gathering or flow lines, shall be provided with the notice of the completion of well abandonment. ¶ <#>Question: Should we include water testing/monitoring for a certain amount of time post plugging/abandoned wells to monitor that they are in sound condition and not leaking into water. This could be a condition of approval for certain sites (e.g., nearing high occupancy buildings, water reservoirs, drinking water wells.) ¶

Note: Environmental and health advocacy groups would like the next section, Well Plugging and Abandonment, to be more extensive and address noticing requirements and inspections after removal. The industry groups noted that this is down hole regulation and therefore not included in the SB 19-181 granted authority.

N. Well Liquids Unloading:

1. Best management practices, including artificial lift, automated plunger lifts and at least 98% emission reductions when utilizing combustion to control venting shall be employed at all facilities unless technically infeasible.
2. Approved manual unloading shall require on-site supervision of the uploading process.

O. Flammable Materials:

1. The location of flammable materials on site shall conform to all COGCC safety standards and local fire codes.
2. A minimum 25-foot buffer, free of weeds and dried grasses, shall be required around flammable materials or equipment.
3. ↓

P. Removal of Equipment:

1. There shall be no permanent storage of equipment (i.e., vehicles, trailers, commercial products, chemicals, drums, totes, containers, materials, and all other supplies not necessary for uses on an oil and gas location) on the site of an oil and gas facility.
2. When not in use, or if no longer needed for on-site operations, all equipment not being used on the site shall be removed.

Q. Maintenance of Machinery:

1. Statewide Best Management Practices shall be used to prevent contamination of soils and stormwater runoff, including equipment and vehicle maintenance and fluid containment.
2. There shall be no maintenance of field equipment involving hazardous materials within 300-feet of a water body.

Deleted: ~~<#>Waste Disposal:~~ ¶
~~<#>A Waste Management and Disposal Plan shall be submitted with all O&GF applications. The plan shall document the techniques and methods of the proposed O&GF to manage wastes generated on the site and demonstrate compliance with and implementation of the standards in this Section 17.3.Q. ¶~~
~~<#>Oil and gas facilities shall remain free of debris and excess materials during all phases of operation. ¶~~
~~<#>Burning of debris, trash or other flammable material is not allowed. ¶~~
~~<#>Temporary storage of materials (up to 30-days) may be allowed with installation of screening to mitigate from aesthetic impacts from public rights-of-way or if requested by landowner.~~

3. Any fueling on-site shall occur over an impervious surface with a bermed secondary containment ~~in case of a spill and shall not occur during storm events.~~

Commented [MK35]: Permeant sumps are not installed on location. Fluids are removed with vac-truck

R. Flow Lines, Transfer Lines, and Gathering Lines:

1. All off-site ~~flowlines~~ lines transporting product generated by the facility shall be located to avoid existing or proposed residential, commercial, and industrial buildings, places of assembly, surface waterbodies and designated open spaces, ~~when technically and economically feasible~~. Buried pipelines shall be a minimum of 4-feet deep and shall be of detectable material which could include the addition of tracer wire to ensure detection during buried utility locating.

Deleted: and sump

Deleted: process materials, production wastes,

Deleted: and any other items used or

2. The location of pipelines shall be evaluated on a case-by-case basis, with the determining locational factor being the size and type of pipeline being ~~proposed~~.

Commented [MK36]: Consideration should be given for surface owner preference.

3. Coordinates of all flow lines, ~~shall~~ be provided.

Commented [MK37]: Operator does not install or own gathering lines and would not have the coordinates/location information.

S. Temporary Water Lines:

1. Temporary waterlines shall be used, unless development is not within a water service area.

Deleted: gathering lines, and transfer lines

2. Temporary waterlines shall be buried at all existing driveway and road crossings, or utilize existing culverts, if available.

T. Financial Assurance:

1. The Applicant shall demonstrate the financial capability to reclaim all disturbed areas during each phase of the site development and following termination of the oil and gas operation on the site. This shall include meeting any state requirements, ~~↓~~

Deleted: , and any additional requirements the County deems necessary to protect the public health, safety, and welfare.

2. The Applicant shall, for the life of the use, carry ~~or utilize~~ customary and usual environmental liability insurance.

17.1. XX – Additional Application Requirements.

A. In addition to the items specified as required in Section 17.3., the applicant shall provide:

- 1. A site inventory map.
- 2. A Safety Management Plan.
- 3. A Site Security Plan.
- 4. A surface use agreement.
- 5. A statement verifying the legal right to extract the mineral resources.

17.4. – Appeals.

A. Section 22 of this Code shall provide direction for all appeals to standards, processes and provisions of this Section 17.

17.5. – Enforcement and Inspections.

A. Applications for O&GFs shall demonstrate compliance with this and all other relevant Sections of this Code. Failure of an Operator to maintain compliance with the County approval of an O&GF may result in the revocation of the approval pursuant to the procedures in Section 12 of the Land Use Code. The County retains the right to seek whatever remedy or redress is legally allowable.

B. The County reserves the right to inspect the property for compliance.

17.6. – Fees and Security for Reclamation.

- A. The following fees are applicable to oil and gas facilities:
 - a. A Capital Transportation Impact fee.

17.7. – Termination of Use or Modifications.

- A. No significant modification to an approved O&GF shall be made without obtaining appropriate land use approvals from the County.
- B. Upon termination of use, the O&GF shall be reclaimed pursuant to the reclamation plan provided.

17.8. – Definitions.

- A. Unless otherwise listed herein, the definitions found within the C.R.S. and Colorado Oil and Gas Conservation Commission (COGCC) regulations shall apply.

January 6, 2020 Draft
Letter by COGA



Occidental Petroleum Corporation
1099 18th Street
Denver, CO 80202
(720) 929-6000

January 24, 2020

VIA EMAIL

Matthew Lafferty
LARIMER COUNTY
Community Development Department
200 W. Oak Street, Suite 3100
Fort Collins CO 80521

RE: Proposed Larimar County Oil and Gas Regulations

Dear Mr. Lafferty,

Occidental Petroleum Corporation (“OXY”) sincerely thanks you for the opportunity to comment on the County’s second draft of oil and gas land use regulations dated January 3, 2020. Occidental supports the County’s efforts to implement these regulations based on authority granted in Senate Bill 19-181. OXY supports the intent of these regulations in general and supports the concepts proposed.

However, there are two areas that OXY respectfully requests the County to consider adding/making changes to the January 3, 2020 draft. These two items are discussed below.

Implement a Two-Track Permitting Process Allowing for Administrative Approval for a Subset of Oil and Gas Applications

Based on extensive discussion during the task force meetings, OXY respectfully requests that the County consider implementing a two-track permitting process that will allow County staff to administratively approve a subset of oil and gas applications.

OXY suggests, at a minimum, the following oil and gas applications not be subject to the Special Review application requirements set forth in Section 4.5 of the County’s Land Use Code and allow County staff to administratively approve:

1. New oil and gas locations that adhere to the following three siting preferences:
 - a. Proposed location is at least 1,000 feet from all existing residential buildings; AND
 - b. Proposed location is at least 500 feet from all drinking water supplies and Waters of the State; AND
 - c. Proposed location is not within a Federal Emergency Management Agency (“FEMA”) designated 100-year floodway.
2. Modifications to an already approved application or legal non-conforming location so long as disturbance area still complies with the three siting preferences outlined in items 1a, 1b, and 1c above.
3. All recompletions.

Recommend the County implement a requirement for community outreach and notice for all oil and gas applications including those that proceed through the administrative approval track. This will ensure all nearby residents have an opportunity to comment and engage in the application review process. OXY suggests notice to all residents within 1,500 feet of the proposed oil and gas location.

An administrative approval process tied to siting preferences as outlined in bullets 1a, 1b, and 1c above will further incentivize operators to take a detailed and comprehensive look at siting. Further, one size fits all setbacks or siting restrictions as outlined in current Sections 17.3.B.3.a, 17.3.B.3.c, and 17.3.F.4 do not align with planning and land use review the county undergoes for other types of development. Therefore, OXY recommends these three sections be removed.

Develop a Robust Alternative Location Analysis Process

All oil and gas applications, regardless of approval track, be required to have a detailed Alternative Location Analysis (ALA). Implementing an ALA process allows for alignment with regulations currently being proposed by the Colorado Oil and Gas Conservation Commission and will minimize potential conflicts between the county's special use permit and the state's location permit. This ALA should consist of the following:

1. A description of a siting reviews the operator undertook to select the preferred location; AND
2. The preferred location with justification for selection of that location including why the operator believes this location is at least as protective as other nearby alternative locations; AND
3. Discussion of best management practices that the operator will implement to minimize and mitigate impacts of development; AND
4. Discussion of community outreach already conducted or planned.

Like the administrative review process recommended above, an ALA process is a more effective planning tool than one size fits all setbacks or siting restrictions.

As always, OXY staff is available to discuss the concepts outlined. Thank you for your consideration to these suggested changes and the attached redline.

Sincerely,

Kim M Cooke

Kim M Cooke, Director Regulatory Policy
Occidental Petroleum Corporation

January 6, 2020 Draft
Comments by Platte River
Power

Attachment A: Section 17 Draft

17.0. – OIL AND GAS FACILITIES

17.1. – Intent and Purpose.

Note: This section has been updated to better reflect the language in SB 19-181.

- A. **Intent.** The intent of this section of the Land Use Code is to establish a regulatory framework for new oil and gas facilities (O&GFs), including recompletions to be located in the unincorporated areas of Larimer County in a manner that protects the public health, safety and general welfare, protects private property rights, protects environment and wildlife, and minimizes adverse impacts.
- B. **Authority:** C.R.S. 29-20-104-(1) provides the County authority to regulate and review applications pertaining to the surface development of O&GFs.
- C. **Purpose:** These regulations are necessary to:
 1. Ensure a comprehensive land use process and transparent public process for the development of new O&GFs, including recompletions, in the unincorporated areas of the County.
 2. Provide for the managed development, installation, maintenance, modification, reclamation and removal of O&GFs without unreasonably discriminating against oil and gas developers and operators, or mineral interest owners.
 3. Minimize to the maximum extent possible the nuisance effects of O&GFs through the application of best available techniques and technologies.
 4. Promote and protect the public health, safety and welfare, and protect the environment and wildlife by minimizing the adverse impacts of O&GFs.
 5. Maximize protection of natural and cultural resources and public facilities.
 6. Strategically locate O&GFs to locate where adverse impacts from such operations can be avoided.
 7. Minimize and mitigate the extent and severity of adverse impacts that cannot be avoided.
 8. Confirm the financial, indemnification and insurance capacities of the oil and gas developer/operator to ensure timely and effective construction, production, removal and reclamation of O&GFs and infrastructure.
- D. **Applicability:** These regulations shall apply to all new O&GFs, including exploration and recompletions, to be constructed on any property in all zoning districts in the unincorporated portions of Larimer County.
- E. **Severability:** If any section, clause, provision, or portion of these regulations should be found to be unconstitutional or otherwise invalid by a court of competent jurisdiction, the remainder of the regulations in this section shall not be affected thereby and is hereby declared to be necessary for the public health, safety and welfare.

Commented [A1]: Consider modifying OG&F definition to include recompletions in general for clarity (as opposed to multiple references of "including recompletions").

Commented [A2]: We recognize the purpose here is to balance the rights of oil and gas developers and mineral owners with the mandate to maximize protecting public health, safety, welfare and the environment under 17.1.C.4. The term "unreasonably discriminating," however, should be replaced with language regarding balancing the duty to protect public health, safety, welfare and the environment, with the rights of oil and gas operators and mineral interest owners, and the need for reasonable regulation.

17.2. – Review Procedures and Required Permits.

Note: Some members of the Task Force and stakeholders provided input that they would like to see a tiered process for reviews, including an administrative process for simpler, smaller projects. The County could consider defining an administrative process (e.g., PSP) for recompletions that do not exceed a

certain percentage in size greater than what exists, or perhaps require a building permit only for replacement of equipment.

- A. **General Requirements.** No person, firm or corporation shall establish, construct, build a new O&GF, including recompletions, without first having obtained required land use approval(s) and permits as required by this Code. Applications to the County for new O&GFs, including recompletions, may be submitted simultaneously with the Colorado Oil and Gas Conservation Commission (COGCC) permitting process, but approval by the County must be secured prior to construction.
- B. **County Review Process:** All new O&GFs, including recompletions, in the unincorporated portions of Larimer County shall require approval of a Special Review application for the proposed facility as set forth in Section 4.5 of this Code. Application and submittal requirements for O&GFs are specified in the following Community Development Department application handouts:
 1. Sketch Plan Review Application and Submittal Requirements for Oil and Gas Facilities.
 2. Neighborhood Meeting Submittal Requirements and Guidelines for Oil and Gas Facilities.
 3. Special Review Application and Submittal Requirements for Oil and Gas Facilities.
- C. **County Permits.** Prior to the commencement of any construction activity for an O&GF, an applicant shall first obtain all required permits for such facilities shall be approved. Required permits include, but are not limited to:
 1. Access permits,
 2. Development construction permit,
 3. Building permits for all qualifying buildings and structures,
 4. Electrical permits, and
 5. All federal, state and local permits.
- D. **Non-County Permits:** County approval of an O&GF shall not relieve the landowner or applicant of the responsibility for securing other permits or approvals required by any other applicable County Departments, local fire district, municipalities, or other applicable public agencies.
- E. **Technical Expert Review:** Applications for O&GFs may involve complex technical issues that require review and input that is beyond the expertise of County staff. If such a situation arises, the Community Development Director may commission a third-party review of the relevant subject matter and require the applicant to pay reasonable costs for the third-party review. Selection of a third-party expert(s) to review portions the proposal will be at the discretion of the County.

Commented [A3]: Platte River would like to see all applications for O&GF be subject to the Special Review process. If at a later date the process can be streamlined, these regulations can be revised. But at the outset, special review seems the appropriate standard for all applications.

Commented [A4]: The “shall be approved” language implies a duty on the County to approve permits.

17.3. – Standards Required for all Oil and Gas Facilities.

- A. **General:**
 1. In addition to the standards and requirements of this Section 17, all other relevant standards and regulations set forth in this Code shall also apply.
 2. All applications for new O&GFs, including recompletions, shall meet all applicable federal, state and local standards and regulations pertaining to the development and operation of such facilities. When the standards and regulations contained herein

conflict with the standards and requirements of another agency, the stricter standard shall apply.

Note: The setbacks and buffers section below has been added since Draft 1 for Planning Commission and Board of County Commissioner discussion. The Task Force did not review this section.

B. Setbacks:

1. The minimum required setbacks for buildings and structures set forth in the applicable zoning district shall apply to the proposed O&GF.
2. In addition to the setbacks in paragraph 3 below, the setbacks set forth in Section 4.9 of this Code shall apply to proposed O&GFs to minimize their impacts on public health, safety, welfare, the environment, and agricultural operations.
3. To achieve the intent and purpose of this Section 17, the following minimum setbacks for O&GFs shall be required, unless more restrictive setbacks are required by the rules of the COGCC:
 - a. 1,000-foot setback from a residential building or platted residential lot
 - b. 2,000-foot setback from a high occupancy building including schools, registered day cares, nursing homes.
 - c. 500-foot setback from a water body or designated outside activity area
4. To achieve the objectives of Section 17.1.C., the Board of County Commissioners may, on a case by case basis, require an increase to these minimum setbacks.
5. ~~The Board of County Commissioners may allow a reduction of the minimum setbacks when it has been determined that the applicant has adequately demonstrated that the setbacks prohibit access to the mineral interests being sought, and the reduced setbacks will achieve to the extent practicable the objectives of this code.~~

C. Air Quality:

1. An Air Quality Report/Plan shall be submitted with all O&GF applications. The report/plan shall demonstrate how the development and operation of the facility will avoid and/or mitigate adverse impacts to air quality and demonstrate compliance with and implementation of standards in Sections 17.3.C. and 8.11 of this Code.
2. In addition to all federal and state laws, rules and regulations, applications for O&GFs shall demonstrate how exploration, construction and standard operations of a O&GF, including traffic and construction equipment, will comply with the rules and regulations of the Colorado Air Quality Control Commission (AQCC). Information to be provided shall include all appropriate applications of notifications and permits for sources of emissions.
3. Reduced Emission Completions shall be used for all completions and well workovers following hydraulic fracturing. Such completions shall include the use of Best Management Practices including, when available, the following unless an equal or better system exists:

Commented [A5]: Platte River proposes removing this provision and urges Larimer County to establish firm minimum setbacks. This provision creates a gray area without adequate standards and will allow oil and gas operators to avoid the minimum setback requirements.

- a. Except for very small productions, closed loop, pitless drilling, completion systems, without permanent on-site storage tanks, for the containment and/or recycling of all drilling, completion and flowback fluids.
 - b. Flaring only allowed during emergencies or upset conditions. When allowed, routing and control of all emissions to a flare or combustor shall provide at least 98% destruction or removal efficiency.
 - c. Zero emission desiccant dehydrators.
 - d. Emission controls of 90% or better for glycol dehydrators.
 - e. Pressure-suitable separator and vapor recovery units.
 - f. No-bleed continuous and intermittent pneumatic devices.
 - g. Automated tank gauging.
4. O&GFs shall be equipped with electric-powered engines for motors, compressors, drilling and production equipment, and pumping systems unless no adequate electricity source is available ~~or it is technically infeasible~~.
 5. During exploration and construction, the applicant shall demonstrate that all facilities on the site, including traffic and construction equipment, complies with all AQCC rules and regulations.
 6. O&GF applications shall include operational provisions to reduce emissions on Air Quality Action Advisory Days posted by the Colorado Department of Public Health and Environment (CDPHE) for the Front Range area. The provisions shall include how alerts are received, outline specific emission reduction measures, and include requirements for documenting the measures implemented. Measures should include:
 - a. Minimizing vehicle traffic and engine idling,
 - b. Reducing truck and worker traffic,
 - c. Delaying vehicle refueling,
 - d. Suspending or delaying use of fossil fuel powered equipment,
 - e. Postponing construction and maintenance activities,
 - f. Postponing well maintenance and liquid unloading that would result in emission releases to the atmosphere, and
 - g. Postponing or reducing operations with high potential to emit VOC's of NOx's.

D. Leak Detection and Repair:

1. A Leak Detections and Repair Plan shall be submitted with all O&GF applications. The plan shall disclose techniques, methods and protocols that will be utilized at the proposed O&GF to identify, prevent, contain, document, repair and report leaks, and it shall demonstrate how it will comply with and implement the standards in this Section 17.1.3.F.
2. Operators shall conduct leak detection and repair inspections at the frequency required by the Air Pollution Control Division (APCD) for the emission source using modern leak detection technologies and equipment. The results of said inspections, including all corrective actions taken, shall be reported to the Larimer County Department of Health and Environment (LCDHE) and County Local Government Designee (LGD) upon request.
3. All verified leaks at an O&GF shall be reported to the LCDHE and LGD within 24-hours of the detection of the leak.

Commented [A6]: This provision should be removed or more adequately defined. What constitutes very small productions? Why are small productions exempted from this standard?

Commented [A7]: What constitutes emergencies or upset conditions? When/how is notice provided of any flaring under this provision, and to whom?

Commented [A8]: And hydrocarbons.

4. Repair of verified leaks shall occur within 72 hours of detection. If it is anticipated that a repair will take longer than 72 hours, the operator shall provide a written explanation to the LCDHE and the LGD as to why more time is required and how the leak will be contained. If a leak is not repaired within 72-hours, the O&GF shall be shut-in until the leak is repaired.
5. Equipment **leaks that pose an imminent safety risk to** persons, wildlife, or the environment shall undergo emergency shut down and not be allowed to operate until the operator has provided evidence that the leak has been repaired.
6. **At least annually, operators shall provide a 2-week notice of a routine leak inspection to the LCDHE and LGD inviting them to attend and observe the inspection.**

Commented [A9]: How are these leaks identified?

Commented [A10]: It appears the intent of this provision is to require an annual routine leak inspection, but as drafted does not specifically set forth this requirement, only that a 2-week notice be given.

E. Odors:

1. **An Odor Mitigation Plan** shall be required for all O&GF applications indicating how the operations will prevent odors from adversely impacting the public and wildlife and further demonstrating compliance with the standards in this Section 17.1.3.H.
2. Oil and gas operations shall comply with the CDPHE, AQCC, Regulation No. 2 Odor Emission, 5 Code of Colorado Regulations 1001-4, or any successor regulations.
3. Proposed O&GFs shall provide protocols for immediate response to odor complaints that include options for ceasing operations, notification of affected residents, and temporary relocation of residents until the source of the odor is identified and resolved.
4. The operator shall communicate the schedule/timing of well completion activities to adjacent and nearby residents ~~which could include an online portal~~. As part of the application, provide information on how notifications will be communicated to the public, ~~which could include an online portal~~.
5. The Odor Mitigation Plan shall include control ~~strategic strategies~~ which shall be implemented upon receipt of an odor complaint(s) or as required by the County. These Odor control strategies may include the following:
 - a. Odorants, that are not a masking agent, shall be added to chillers and mud systems.
 - b. Operators shall not use odor masking agents or additives.
 - c. Filtration systems and/or additives to minimize, not mask, odors from drilling and fracturing fluids shall be utilized in the drilling and flowback processes.
 - d. Additives intended to eliminate odors generated by the operations of an O&GF shall not create a separate odor.
 - e. Enclosed shale shakers shall be ~~used utilized~~ to contain fumes from exposed mud.
 - f. Drilling activities shall utilize minimum low odor Category III drilling fluid or non-diesel-based drilling muds that do not contain benzene, toluene, ethylbenzene or xylene (BTEX).
 - g. Wipe down drill pipe as they exit the well bore each time.

F. Water Quality and Water Bodies:

1. **A Water Quality Report/Plan** shall be submitted with all O&GF applications. The report/plan shall demonstrate how the development and operations of the facility will avoid impacts to surface and ground waters in Larimer County, and demonstrate compliance with and implementation of standards in Sections 17.3.D. and 8.12 of this Code.

2. Baseline and subsequent water source tests, as typically required by and submitted to the COGCC and CDPHE, shall be provided to the LCDHE and the LGD for the life of the facility and any post-closure assessments, if approved by the owner(s) of the water well. It is recommended that the operator also post these reports online for public/access transparency.
3. The application shall provide documentation indicating how the COGCC water quality protection standards are being implemented.
4. Locating O&GFs within a Federal Emergency Management Agency (FEMA) designated 100-year floodplain shall not be allowed unless no other location is feasible, and all other appropriate permissions are obtained.
5. New wastewater injection wells shall not be allowed.
6. The requirements of this Section 17.4.D shall not prevent discharges reviewed and permitted by the CDPHE Water Quality Control Division, the EPA, and the Army Corps of Engineers.

Commented [A11]: Why only recommended? Establish this as a set requirement, otherwise it is unlikely any operators will do this.

G. Spills and Releases:

1. **A Spill Prevention Control and Countermeasure Plan** shall be submitted with all O&GF applications. The plan shall disclose techniques, methods, and protocols to be utilized at the proposed O&GF to prevent, contain, document and report any spills or releases, and shall demonstrate compliance with and implementation of the standards in this Section 17.3.E.
2. **An Emergency Response Plan** shall be provided that includes evacuation plans and routes, inventory of emergency response supplies, notification requirements and annual open house training for emergency services personnel to become familiar with the site.
3. Secondary containment shall be required which is capable of holding 125% of the total capacity of on-site containment vessels and storage tanks.
4. Unloading areas shall be designed to contain potential spills or direct spills into other secondary containment areas
5. Containment systems constructed of steel rimmed berms, or similar impervious surfaces that are equal to or better, shall be used for all secondary containment areas.
6. Any spill or release of greater than 25 gallons on an O&GF, including those thresholds reportable to the COGCC, shall upon discovery, be immediately reported to the following Local Emergency Response Authorities in Larimer County:
 - a. Larimer County Sheriff – Public Safety Answering Point (PSAP) (9-1-1)
 - b. Larimer County Department of Health and Environment,
 - c. Local Fire Department/District,
 - d. Local Municipal Police Department if within in mile of a City or Town,
 - e. Larimer County Oil and Gas LGD, and
 - f. Larimer County Local Emergency Planning Committee (within 24-hours).
7. All spills or releases, whether reportable or not, shall be cleaned up immediately and to the satisfaction of the local emergency response authorities, listed in the Spill Prevention Control and Countermeasure Plan.

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H. Noise:

1. **A Noise Report and Mitigation Plan** shall be required for all O&GF applications. The plan shall demonstrate how the operations will mitigate noise impacts to comply with

the noise standards contained in this Section 17.3.G. The report and plan shall include the following:

- a. A three-day (one day being a weekend day) baseline noise analysis.
 - b. Modeled decibel levels for various phases of development shall be presented using contour maps to radii of 350 feet from the site of operation/noise source (per COGCC) or at the property line of an adjacent land use, whichever is closer.
 - c. A plan of proposed mitigation measures to be implemented by the oil and gas operations during all stages of compliance with the maximum permissible noise levels as listed in Section G.2 below.
2. Noise generated from O&GFs shall comply with the following maximum permissible noise levels appropriate for the zoning and adjacent land uses as determined by the County:

<u>ZONE AREA DESIGNATIONS</u>	<u>7:00 am to next 7:00 pm</u>	<u>7:00 pm to next 7:00 am</u>
Residential/Agricultural/Rural	55 db(A)	50 db(A)
Commercial	60 db(A)	55 db(A)
Light Industrial	70 db(A)	65 db(A)
Industrial	80 db(A)	75 db(A)

In the hours between 7:00 a.m. and the next 7:00 p.m., the noise levels permitted above may be increased by ten (10) db(A) for a single period of not to exceed fifteen minutes in any one-hour period. Night-time levels between 7:00 p.m. and the next 7:00 a.m. shall not be exceeded therefore requiring strategic planning of noise-inducing activities to be conducted during daytime hours at the site.

- 3. Decibel levels produced by the O&GF shall meet the identified level for the appropriate zoning area designation of the adjacent land use. Zones as defined by Article 12 – Noise abatement of the Colorado Revised Statutes (C.R.S.) 25-12-102 will be considered as part of the County’s determination for surrounding land uses.
 - 4. In remote locations, where there is no reasonably proximate occupied structure or Designated Outside Activity Area (COGCC), the light industrial standard may be applicable as determined by the County.
 - 5. Decibel levels shall be measured at least 350-feet from the boundary of the operation/noise source (from source or sound wall per COGCC) or at the property line of the adjacent land use, whichever is greater.
 - 6. Construction of O&GFs, including drilling/well completions, recompletions, and pipeline installations, shall be subject to the maximum permissible noise levels specified for light industrial zones for the period within which construction is being conducted.
 - 7. Quiet design mufflers (i.e., hospital grade or dual dissipative) or equal to or better than noise mitigation technologies shall be utilized for non-electrically operated equipment.
 - 8. Motors, Generators, and engines shall be enclosed in acoustically insulated housings or covers.
- I. Dust:
- 1. A Fugitive Dust Control Plan shall be submitted with all O&GF applications. The plan shall disclose techniques and methods to be utilized at the proposed O&GF to prevent or mitigate fugitive dust generated by the construction and operations of the proposed

O&GF and shall demonstrate compliance with and implementation of standards in Sections 17.3.I and 8.11 of this Code.

2. Best management practices (BMPs) for the mitigation of dust associated with on-site operations and traffic activities shall be employed at the facility. The BMPs shall be outlined in the Fugitive Dust Control Plan.
3. Produced water and other process fluids shall not be used for dust suppression unless adequately pretreated so that it does not create odors and has been approved for land application by CDPHE Water Quality Control Division.
4. Safety Data Sheets (SDSs) shall be provided with the application for any proposed chemical based dust suppressants.
5. Unless otherwise approved by the County Health and Engineering Departments, only water will be used for dust suppression activities within 300-feet of the ordinary high-water mark of any body of water.

J. Access:

1. **A Traffic Impact Analysis and Routing Plan** shall be submitted with all O&GF applications. The plan shall disclose routing alternatives and transportation infrastructure improvements proposed for the proposed O&GF to mitigate projected transportation impacts and demonstrate compliance with and implementation of the standards in this Section 17.3.E.
2. Designs for private access drives shall conform to the Local Low Volume cross section found in the Larimer County Rural Area Road Standards and shall include the following:
 - a. The first 50 feet of access drive from the edge of pavement of the adjacent road will be paved, or made of an approved all weather surface, and the remaining portions of the access drive shall be composed of a minimum of 6 inches of compacted Class 5 road base.
 - b. The access drive entrance shall include returns with a 30-foot radius.
 - c. A mud and debris tracking pad shall be located at the end of the paved portion of the access drive.

K. Chemical Handling:

1. **A Chemical and Hazardous Materials Report and Handling Plan** shall be submitted with all O&GF applications. The plan shall disclose the type of hazardous and non-hazardous materials and chemicals that will be used on the site of the proposed O&GF, including how they will be handled to prevent spills and demonstrate compliance with and implementation of standards in this Section 17.3.K.
2. Prior to any hydraulic fracturing activity, the Operator shall provide the County with a copy of the Chemical Disclosure Registry form provided to the COGCC pursuant to the COGCC's "Hydraulic Fracturing Chemical Disclosure".
3. Drilling and completion chemicals shall be removed from the site within sixty (60) days of the drilling completion.

Commented [A12]: We would like to see this be reduced to 30 days.

L. Recycle, Reuse and Disposal of Fluids:

1. **A Waste Management and Disposal Plan** shall be submitted with all O&GF applications. The plan shall document the techniques and methods of the proposed O&GF to manage wastes generated on the site and demonstrate compliance with and implementation of the standards in this Section 17.3.L.
- ~~2. Drilling, completion, flowback, and produced fluids shall be recycled or reused~~ whenever

2. technically feasible.

3. If not to be recycled or reused onsite, exploration and production waste may be temporarily stored in tanks for up to 30-days while awaiting transport to licensed disposal or recycling sites.
4. Produced water shall be recycled or reused or shall be transported by pipeline unless easements are not available.
5. The Operator shall take precautions to prevent adverse environmental impacts to air, water, soil, or biological resources to the extent necessary to protect public health, safety and welfare, including the environment and Wildlife Resources to prevent the unauthorized discharge or disposal of oil, gas, Exploration and Production Waste, chemical substances, trash, discarded equipment, or other oil field waste.
6. The requirements of this Section 17.3.L shall not prevent discharges and beneficial uses reviewed and permitted by the CDPHE Water Quality Control Division and the Environmental Protection Agency (EPA).

M. Lighting and Visual Impacts:

1. For all phases of the development of the site, the application shall demonstrate compliance with the visual and aesthetic rules of COGCC and the Larimer County Land Use Code for landscaping, fencing and lighting set forth in Section 8.
2. All O&GFs shall be painted with colors that are matched to or slightly darker than the surrounding landscape, and shall use utilized paint with uniform, non-contrasting, nonreflective color tones based upon the Munsell Soil Color Coding System.
3. The location of all outdoor lighting shall be designed to minimize off-site light spillage and glare using best practices recognized by the International Dark-Sky Association. See Section 8.15, Lighting Standards.
4. For all phases of site development, fencing shall be installed for security and visual aesthetics of the use.
5. Sound or screening wall to mitigate for noise during well completion may be required if the O&GF is within 2,000 feet of residential buildings or lots, if electric requirement is appealed.
6. O&GFs applications shall minimize removal of trees and vegetation on the site.
7. Landscaping and/or fencing for screening and visual quality as viewed from public rights-of-way and nearby residential areas shall be required within 6 months from the time of well completion and in accordance with requirements for the zoning district.
8. O&GF applications shall demonstrate compliance with weed control requirements of the County Weed District and Forestry Services Department, including for access roads serving the facility.

Note: Environmental and health advocacy groups would like the next section, Well Plugging and Abandonment, to be more extensive and address noticing requirements and inspections after removal. The industry groups noted that this is down hole regulation and therefore not included in the SB 19-181 granted authority.

N. Well Plugging and Abandonment:

1. A Reclamation Plan shall be submitted. The plan shall demonstrate how well abandonment and reclamation shall comply with the COGCC rules and shall include the following information:

Commented [A13]: Platte River believes that certain aspects of Well Plugging and Abandonment are appropriate for regulation under SB 19-181 and this provision could be more extensive. Any surface issues related to plugging and abandonment are appropriate for regulation, along with any testing requirements for water quality or ensuring that lines left in place are properly tested on a recurring basis.

- a. Removal of all equipment from the well site,
 - b. Restoration of the site surface to the conditions of the site reclamation plan,
 - c. Notice to the County LGD of the commencement and completion of such activity, and
 - d. Coordinates for the location of the decommissioned well(s), and any associated gathering or flow lines, shall be provided with the notice of the completion of well abandonment.
 - e. Question: Should we include water testing/monitoring for a certain amount of time post plugging/abandoned wells to monitor that they are in sound condition and not leaking into water. This could be a condition of approval for certain sites (e.g., nearing high occupancy buildings, water reservoirs, drinking water wells.)
- O. Well Liquids Unloading:**
1. Best management practices, including artificial lift, automated plunger lifts and at least 98% emission reductions when utilizing combustion to control venting shall be employed at all facilities ~~unless technically infeasible~~.
 2. Approved manual unloading shall require on-site supervision of the uploading process.
- P. Flammable Materials:**
1. The location of flammable materials on site shall conform to all COGCC safety standards and local fire codes.
 2. A minimum 25-foot buffer, free of weeds and dried grasses, shall be required around flammable materials or equipment.
- Q. Waste Disposal:**
1. **A Waste Management and Disposal Plan** shall be submitted with all O&GF applications. The plan shall document the techniques and methods of the proposed O&GF to manage wastes generated on the site and demonstrate compliance with and implementation of the standards in this Section 17.3.Q.
 2. Oil and gas facilities shall remain free of debris and excess materials during all phases of operation.
 3. Burning of debris, trash or other flammable material is not allowed.
 4. Temporary storage of materials (up to 30-days) may be allowed with installation of screening to mitigate from aesthetic impacts from public rights-of-way or if requested by landowner.
- R. Removal of Equipment:**
1. There shall be no permanent storage of equipment (i.e., vehicles, trailers, commercial products, chemicals, drums, totes, containers, materials, and all other supplies not necessary for uses on an oil and gas location) on the site of an oil and gas facility.
 2. When not in use, or if no longer needed for on-site operations, all equipment not being used on the site shall be removed.
- S. Maintenance of Machinery:**
1. Statewide Best Management Practices shall be used to prevent contamination of soils and stormwater runoff, including equipment and vehicle maintenance and fluid containment.
 2. There shall be no maintenance of field equipment involving hazardous materials within 300-feet of a water body.

Commented [A14]: See Comment at 17.3.T.3.

Commented [A15]: Yes. This is reasonable and within the scope of the County's rights under SB 19-181, and should be a condition of approval.

- 3. Any fueling on-site shall occur over an impervious surface with a bermed secondary containment and sump in case of a spill and shall not occur during storm events.

T. Flow Lines, Transfer Lines, and Gathering Lines:

- 1. All off-site lines transporting process materials, production wastes, product and any other items used or generated by the facility shall be located to avoid existing or proposed residential, commercial, and industrial buildings, places of assembly, surface waterbodies and designated open spaces. Buried pipelines shall be a minimum of 4-feet deep and shall be of detectable material which could include the addition of tracer wire to ensure detection during buried utility locating.
- 2. The location of pipelines shall be evaluated on a case-by-case basis, with the determining locational factor being the size and type of pipeline being proposed.
- 3. Coordinates of all flow lines, gathering lines, and transfer lines shall be provided.

U. Temporary Water Lines:

- 1. Temporary waterlines shall be used, unless development is not within a water service area.
- 2. Temporary waterlines shall be buried at all existing driveway and road crossings, or utilize existing culverts, if available.

V. Financial Assurance:

- 1. The Applicant shall demonstrate the financial capability to reclaim all disturbed areas during each phase of the site development and following termination of the oil and gas operation on the site. This shall include meeting any state requirements, and any additional requirements the County deems necessary to protect the public health, safety, and welfare.
- 2. The Applicant shall, for the life of the use, carry customary and usual environmental liability insurance.

17.1. XX – Additional Application Requirements.

- A. In addition to the items specified as required in Section 17.3., the applicant shall provide:
 - 1. A site inventory map.
 - 2. A Safety Management Plan.
 - 3. A Site Security Plan.
 - 4. A surface use agreement.
 - 5. A statement verifying the legal right to extract the mineral resources.

17.4. – Appeals.

- A. Section 22 of this Code shall provide direction for all appeals to standards, processes and provisions of this Section 17.

17.5. – Enforcement and Inspections.

- A. Applications for O&GFs shall demonstrate compliance with this and all other relevant Sections of this Code. Failure of an Operator to maintain compliance with the County approval of an O&GF may result in the revocation of the approval pursuant to the procedures in Section 12 of the Land Use Code. The County retains the right to seek whatever remedy or redress is legally allowable.
- B. The County reserves the right to inspect the property for compliance.

Commented [A16]: When shall these be provided? To whom?

As currently drafted and in connection with 17.3.N.1.d, operators are only required to provide coordinates at the time a well is decommissioned. These coordinates should be provided within 30 days of completion of construction of any flow lines, gathering lines, and transfer lines.

Effective regulation of flow lines is essential to protect the health, safety and welfare of the public. Especially in light of the incident in Firestone, which was an impetus for additional oil and gas regulation, more strict requirements for reporting on flow lines are required.

Commented [A17]: In the event an operator cannot obtain a surface use agreement, the regulations should require that, as a part of every application, the operator demonstrate its attempts to negotiate a surface use agreement, including correspondence and a copy of the proposed surface use agreement the operator presented to the landowner.

17.6. – Fees and Security for Reclamation.

- A. The following fees are applicable to oil and gas facilities:
 - a. A Capital Transportation Impact fee.

17.7. – Termination of Use or Modifications.

- A. No modification to an approved O&GF shall be made without obtaining appropriate land use approvals from the County.
- B. Upon termination of use, the O&GF shall be reclaimed pursuant to the reclamation plan provided.

17.8. – Definitions.

- A. Unless otherwise listed herein, the definitions found within the C.R.S. and Colorado Oil and Gas Conservation Commission (COGCC) regulations shall apply.

January 6, 2020 Draft
Comments by Richard Alper

**FINAL COMMENTS SUBMITTED TO THE RECORD OF THE OIL AND GAS TASK FORCE MEETING
DATED JANUARY 23, 2020 by Richard S Alper, Task Force Member;**

Note: These comments are primarily based on inputs from the Oil and Gas Working Group of the County Environmental Science Advisory Board. Section references are to the most recent draft of the County regulation, dated January, 2020.

- 1) 17.2B: How does one define the neighborhood within which the threshold rule applies? Assuming the minor special review process exists in the land use chapter of the county code, would it be necessary or advisable to adapt that process to construction and operation of an oil and gas facility?

- 2) 17.2 B 2: e. What does it mean specifically to “minimize impacts” to agricultural operations? Is this subject to discretionary design review without any standard or principle to clarify what “minimize impacts” means? Is there something more to minimizing impacts to ag beyond requiring a setback according to Section 4.5 of the Code.

- 3) 17.2 B3 c. ; Regarding the 500 foot setback from a water body, we understand that a different term is used by the COGCC ie ‘water of the state.’ . Does the term water body include stream, creek , river, lake or reservoir, wetland, irrigation ditch and pond? We believe a definition is needed for these water bodies which is distinct from “waters of the U.S” or “waters of the State.”

17.3B 3a) It is my understanding that the COGCC does not require a setback from a water body but does require water bodies to be shown on topographic maps submitted as part of an application to it. While the 500 foot setback might be a reasonable starting point, this setback should be subject to adjustment in ways not considered in 17.3 B 5. We believe the size of the setback should be subject to any hydro geologic studies which might indicate a diminished or increased setback in a particular circumstance. At the discretion of the Director, and where there is a public health risk from proximity of the affected water body to the proposed O&G facility, perhaps such a hydro geologic study could be required as part of the application.

17.3B 3b) We applied the Round 2 regs to the recently filed Unicorn application to test how the Round 2 reg might apply. We found that there are two irrigation ditches and one pond within 500 feet of the operational pad for the proposed Unicorn facility. Under the proposed setback, this should trigger an additional level of review by the Director, perhaps including requiring an additional study by the applicant, as discussed above.

17.3B 3b) Assuming for the sake of discussion that the BCC intends to follow the lead of the COGCC on setbacks, not to exceed 1000 feet, there are two comments; a) Would this be inconsistent with the intention and effect of SB 1981 that Counties take an evidence based, independent approach to protecting public health and safety? b) Before deciding to accept the lead of the COGCC on the matter of setbacks, the County should gather any relevant and recent studies (CDPHE 2018?) concerning the health effects of oil facilities in proximity to schools, day care, nursing homes and residential neighborhoods so that it's decision on setbacks may be supported by science based evidence as distinct from simple alignment with a state agency.

17.3B 3a) Again applying the Round 2 regs to the Unicorn application, we find that operating buildings proposed for the Unicorn pad site are less than 1000' from nearby residences. It is also very near a significant section of the Poudre trail. Pursuant to SB 181 the County should ensure that the proposed reg allows it discretion where public health and safety require , to require additional studies or impose setbacks or other requirements more stringent than those required in the ordinary case.

- 4) 17.3D: We understand that Reg 7 newly proposed by the COGCC tightens up it's requirements for LDAR. As a policy matter does the County intend to compare this reg 17.3D to Reg 7 proposed by the COGCC and decide whether to be more stringent than the COGCC with respect to LDAR?

17.3D3 and D4: This reg discourages operators from checking the well more frequently. We agree with the requirement of a verified leak but suggest that a) there should be a requirement of a daily walk thru of the well site and b) that if a cracked valve or pipe leak can be fixed within 48 hours that it need not be reported. A verified leak must be reported if it cannot be fixed within 48 hours, not 72 hours.. The point of non compliance should be a verified leak that has not been fixed within 48 hours.

Applying the Round 2 reg to the Unicorn application, that application shows 8 oil tanks and 2 water tanks. It is not clear what the County requirement is for separators. The County should consult proposed Reg 7 to see if it's requirements for separators are adequate a) as applied to the Unicorn application (as a test case) and b) for the purposes writing the County's regulation.

17.3.D1, D2: Assuming that the first required LD test does not occur until 90-180 days after commencement of operation, there is no requirement that a leak detection test be conducted during this critical shakedown period when there is a clear risk of a leak. We recommend the County adopt such a requirement during the first 180 days of

operation. The results of the leak detection test during the shakedown period should be filed with the County within 14 days of its completion.

17.3 G: Spill Prevention Control and Counter- measure Plan (SPCC). I am advised that there is no definition for an SPCC in the State law, but that EPA has a definition of SPCC which is part of an EPA regulation concerning the contents of an SPCC. One key requirement in the EPA regulation on SPCC is the requirement that a licensed P.E. must sign the Plan. We suggest the County follow the EPA definition and regulation on this point.

17.3G1: it is unclear if the term “spill” includes air, water, waste, oil and gas. Is the County’s goal to follow the COGCC definition or, under SB 181, to adopt a more inclusive definition?

17.3 G 3: The 125% of secondary containment should be replaced with adoption and compliance with the EPA requirement which is 110% of total capacity. Secondary containment should equal or exceed total capacity consistent with industry practice, without being overly prescriptive in a novel way, such as 125%. .

17.3.G.5: We believe earthen berms should be permitted since they have been used effectively in the past as distinct from requiring only impervious surfaces.

17.3.G.6: This provision must specify whether the spill is located inside or outside of the containment area. This (inside/ outside) determination should help define the number of gallons of spilled or release which triggers the “immediate reporting” requirement. For example, the gallon threshold inside the containment area would ordinarily be larger than the gallon threshold outside the containment area, as Andy Peterson has pointed out.

17.3.G.6 We felt that that the “immediate reporting” requirement should be modified to be more specific in the following ways: . There should be sequence of whom to call in what order. Should the sheriff’s department be called first? If so, is there not a more effective number than 911 within the sheriff’s department? Or should the County Dept of Health and the Environment be called first? Should “immediate reporting” mean by 10am the next business day? Should it mean within two hours from the time of the spill? Or from the discovery of the spill?

January 6, 2020 Draft
Comments by Sherri
Valentine

Matt & Lesli,

Below are suggestions related to version 2 of the draft oil and gas regulations [herein after "2nd draft"]. I hope you will consider them as you prepare a final draft for the Board of County Commissioners.

PROPOSED O&G REGULATIONS / VERSION 2 DRAFT, DATED JANUARY 3:

17.1.B. Authority

The proposed language in this section of the 2nd draft is legally faulty and omits authority specifically granted by SB19-181.

Section 4. 29-20-104. Powers of local government, subsection (1)(h) includes an "**AND**" which the County's 2nd draft excludes.

To fully and accurately state the powers the state legislation grants to local governments, the County's regulations should either delete the phrase "the surface development of" or add to the end of the single sentence: "and to protect and minimize adverse impacts to public health, safety, and welfare and the environment."

Additionally:

Section 4. 29-20-104 (g) grants to local governments the authority to "**[r]egulate the use of land on the basis of the impact OF THE USE** on the community or surrounding areas."

Matters "covered" by Section 4. 29-20-104 (h) include:

"(III) IMPACTS TO PUBLIC FACILITIES **AND SERVICES**,"

"(IV) WATER **QUALITY AND SOURCE . . . LAND DISTURBANCE . . .**" and

"(VI) . . . REGULATING THE USE OF LAND SO AS TO PROVIDE PLANNED AND ORDERLY USE OF LAND **AND PROTECTION OF THE ENVIRONMENT . . .**"

Section 7. 34-60-103.(5.5) defines "Minimize adverse impacts" as used in 29-20-104(1)(h), to mean "to **THE EXTENT NECESSARY AND REASONABLE TO PROTECT PUBLIC HEALTH, SAFETY, AND WELFARE, THE ENVIRONMENT, AND WILDLIFE RESOURCES, TO:**

- a. **Avoid adverse impacts . . . AND**
- b. **Minimize AND MITIGATE . . .”**

When all the applicable sections are considered in conjunction, the language of SB19-181 empowers local governments to regulate beyond the surface impacts when O&G activity impacts local government services, water quality and source, and all aspects of protection of the environment, public health, safety and welfare, and wildlife.

This would include, by definition, ground water (especially where such is the source of drinking or irrigation water), rivers that support wildlife and provide irrigation water, and underground water sources that could be negatively impacted by O&G surface AND SUBSURFACE ACTIVITIES. It would also include transporting and storage of O&G-related activities as they impact the use of land within local government jurisdictions. Such activities are not the same as “downhole” activities, for which the COGCC has reserved state regulation.

Attorneys may disagree but, based upon a professional background of drafting and interpreting legislation and laws, I believe my reading of both SB19-181 and the county’s 2nd draft is accurate.

Absent inclusion of the full enumeration of powers set forth within SB19-181, the County would do a disservice to the citizens and environment of the County. I hope you will give serious consideration to revised language in the final draft that includes ALL the powers granted local governments.

17.1.C. Purpose

As currently drafted, this section serves only to set *limits* on the County’s authority.

Moreover, this entire section is unnecessary as the purpose is covered within the authority set forth in 29-20-104. I respectfully request the section be deleted in its entirety.

17.2. Review Procedures . . .

I encourage the County to keep the proposed single-tier Special Review.

I also encourage the County to find a way to do so that protects the limited number of County employees who will be conducting such reviews from the unique pressures caused by familiarity when working often with the same representatives of industry and members of the public.

17.3.B. Setbacks

Regarding subsection 3 identifying specific setback distances for O&G activities as 1000 feet for residential areas, 2000 for heavy occupancy buildings, e.g., schools and healthcare facilities, and 50 for water and outside activity areas:

Why would those who live in homes, who must breathe the air pollution and listen to noise pollution 24 hours a day, 7 days a week, be granted less protection than those who are in “heavy occupancy” buildings for limited time periods? The only justification for such is to give extractors more land from which to base their operations, as giving extra protections to schools and such gives only the illusion of protection, while leaving the greater population at greater risk.

At the very least, O&G activities should be 2000 feet from *all humans who must be regularly exposed* to the pollutions that are part of fracking activities – and this should be especially so the more wellheads, storage tanks, separators, traffic, etc., are located on/associated with a specific site.

As to setbacks from water sources and natural land areas, I hope you will consider including an obligation by the operator to demonstrate the water sources and natural areas will be 100% protected – and (as for ALL permits) require financial security sufficient to make whole any waters/lands harmed by operator error or accident, and from operator abandonment. Fifty feet is terribly close to a prairie dog field that shelters endangered black-foot ferrets or a drinking water well or a ditch through which runs waters that give life to the food we eat!

17.3.C. Air Quality

Thank you for including especially subsection 3.b., limiting flaring!

It is encouraging that this is an issue on which most of the O&G community was able to agree with County citizens.

17.3.D. Leak Detection . . .

Thank you for including subsection 5; it is an important qualification to the 24-hour standard set forth in subsection 3.

However, this section omits clarification – or definition – of what constitutes an “imminent safety risk to persons, wildlife, or the environment,” and

consequently may only be enforceable by litigation. Please include clarification and/or definition.

17.3.F. Water Quality . . .

This section addresses some of the concerns raised above (under Authority), but I hope you will give serious consideration to those that are not.

17.3.G. Spills and Releases

This section neglects to hold operators responsible for the high cost of emergency responses and remediation of spills and releases.

Requiring operators to demonstrate contractual agreements with the listed authorities (subsection 6) and to provide financial securities to the County that are sufficient to cover such – so the citizens of the County do not end up with the financial burden – should be included within the County's regulations for O&G activities.

17.3.K. Chemical Handling

Subsection 1. Please include disclosure of materials and chemicals that are **moved and stored on site**, in addition to those "used. And include a requirement to file County-approved addenda when chemicals are added that where not listed on the original application.

Subsection 3. Please amend this section to require removal within 15 (or no less than 30) days of drilling completion. There is no good reason why sites need become storage areas.

Please include, either within this section or a new section, a requirement for each application to list at least two human emergency contacts – and manner of contact – that are available 24/7/365. There may be times when the County and/or various response authorities, or neighbors, need to reach a responsible party of the O&G activity – one who can make immediate decisions and initiate immediate actions.

In addition, perhaps identify a primary government contact who can be reached and coordinate in an emergency.

17.3.N. Well Plugging . . .

For the reasons stated above, I disagree with the O&G industry that this is downhole activity and thus not within the enumerated powers of local government.

17.3.T. Flow Lines . . .

I respectfully request that the County require disclosure and mapping of all new, and existing (as identified) flow, transfer, and gathering lines. Such would help prevent similar catastrophic events such as have already occurred in adjacent counties.

17.5. Enforcement

Subsection B. Please consider adding to the end of this sentence: "without notice."

17.6. Fees and Security . . .

C.R.S. 29-20-104.5 permits local governments to impose development charges for emergency services. Why aren't such fees included in this section?

Additionally, I do not believe the bonding authority of the COGCC precludes bonding by the County. Please include sufficient bonding to cover all the possible costs of reclamation, including abandonment and bankruptcy. Although such a requirement may create a hardship to some companies, if they cannot demonstrate full financial responsibility, they should not be permitted to begin operations, lest the citizens pay for the operators' profits.

I'd like to commend staff for putting together the draft regulations. With the exception of the concerns and comments noted above, the 2nd draft regulations are comprehensive and thoughtful. Thank you.

And, thank you for the opportunity to comment and participate in this important process.

Sherri Valentine

Open Lands Advisory Board liaison to the O&G Task Force

January 6, 2020 Draft
Comments by Tim Goser

Larimer County Board of County Commissioners

Attn: Commissioners Johnson, Kefalas, and Donnelly

Re: Public Comment on Second Draft of Oil and Gas Regulations

Dear Commissioners, Mr. Lafferty and Ms. Ellis,

The counties 2nd draft of the O&G regulations are woefully inadequate to protect the Public Health, Safety, and Welfare, the Environment & Wildlife Resources per new State law SB-181. Additionally, at the O&G Task Force (TF) meeting on 1/23/20 section **17.3 (B) Setbacks** was eliminated which should trigger an automatic extension to the Public Comment period that ends today, 1/24/20. Transparency, fairness and actually protecting the public health, safety ... of the citizens of Larimer County are a few of the main reasons for the proposed and needed extension. Setbacks are key to insuring public health. Giving the public (1) day to respond if they attended the O&G TF meeting and very little if any notice if they didn't, to last minute **critical** change(s) to the 2nd Draft proposed regs, is simply unacceptable and contrary to protecting the public's health, safety....

17.2 (B) The 2nd Draft regs don't even give Larimer County the ability to deny O&G applications if they don't meet the intent of SB-181 to protect the public's health, safety ... The O&G regulations should make it abundantly clear that there are clearly defined criteria to be followed to obtain approval and when it's not the application WILL & MUST be denied.

17.3 (B) Setbacks – A 2000' setback is not only reasonable but scientifically supported which should be the requirement for all situations: residential buildings..., high occupancy buildings (schools ...) & water bodies or outside activity areas. Deviating from 2000' setbacks is contrary to protecting public health, safety ... mandated by SB-181. I would hope the precautionary principle would be applied to setbacks and protecting the citizens of Larimer County. O&G activities add greatly to the formation of ozone which has many adverse health effects to humans and the health of wildlife and plants, consequently 2000' setbacks and continuous Air Quality monitoring should be mandated by the regs.

17.3 (C) Continuous Air Quality (AQ) monitoring completely paid for by the O&G industry would help protect the public's health and safety and is consistent with SB-181. No other industry that I know of is allowed to pollute with impunity and not pay for it in any way! The O&G industry should want to demonstrate how safe it is like it advertises and the County should safeguard the public's health with mandatory continuous AQ monitoring as part of the 2nd draft regs. Of course, allowable threshold AQ levels should be included in the regs with penalties and the ability for Larimer County to shut down operators and facilities that don't or won't comply. This monitoring should be real time reporting to the county for the public to access in real time.

17.3 (V) This section is ambiguous and lacks necessary information to be enforceable to protect the public health and safety. Financial capability thresholds need to be defined and set and due diligence needs to be done to ensure that O&G operators ... meet these necessary standards. These detailed public disclosures are just that open to the public for review and copying. Failure to prove these financial capabilities should mandate and necessitate an applicant or application be denied. Larimer County residents should not have to bear the burden of subsidizing O&G development by paying for reclamation costs because the county isn't requiring necessary financial capabilities from the industry or providing due diligence to insure the O&G industries financial disclosures are true and accurate.

Drilling and developing O&G resources in public areas and open spaces should be off limits and illegal. No one should have to state this obvious point but I feel I need to because the O&G regs don't prohibit it. This is a king size whole in the regs and suggests the regs are not well thought out or in the public's interest.

There are terms sprinkled in the regs like economically viable, technically infeasible which are against the language and intent of SB-181. All of them should be removed.

I would hope the final version of the O&G regs are substantially better and are genuinely about protecting Public Health, Safety and Welfare, the Environment, & Wildlife Resources and not trying to balance O&G development with Public Health, Safety ... which is contrary to SB-181 and what the 2nd draft regs appear to be wanting to do!

Sincerely,

Tim Gosar

Public Comments

Section 17 - Oil and Gas Facilities

Draft Regulations

Draft Date: October 30, 2019

October 30, 2019 Draft
Comments by Ally Little

Note: This will be a new Section in the Larimer County Land Use Code. This is a preliminary outline of draft oil and gas regulations and is not all inclusive.

To keep the Task Force Committee discussion on track, please focus comments to the intent and purpose of the standards and avoid refrain from making small edits.

17.0. – OIL AND GAS FACILITIES

17.1. – Intent and Purpose.

- A. **Intent and Purpose:** The Intent and purpose of this section is to establish and administer necessary and reasonable regulations for *oil and gas drilling and production* in a manner that protects and promotes the health, safety, and general welfare of the residents and environment of the County. To the extent practicable these regulations will require applications for oil and gas operations to demonstrate how adverse impacts will be mitigated to achieve a minimal negative impact on the environment, wildlife and residents of the County.
- B. **Authority:** Pursuant to the authority granted to the County in C.R.S. 29-20-104(1) the review of such applications may include, without limitation:
 1. Land Use,
 2. Location and siting of oil and gas facilities,
 3. Impacts to public facilities and services,
 4. Water quality and source, noise, vibration, odor, light, dust, air emissions and air quality, land disturbance, reclamation procedures, cultural resources, emergency preparedness, and coordination with first responders, security and traffic and transportation impacts,
 5. Financial securities, indemnification and insurance as appropriate to ensure compliance with the requirements of Larimer County, and
 6. All other nuisance-type effects of oil and gas development.
- C. **Applicability:** These regulations shall be applicable to all oil and gas drilling and production activity commenced on any property in Larimer County, after the date of _____, regardless of what zoning district the property is situated in.
- D. **Severability:** If any sections, clause, provision, or portion of these regulations should be found to be unconstitutional or otherwise invalid by a court of competent jurisdiction, the remainder of the regulations in the section shall not be affected thereby and is hereby declared to be necessary for the public health, safety and welfare.

17.2. – Required Process and Permits

- A. Required Process:
 - a. Oil and gas drilling and production activities in Larimer County shall require Special Review approval (Section 4.5). Should we state when the approval must be obtained, i.e. prior to submittal to Colorado Oil and Gas Commission (COGCC)???
- B. Supplemental Review Criteria for Oil and Gas Facilities:
 - a. In addition to the Special Review criteria found in Section 4.5.3 of this Code, each oil and gas facility shall be approved only if it meets the following criteria:
 - i. It complies all the requirements of this Section 17.
 - ii. Reasonable and necessary mitigation steps have been taken to protect the public health, safety, and welfare and environment

Commented [LMK1]: Matt I think the wording in this first paragraph may minimize the research and work that you and Frank have put into this so I would suggest deleting a few of the qualifiers

Commented [FNH2]: To maximize our time together, we'd like to focus on the broad issues at hand as the specific language can be addressed by staff at a later time.

Commented [LMK3]: Do we need a qualifier here minimal negative impact?

Commented [LMK4R3]:

Commented [LMK5]: Either prior to or concurrently?

Commented [FNH6]: It may be good to remind the task force that we can always modify this if needed.

Commented [LKE7]: I think maybe after if our rules are going to supplement the state rules.

Commented [FNH8R7]: I think is a political question, so I'd leave it up to the board and the task force to discuss. Though I think it would be good to maybe highlight some of the pros and cons of either approach. A pro of waiting til after the state is we can benefit from their expertise and let them do some of the heavier lifting, plus, it may give the public some opportunity to address their concerns at the state level. Some of the positives of going first is that we get more control, we look more proactive, and we can have a more local process with more local input earlier on.

Commented [LA9]: State the County's turnaround time for review and whether this review is required prior to construction/operation- for example: Larimer County shall require Special Review approval (Section 4.5), which may take up to 90 days. This approval is required prior to any construction of a new facility.

- C. Permits required:
- Access permits
 - Building permits as required for structures
 - Development Construction permit
 - All federal, state and local permits for oil and gas operations

17.3. – Standards Required for all Oil and Gas Facilities

A. General:

- All applicants are responsible for compliance with applicable federal, state and local laws and regulations for the operation of Oil & Gas facilities.
- Oil and Gas facilities should be located to minimize impacts on agricultural operations and Waters of the United States.

Commented [FNH10]: We probably need to somewhere define what these are.

B. Air Quality:

- The use? Shall comply with existing federal and state laws and regulations applicable to its operations and emission sources as well as any future laws and regulations adopted by the Colorado Air Quality Control Commission (AQCC).
- Air contaminant emission sources shall apply for and comply with the permit and control provisions prescribed by the Colorado APCD C.R.S. tit.25, Art. 7 (C.R.S. § 25- 7-101 et seq.) and the rules and regulations promulgated by the AQCC all applicable emission sources.
- Environmental Protection Agency (EPA) Reduced Emission Completions shall be used for all completions and well workovers following hydraulic fracturing, unless the application demonstrates that it is economically infeasible or impractical to utilize such a system.
- Closed loop, pitless drilling, completion systems without permanent on-site storage tanks must be utilized for containment and/or recycling of all drilling, completion, and flowback fluids, unless the application demonstrates that it is economically infeasible or impractical to utilize such a system. All emissions shall be routed to and controlled by a flare or combustor operated with at least 98% destruction removal efficiency.
- Oil and Gas facilities shall be equipped with electric-powered engines for motors, compressors, drilling and production equipment, and pumping systems, unless it is demonstrated by the application materials the utilization of such equipment is not economically feasible or practical.
- During construction and exploration, the applicant shall demonstrate that the site, including traffic and construction equipment, complies with all AQCC standards.
- Oil and gas operators shall respond to air quality action day advisories posted by the CDPHE for the front range area by implementing air reduction measures, which should include:
 - ~~Minimizing~~ ~~Eliminating~~ vehicle traffic and engine idling ~~when vehicle is stopped for 10 minutes or more;~~
 - Reduced truck and worker traffic;
 - Delay vehicle refueling;
 - Suspend or delay use of fossil fuel powered ancillary equipment;
 - Postpone construction or maintenance activities; and
 - Postpone will maintenance and liquid unloading activities that would result in emission to the atmosphere.

Commented [LA11]: No mention of pneumatic devices which allow venting of natural gas to atmosphere. This is something CDPHE will likely eventually regulate, but may want to consider at County level.

Commented [LMK12]: Same as above

Commented [LA13]: Specify- an enclosed shrouded flare

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C. Leak Detection and Repair:

1. Oil and gas facilities shall at a minimum conduct semi-annual leak detection and repair (LDAR) inspections using modern leak detection technologies and equipment. One of the Semi-annual LDAR inspections shall include a five-day notice to the County Local Government Designee (LGD) and County Health Department inviting them to observe, at their discretion, the inspection.
2. Verified leaks to an oil and gas facility shall be reported to the County LGD and County Health Department within 24 hours of the discovered leak.
3. All verified leaks shall be repaired within 72 hours, unless technically or operationally infeasible.
4. Equipment leaks that pose an imminent hazard to persons, property, wildlife or the environment shall be shut down and not allowed to operate until the operator has provided evidence that the leak has been repaired.

D. Spills and Releases:

1. Any spill or release at an oil and gas facility, including those reportable to the COGCC, shall be immediately reported, no later than 24 hours after the event, to the following local emergency response authorities in Larimer County:
 - a. Larimer County Sheriff
 - b. Larimer County Department of Health and Environment
 - c. Larimer County Local emergency Planning Committee
 - d. Larimer County Oil and Gas LGD
 - e. Local Municipal Police Department if within one mile of a city or town
 - f. Local Fire Department
2. All spills or releases shall be cleaned up to the satisfaction of the local emergency response authorities, listed in item 1 above. Remediation of spills or releases reportable to the COGCC may be deferred to the COGCC and CDPHE.

E. Well Liquids Unloading:

1. Best management practices, including artificial lift, automated plunger lifts and at least 90% emissions when utilizing combustion to control venting shall be employed at all facilities.
2. Approved manual unloading shall require on-site supervision of the unloading process.

F. Noise:

1. A three-day (one day being a weekend day) baseline noise analysis from all receptors within 350 feet of the proposed use, or the property line, whichever is closest to the proposed oil and gas facility, shall be provided.
2. Predicted decibel levels shall be provided for various phases of development, as measured 350 feet from the site of operation/noise source (per COGCC) or at the property line of the adjacent land use, whichever is greatest. The type of land use of the surrounding area shall be determined by the County taking into consideration any applicable zoning of other local land use designation.
3. Proposed mitigation measures demonstrating that the oil and gas operations at any well site, production facility, or gas facility shall comply with the following maximum permissible noise levels appropriate for the zoning designation by the County:

Commented [FNH14]: I think this is fine, a little more than the state.

Commented [LS15R14]: I agree with Frank...not sure construction and traffic flows should be under AQCC? We should be requiring particulate emission (dust) control, and all kinds of odor control to relate with the CDPHE health study of the early stages of development in order to get a producing well.

Commented [LS16R14]: AQCC will be reviewing rulemaking in Dec to require O&G have all air permits in place prior to construction and development.

Commented [LMK17]: I wonder if there is a way to say LDAR or better technology so if something else becomes better we do not have to change this section?

Commented [FNH18]: Do they have to send us a report or something? What if they fail to do the inspection?

Commented [LS19R18]: For reports, we could include something like "This information will be collectively reported on a monthly basis in the same format that Operator uses for reporting to the Air Pollution Control Division under Regulation 7."
-Could also state "The Operator may satisfy this reporting obligation in whole by submitting its AQCC Regulations No. 7 annual (or as often as required by current and future regulations) reports for the prior calendar year to the County and LCDHE, and supplementing them as needed to meet these reporting requirements for covered facilities within the County."

Commented [LS20R18]: Could be 1a.

Commented [LA21]: Semi-annual is probably already required by operator's State permits with CDPHE. I recommend we require more, but don't require results to be sent in anywhere. Operators should just keep records of their inspections. That encourages operators to check for leaks more often than required without feeling fear of repercussions if leaks are found.

Commented [LA22]: Requiring operators to report all leaks will discourage them from reporting. Instead we should require that all leaks must be internally documented

Commented [LMK23]: Not sure what this means?

Commented [LA24]: This is not worded well- any spill? I think we should specify that all spills/releases must be immediately cleaned up, but the COGCC's thresholds seem

Commented [LA25]: Have these agencies been notified that they will be responsible for this information? If they

Commented [LMK26]: 1a?

Commented [LMK27]: ?

Commented [LS28]: This is an application requirement, not a Standard for Development? Maybe for this section, use:

4. Decibel levels shall meet the identified level for the appropriate activity and adjacent land use. Decibels shall be measured at 350 feet from the site of operation/noise source (per COGCC) or at the property line of the adjacent land use, whichever is greatest. The type of land use of the surrounding area shall be determined by the County taking into consideration any applicable zoning or other local land use designation.
5. Oil and gas operations at any well site, production facility, or gas facility shall comply with the following maximum permissible noise levels appropriate for the zoning designation by the County:

<u>ZONE</u>	<u>7:00 am to next 7:00 pm</u>	<u>7:00 pm to next 7:00 am</u>
Residential/Agricultural/Rural	55 db(A)	50 db(A)
Commercial	60 db(A)	55 db(A)
Light Industrial	70 db(A)	65 db(A)
Industrial	80 db(A)	75 db(A)

In the hours between 7:00 a.m. and the next 7:00 p.m., the noise levels permitted above may be increased by ten db(A) for a period of not to exceed fifteen minutes in any one-hour period.

Construction projects (pipeline or facility construction/installation) shall be subject to the maximum permissible noise levels specified for industrial zones for the period within which construction is to be completed pursuant to any applicable construction permit issued by proper authority or, if no time limitation is imposed, for a reasonable period of time for completion of project.

G. Odors:

1. Oil and gas operations shall be in compliance with the Department of Public Health and Environment, Air Quality Control Commission, Regulation No. 2 Odor Emission, 5 C.C.R. 1001-4, Regulation No. 3 (5 C.C.R. 1001-5), and Regulation No. 7 Section XVII.B.1 (a-c) and Section XII.
2. Operations shall prevent odors from oil and gas facilities from affecting the health and welfare of the public during development activities including drilling, fracking, and flowback to the extent reasonably possible.
3. A system shall be established for immediate response to odor complaints that includes options for ceasing operations, notification of affected residents, and temporary relocation of residents until the source of the odor is identified and resolved.
4. We encourage the Operator to communicate the schedule/timing of well completions activities to residents, which could allow for voluntary shutting of windows and air intakes or temporary relocation.

H. Dust:

1. Best management practices for the mitigation of dust associated with on-site and traffic activities shall be employed at the facility.
2. Produced water and other process fluids shall not be used for dust suppression.
3. Safety Data Sheets (SDS) shall be provided with the application for any proposed chemical based dust suppressants.

Commented [LA29]: including what?

- 4. Water only, unless otherwise approved by the County Health and Engineering Department, will be used for dust suppression activities within 300 feet of the ordinary high-water mark of any body of water.

Commented [LMK30]: Potable?

I. **Access:**

- 1. Private access drives shall conform to the Local Low Volume cross section found in the Larimer County Rural Area Road Standards, and shall include the following:
 - a. The first 50 feet of access drive from the edge of pavement of the adjacent road will be paved and the remaining portions of the access drive shall be composed of a minimum of 6 inches of compacted Class 5 road base.
 - b. The access drive entrance shall include returns with a 30-foot radius.
 - c. The access drive shall be treated with Magnesium Chloride during the entire construction phase, and any time there after when the level of use exceeds 200 vehicle trips per day.
 - d. A mud and debris tracking pad shall be located at the end of the paved portion of the access drive.

Commented [LMK31]: Seems to be missing something

Commented [LKE32]: Caps?

Commented [FNH33]: Should we include some language about making sure that fire apparatus can get in, or complying with the standards of the local fire district?

J. **Chemical Handling:**

- 1. Prior to any hydraulic fracturing activity, the operator shall provide the County with a copy on the chemical disclosure registry form provided to the COGCC pursuant to the COGCC's "Hydraulic Fracturing Chemical Disclosure".-
- 2. Drilling and completion chemicals shall be removed from the site within sixty days of the drilling completion.
- 3. The following toxic, including orally toxic chemicals shall not be added ~~utilized in~~ the hydraulic fracturing fluid:
 - a. Benzene
 - b. Lead
 - c. Mercury
 - d. Arsenic
 - e. Cadmium
 - f. Chromium
 - g. Ethylbenzene
 - h. Xylene
 - i. 1,3,5-trimethylbenzene
 - j. 1,4-dioxane
 - k. 1-butanol
 - l. 2-butoxyethanol
 - m. N,N-dimethylformamide
 - n. 2-ethylhexanol
 - o. 2-mercaptoethanol
 - p. Benzene, 1, 1'-oxybis-, tetrapropylene derivatives, sulfonated, sodium salts
 - q. Butyl glycidyl ether
 - r. Polysorbate 80
 - s. Quaternary ammonium compounds, dicoco alkyldimethyl, chlorides
 - t. Bis hexamethylene triamine penta methylene phosphonic acid
 - u. Diethylenetriamine penta
 - v. FD&C blue no 1.

Commented [LMK34]: Would thirty be better?

Commented [LKE35]: Is this a defined term? Sounds odd

w. Tetrakis (triethanolaminate) zirconium (IV) (TTZ)

K. Recycle, Reuse and Disposal of Fluids:

1. Drilling, completion flowback and produced fluids shall be recycled, unless technically infeasible.
2. Exploration and production waste may be temporarily stored, not to exceed two weeks, in tanks while awaiting transport to licensed disposal or recycling sites.
3. Produced water shall be transported by pipeline unless economically or technically infeasible.

Commented [FNH36]: I don't know whether the industry will say anything about whether any of these are necessary, I am just not sure where this list came from, but we may want to make sure that the industry is aware and isn't going to say that they have to be able to use some of these or they can't develop at all in the county.

Commented [LA37]: Very specific list. I am not familiar with what is normally in hydraulic fracturing fluid, but is this list practicable?

L. Water Bodies:

1. The applicant shall provide documentation to the County ~~documentation~~, as required by the COGCC, demonstrating how the COGCC water quality protection standards ~~are~~ being complied with.
2. The Larimer County Health Department shall be provided with all water source tests, that are typically submitted to the COGCC or CDPHE.
3. Proposed oil and gas operations proposed with in a flood-plain shall require review and approval of the Floodplain Permit prior to the Board of County Commissioners hearing for an oil and gas special review application.
4. Produced water disposal via wastewater injection wells shall not be allowed.

Commented [LA38]: Include a setback from Waters of the US.

M. Visual:

1. The application shall demonstrate compliance with the visual and aesthetic rules of COGCC and the Larimer County regulations for landscaping, fencing and lighting for all phase of the development of the site.
2. All oil and gas facilities shall be painted with colors that are matched to or slightly darker than the surrounding landscape, and shall utilized paint with uniform, noncontracting, nonreflective color tones based upon the Munsell Soil Color Coding System.
3. The location of all outdoor lighting shall be designed to minimize off-site light spillage and glare.
4. Fencing shall for all the phases of an Oil and ~~Gas~~ facility development to ensure the security and visual aesthetics of the use.
5. Landscaping for screening and visual quality from off-site shall be required within 6 months from the time of well completion.
6. O&G Oil and Gas facility applications, including access roads serving the facility, shall demonstrate how compliance with weed control requirements of the County Weed District and Forestry Services Department will be met.

Commented [LMK39]: Do we need to qualify where – unincorporated area, at the well site, anywhere in the county?

Commented [FNH40]: Within Larimer County or anywhere. If they are drilling here but hauling the water to weld county to an injection well, why would we care?

Commented [LMK41]: At some point reach consistency in O & G or Oil and Gas facility

N. Well Plugging and Abandonment:

1. Well abandonment and reclamation shall comply with the COGCC rules, and shall include the following:
 - a. Removal of all equipment from the well site,
 - b. Restoration of the site surface to the conditions of the site reclamation plan,
 - c. Notice to the County LGD of the commencement and completion of such activity, and
 - d. Coordinates for the location of the decommissioned well(s), and any associated gathering or flow lines, shall be provided with the notice of the

completion of well abandonment

Commented [LMK42]: Any inspection requirements after closure?

O. Flammable Material:

1. The location of flammable materials on site shall conform to all COGCC safety standards and local fire codes.
2. A minimum 25-foot buffer, free of weeds and dried grasses, shall be required around anything flammable.

P. Waste Disposal:

1. Oil and gas facilities shall remain free of debris and excess materials during all phases of operation.
2. Burning of debris, trash or other flammable material is not allowed.

Q. Removal of Equipment:

1. There shall be no permanent storage of equipment on the site of an oil and gas facility.
2. When not in use, or no longer needed for on-site operations all equipment not being used on the site shall be removed.

Formatted: Indent: Left: 1", No bullets or numbering

R. Maintenance of Machinery:

1. There shall be no maintenance of field equipment involving hazardous material within 300 feet of a water body.
2. Any fueling on-site shall occur over an impervious surface with secondary containment and shall not occur during storm events.

S. Flow Lines, Transfer Lines and Gathering Lines:

1. All off-site lines transporting process materials, production wastes, product and any other items used or generated by the facility shall be located to avoid existing or proposed residential, commercial, and industrial buildings; places of assembly, surface waterbodies and designated open spaces.
2. The location of pipelines shall be evaluated on a case by case basis, with determine locational factor being the size and type of pipeline being proposed.
- 2.3. Coordinates of all flow lines, gathering lines, and transfer lines shall be provided.

T. Temporary Water Lines:

1. Temporary waterlines shall be used, unless technically infeasible.
2. Temporary waterlines shall be buried at all existing driveway and road crossing, or utilize existing culverts, if available.

U. Financial Assurance:

1. The ~~operator~~ Applicant must demonstrate the financial capability to reclaim all disturbed areas during each phase of the site development and following termination of the oil and gas operation on the site.
2. The ~~operator~~ Applicant must, for the life of the use, carry environmental liability insurance for ~~gradual~~ all potential pollution events.

Commented [FNH43]: Who is going to check this, or decide how much, or that it is still there when we need it?

17.4.- Guidelines for Oil and Gas Developments

- A. Applications for oil and gas facilities are strongly encouraged to incorporate the following guidelines (best management practices). Where reasonably necessary, the County may require some or all of the following guidelines depending on the location and characteristics of the proposed facility.
1. To mitigate the adverse impacts of air emissions generated by oil and gas facilities, ~~operator~~~~operator~~Applicants are encouraged to:
 - a. use tankless production techniques,
 - b. use zero emission dehydrators,
 - c. use pressure-suitable separator and vapor recovery units,
 - d. use no-bleed continuous and intermittent pneumatic devices, or alternatives such as replacing natural gas with electric or instrument air, or by routing discharged emissions to closed loop-systems of processes,
 - e. use automated tank gauging, and
 - f. eliminate all flaring except during emergencies or upset conditions, which shall be reported to the County (see std).
 2. To mitigate the adverse impacts of odor generated by oil and gas facilities, ~~operator~~~~operator~~Applicants are encouraged to:
 - a. Add odorants that are not a masking agent, to adding chillers to the mud systems,
 - b. Using filtration systems or additives to minimize odors from drilling and fracturing fluids except that the operatorApplicant shall not mask odors by using masking fragrances,
 - c. Enclose shale shaker to contain fumes from exposed mud where safe and feasible,
 - d. Wipe down drill pipe each time drilling operation "trips" out of hole,
 - e. Increasing additive concentration during peak hours provided additive does not create a separate odor. Additive must be used per manufacturer's recommended level,
 - f. Use minimum low odor Category III drilling fluid. This could include non-~~diesel based~~~~diesel-based~~ drilling muds including drilling muds that are low odor and do not contain benzene, toluene, ethylbenzene or xylene (BTEX), ~~or~~
 - g. Apply 'green frac' methods, utilizing only sand and water as fracking materials or other 'green frac' materials agreed upon between the community and industry, and
 - h. The OperatorApplicant is encouraged to communicate the schedule/timing of well completions activities to residents, which could allow for voluntary shutting of windows and air intakes or temporary relocation.
 3. To mitigate the impacts of multiple pipeline corridors, ~~operator~~~~operator~~Applicants are encouraged to consolidate and share pipeline easements and corridors, unless it is technically infeasible.

Commented [LA44]: Emergency/upset conditions happen a lot. Are we expecting operators to contact the County every time? If so, we should also provide a 24 hr hotline or e-mail that will be used to track this info.

Commented [LMK45]: ?

Commented [LMK46]: Is this possible? Last I looked (a long time ago) this was cost prohibitive and not the best technology?

17.5. - Application Requirements

- A. In addition to the submittal requirements necessary to demonstrate compliance with the applicable Sections of the Land Use Code, applications for oil and gas facilities shall also include, when relevant, the following:
- a. A Site Inventory Map.
 - b. A Safety Management Plan.
 - c. A Containment and Spill Prevention PlanSpill Prevention, Control, and Countermeasure Plan.

- d. A Noise Mitigation Plan.
- e. An Emergency Preparedness Plan.
- f. An Odor Mitigation Plan.
- g. A Hazardous Material Plan.
- h. A Dust Mitigation Plan.
- i. A Site Security Plan.
- j. A Production Water Supply Plan.
- ~~k. A Containment and Spill Plan.~~
- ~~l. A Waste Management Plan.~~
- ~~m. A Reclamation Plan.~~
- ~~n. A Surface Use Agreement.~~
- ~~o. A statement verifying the legal right to extract the mineral resources.~~

Commented [LA47]: Listed twice

17.6. - Appeals

- A. Any decision made pursuant to this section may be appealed pursuant to Section 22 of the Larimer County Code.

17.7. - Enforcement and Inspection

- A. Applicants shall demonstrate compliance with the Larimer County Land Use Code, and with this Section. Failure to maintain compliance with the County approval of an oil and gas facility may result in the revocation of the approval pursuant to the procedures in Section 12 of the Land Use Code. The County retains the right to seek whatever remedy or redress is legally allowable.
- B. The County reserves the right to inspect the property for compliance at any time.

Commented [LMK48]: ?

Commented [LMK49]: Should there be some notice requirement?

17.8. - Fees and Security for Reclamation

- A. The following fees are applicable to oil and gas facilities.
 - a. TBD
- B. An impact fee will be assessed as follows:
 - a. Capital Transportation Impact Fees
- C. Each application shall include financial security for the purpose of ensuring maintenance and reclamation may be accomplished if the applicant is unable or unwilling to perform its obligations.

Commented [LMK50]: In addition to any COGCC?

17.9. - Termination of Use or Modification.

- A. No modification to an approved oil and gas facility shall be made without obtaining appropriate land use approval from the county.
- B. Upon termination of use, the oil and gas facility must be reclaimed pursuant to the reclamation plan provided.

17.10. - Definitions.

- A. Unless otherwise listed herein, the definitions found within the Colorado Revised Statutes and COGCC regulations shall control.

October 30, 2019 Draft
Comments by COGA

Note: This will be a new Section in the Larimer County Land Use Code. This is a preliminary outline of draft oil and gas regulations and is not all inclusive.

To keep the Task Force Committee discussion on track, please focus comments to the intent and purpose of the standards and avoid refrain from making small edits.

17.0. – OIL AND GAS FACILITIES

17.1. – Intent and Purpose.

- A. **Intent and Purpose:** The Intent and purpose of this section is to establish and administer necessary and reasonable regulations for oil and gas drilling and production in a manner that protects and promotes the health, safety, and general welfare of the residents and environment of the County. To the extent practicable these regulations will require applications for oil and gas operations to demonstrate how adverse impacts will be mitigated to achieve a minimal negative impact on the environment, wildlife and residents of the County.
- B. **Authority:** Pursuant to the authority granted to the County in C.R.S. 29-20-104(1) the review of such applications may include, without limitation:
1. Land Use,
 2. Location and siting of oil and gas facilities,
 3. Impacts to public facilities and services,
 4. Water quality and source, noise, vibration, odor, light, dust, air emissions and air quality, land disturbance, reclamation procedures, cultural resources, emergency preparedness, and coordination with first responders, security and traffic and transportation impacts,
 5. Financial securities, indemnification and insurance as appropriate to ensure compliance with the requirements of Larimer County, and
 6. All other nuisance-type effects of oil and gas development.
- C. **Applicability:** These regulations shall be applicable to all oil and gas drilling and production activity commenced on any property in Larimer County, after the date of _____, regardless of what zoning district the property is situated in.
- D. **Severability:** If any sections, clause, provision, or portion of these regulations should be found to be unconstitutional or otherwise invalid by a court of competent jurisdiction, the remainder of the regulations in the section shall not be affected thereby and is hereby declared to be necessary for the public health, safety and welfare.

17.2. – Required Process and Permits

- A. Required Process:
- a. Oil and gas drilling and production activities in Larimer County shall require Special Review approval (Section 4.5). **Should we state when the approval must be obtained, i.e. prior to submittal to Colorado Oil and Gas Commission (COGCC)???**
- B. Supplemental Review Criteria for Oil and Gas Facilities:
- a. In addition to the Special Review criteria found in Section 4.5.3 of this Code, each oil and gas facility shall be approved only if it meets the following criteria:
 - i. It complies all the requirements of this Section 17.
 - ii. Reasonable and necessary mitigation steps have been taken to protect the public health, safety, and welfare and environment

- C. Permits required:
- a. Access permits
 - b. Building permits as required for structures
 - c. Development Construction permit
 - d. All federal, state and local permits for oil and gas operations

17.2.1 - Administrative Review Process

A. *Applicant's Election to Use Administrative Review Process.* As an alternative to processing an application using the Special Review process set out in Section 4.5 of the Larimer County Land Use Code (Code), an applicant may elect to use the expedited and enhanced administrative review process set out in this section. In electing to use this administrative review process, the applicant must acknowledge and agree in its application to all of the following:

1. That by using this administrative review process to obtain an expedited review, the applicant's application will not only be subject to the baseline standards in section 17.3, but also the enhanced standards outlined in Section 17.3.1, which enhanced standards might be interpreted to be in operational conflict in one or more respects with COGCC regulations;
2. That to the extent the enhanced or negotiated standards imposed through this administrative review process are not already included as conditions in the applicant's COGCC permit, the applicant will request the Commission to add such enhanced standards as additional conditions to the applicant's COGCC permit; and
3. That if for any reason the applicant wishes to revoke its election to use this administrative review process or to withdraw from the process once started, but still desires an oil and gas permit under this section, it will be required to follow and meet all of the requirements of the Special Review Development Review Procedures in Section 12.2 of the Code.

B. *Application Completeness Review.* An application reviewed under this section shall be reviewed by the Director for completeness using the same process used in the Special Review process.

C. *Development Review Services Team (DRST).* After an application is filed with current planning and determined by the Director to be a complete application, it shall be reviewed by the DRST. The DRST shall review the application for conformance with the applicable provisions of this chapter and any other applicable provisions of this code. As part of this review, the DRST may meet with the applicant or the applicant's representatives to discuss the application and to present the DRST's questions, concerns and recommendations. Within thirty (30) days after the application has been determined by the director to be a complete application, the DRST shall complete its review by submitting a written report of its findings and recommendations to the applicant and the director. The report shall also be posted on the County's website with the application, but excluding any information required under this chapter to be kept confidential. Within thirty (30) days of the issuance of the DRST's report, the applicant may supplement its application in response to the DRST report.

D. *Neighborhood Meeting.* The neighborhood meeting for an application reviewed under this section shall be scheduled, noticed and conducted or waived in the same manner as under the Special Review process set out in Section 12.2.4 of the Code, but with one addition: The notices mailed shall state that the application is being reviewed under the administrative review process and notify the recipients of the notice that they will have until fifteen (15) days after the neighborhood meeting is held or after such other date set by the Director if the neighborhood meeting is waived by the Director in which to submit to current planning for the Director's consideration any comments and information, in written, electronic or photographic form, related to the subject application.

E. *Public Comment.* Within fifteen (15) days after the neighborhood meeting is held or after such other date set by the Director if the neighborhood meeting is waived by the Director, any person may file with current planning for the Director's consideration and to be included in any record on appeal, any comments and information, in written, electronic or photographic form, relevant to the Director's consideration of the subject application under this section. Current planning shall preserve all of the comments and information received under this section to ensure that they are included in any record of appeal. These comments and information shall also be made available for review by the applicant. The applicant may supplement its application in response or rebuttal to the comments and information submitted by the public. The applicant must file this supplemental information with current planning within fifteen (15) days after the deadline for the public's submittal of its comments and information. Any comments and information received by current planning after the deadlines set forth herein, shall not be considered by the Director in his or her decision and shall not be included in the record of any appeal.

F. *Director's Negotiations with Applicant.* After receiving the DRST report and all of the public comments and information provided under this section, the Director shall negotiate with the applicant for standards to be added as conditions to the oil and gas permit in addition to or in substitution of those baseline standards required in Section 17.3 and the enhanced standards in section 17.3.1, if in the Director's judgment such conditions will result in the increased protection of the public's health, safety, welfare, and environment or further minimize adverse impacts to surrounding land uses, the environment or wildlife resources. The Director shall have ten (10) days after the last of the public comments and information have been submitted in which to conduct those negotiations. If after those negotiations the applicant agrees in writing to these new standards, they shall be added as conditions to the oil and gas permit if the permit is granted by the Director. The condition shall also be submitted by the applicant to the commission to be added as an express condition on the applicant's COGCC permit. If the applicant does not agree to these conditions, they shall not be added as conditions to any granted oil and gas permit. In addition, the applicant's refusal to agree to any such conditions shall not be used by the Director as a basis, in whole or part, to deny the applicant's requested oil and gas permit.

G. *Director's Decision.* Within fifteen (15) days after the expiration of the negotiation period, the Director shall issue his or her written findings and conclusion, granting, granting with conditions to the extent agreed by the applicant or denying the applicant's requested oil and gas permit. The record which the Director must consider in issuing his or her written findings and conclusions shall consist solely of the application, the applicant's supplementals to the application, the DRST report and the public comments and information submitted under this section. This record shall be used by the Director to then determine the application's compliance or noncompliance with the applicable provisions of this chapter and any other applicable provisions in this code.

H. *Appeal of Director's Decision.* The Director's decision as set out in his or her written findings and conclusions shall constitute the Director's final decision. The Director's final decision is not appealable to the Planning Commission, nor the Board of County Commissioners, nor the Board of Adjustment. The Director's final decision may only be appealed by the applicant or a "party in interest," to the District Court for Larimer County. The record to be considered in the appeal shall consist of the Director's written findings and conclusion, the application, the applicant's supplementals to the application, the DRST report, all comments and information provided by the public, and any other evidentiary information the District Court orders to be included in the record.

17.3. – Standards Required for all Oil and Gas Facilities

A. General:

1. All applicants are responsible for compliance with applicable federal, state and local laws and regulations for the operation of Oil & Gas facilities.
2. Oil and Gas facilities should be located to minimize impacts on agricultural operations.

B. Air Quality:

1. The use? shall comply with existing federal and state laws and regulations applicable to its operations and emission sources as well as any future laws and regulations adopted by the Colorado Air Quality Control Commission (AQCC).
2. Air contaminant emission sources shall apply for and comply with the permit and control provisions prescribed by the Colorado APCD C.R.S. tit.25, Art. 7 (C.R.S. § 25- 7-101 et seq.) and the rules and regulations promulgated by the AQCC all applicable emission sources.
3. Environmental Protection Agency (EPA) Reduced Emission Completions shall be used for all completions and well workovers following hydraulic fracturing, unless the application demonstrates that it is economically infeasible or impractical to utilize such a system.
4. Closed loop, pitless drilling, completion systems without permanent on-site storage tanks must be utilized for containment and/or recycling/reuse of all drilling, completion, and flowback fluids, unless the application demonstrates that it is economically infeasible or impractical to utilize such a system. All emissions shall be routed to and controlled by a flare or combustor operated with at least 98% destruction removal efficiency.
5. Oil and Gas facilities shall be equipped with electric-powered engines for motors, compressors, drilling and production equipment, and pumping systems, unless it is demonstrated by the application materials the utilization of such equipment is not economically feasible or practical.
6. During construction and exploration, the applicant shall demonstrate that the site, including traffic and construction equipment, complies with all AQCC standards.
7. Oil and gas operators shall respond to air quality action day advisories posted by the CDPHE for the front range area by implementing air reduction measures, which could include:
 - a. Minimizing vehicle traffic and engine idling;
 - b. Reduced truck and worker traffic;
 - c. Delay vehicle refueling;
 - d. Suspend or delay use of fossil fuel powered ancillary equipment;
 - e. Postpone construction or maintenance activities; and
 - f. Postpone will maintenance and liquid unloading activities that would result in emission to the atmosphere.

C. Leak Detection and Repair:

1. Oil and gas facilities shall at a minimum conduct semi-annual leak detection and repair (LDAR) inspections using modern leak detection technologies and equipment. One of the Semi-annual LDAR inspections shall include a five-day notice to the County Local Government Designee (LGD) and County Health Department inviting them to observe, at their discretion, the inspection.
2. Verified leaks to an oil and gas facility shall be reported to the County LGD and County Health Department within 24 hours of the discovered leak.

3. All verified leaks shall be repaired within 72 hours, unless technically or operationally infeasible. If a leak is not repaired within 72 hours, the oil and gas facility shall be shut-in until the leak is repaired.

4.

D. Spills and Releases:

1. Any state reportable spill or release at an oil and gas facility, including those reportable to the COGCC, shall be immediately reported, **no later than 24 hours** after the event, to the following local emergency response authorities in Larimer County:
 - a. Larimer County Sheriff
 - b. Larimer County Department of Health and Environment
 - c. Larimer County Local emergency Planning Committee
 - d. Larimer County Oil and Gas LGD
 - e. Local Municipal Police Department if within one mile of a city or town
 - f. Local Fire Department
2. All state reportable spills or releases shall be cleaned up to the satisfaction of state and local agencies. Remediation of spills or releases reportable to the COGCC may be deferred to the COGCC and CDPHE.

E. Well Liquids Unloading:

1. Best management practices, including artificial lift, automated plunger lifts and at least 90% emissions when utilizing combustion to control venting shall be employed at all facilities.
2. Required manual unloading shall require on-site supervision of the unloading process.

F. Noise:

1. A three-day (one day being a weekend day) baseline noise analysis from all receptors within 350 feet of the proposed use, or the property line, whichever is closest to the proposed oil and gas facility, shall be provided.
2. Predicted decibel levels shall be provided for various phases of development, as measured 350 feet from the site of operation/noise source (per COGCC) or at the property line of the adjacent land use, whichever is greatest. The type of land use of the surrounding area shall be determined by the County taking into consideration any applicable zoning of other local land use designation.
3. Proposed mitigation measures demonstrating that the oil and gas operations at any well site, production facility, or gas facility shall comply with the following maximum permissible noise levels appropriate for the zoning designation by the County:
4. Decibel levels shall meet the identified level for the appropriate activity and adjacent land use. Decibels shall be measured at 350 feet from the site of operation/noise source (per COGCC) or at the property line of the adjacent land use, whichever is greatest. The type of land use of the surrounding area shall be determined by the County taking into consideration any applicable zoning or other local land use designation.
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2. Operator shall submit a odor mitigation plan that includes a process for response to odor complaints.
3. We encourage the Operator to communicate the schedule/timing of well completions activities to residents.

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1. Best management practices for the mitigation of dust associated with on-site and traffic activities shall be employed at the facility.
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4. Water only, unless otherwise approved by the County Health and Engineering Department, will be used for dust suppression activities within 300 feet of the ordinary high-water mark of any body of water.

I. Access:

1. Private access drives shall conform to the Local Low Volume cross section found in the Larimer County Rural Area Road Standards, and shall include the following:
 - a. The first 50 feet of access drive from the edge of pavement of the adjacent road will be paved and the remaining portions of the access drive shall be composed of a minimum of 6 inches of compacted Class 5 road base.
 - b. The access drive entrance shall include returns with a 30-foot radius.
 - c. The access drive shall be treated with Magnesium Chloride during the entire construction phase, and any time there after when the level of use exceeds 200 vehicle trips per day.
 - d. A mud and debris tracking pad shall be located at the end of the paved portion of the access drive.

J. Chemical Handling:

1. Prior to any hydraulic fracturing activity, the operator shall provide the County with a copy on the chemical disclosure registry form provided to the COGCC pursuant to the COGCC's "Hydraulic Fracturing Chemical Disclosure".
2. Drilling and completion chemicals shall be removed from the site within sixty days of the drilling completion.
 - a.

K. Recycle, Reuse and Disposal of Fluids:

1. Drilling, completion flowback and produced fluids shall be recycled/reused, unless technically infeasible.
2. Exploration and production waste may be temporarily stored, not to exceed two weeks, in tanks while awaiting transport to licensed disposal or recycling sites.
3. Produced water shall be transported by pipeline unless economically or technically infeasible.

L. Water Bodies:

1. The applicant shall provide documentation to the County, as required by the COGCC, demonstrating how the COGCC water quality protection standards are being complied with.
2. The Larimer County Health Department shall be provided with all water source tests that are typically submitted to the COGCC or CDPHE if approved by the water well owner.
3. Proposed oil and gas operations proposed within a floodplain shall require review and approval of the Floodplain Permit prior to the Board of County Commissioners hearing for an oil and gas special review application.
4. Produced water disposal via wastewater injection wells shall not be allowed.

M. Visual:

1. The application shall demonstrate compliance with the visual and aesthetic rules of COGCC and the Larimer County regulations for landscaping, fencing and lighting for all phase of the development of the site and in accordance with the development requirements for the zone development is proposed in.
2. All oil and gas facilities shall be painted with colors that are matched to or slightly darker than the surrounding landscape, and shall utilize paint with uniform, noncontracting, nonreflective color tones based upon the Munsell Soil Color Coding System.
3. The location of all outdoor lighting shall be designed to minimize off-site light spillage and glare.
4. Fencing shall be required for all the phases of an Oil and Gas facility development to ensure the security and visual aesthetics of the use.
5. Landscaping for screening and visual quality from off-site shall be required within 6 months from the time of well completion.
6. Oil and Gas facility applications, including access roads serving the facility, shall demonstrate how compliance with weed control requirements of the County Weed District and Forestry Services Department will be met.

N. Well Plugging and Abandonment:

1. Well abandonment and reclamation shall comply with the COGCC rules and shall include the following:

- a. Removal of all equipment from the well site,
- b. Restoration of the site surface to the conditions of the site reclamation plan,
- c. Notice to the County LGD of the commencement and completion of such activity, and
- d. Coordinates for the location of the decommissioned well(s), and any associated flow lines, shall be provided with the notice of the completion of well abandonment.

O. Flammable Material:

1. The location of flammable materials on site shall conform to all COGCC safety standards and local fire codes.
2. A minimum 25-foot buffer, free of weeds and dried grasses, shall be required around anything flammable.

P. Waste Disposal:

1. Oil and gas facilities shall remain free of debris and excess materials during all phases of operation.
2. Burning of debris, trash or other flammable material is not allowed.

Q. Removal of Equipment:

1. There shall be no permanent storage of equipment on the site of an oil and gas facility.
2. When not in use, or no longer needed for on-site operations all equipment not being used on the site shall be removed.

R. Maintenance of Machinery:

1. There shall be no maintenance of field equipment involving hazardous material within 300 feet of a water body.
2. Any fueling on-site shall occur over an impervious surface and shall not occur during storm events.

S. Flow Lines, Transfer Lines and Gathering Lines:

1. All off-site lines transporting process materials, production wastes, product and any other items used or generated by the facility shall be located to avoid existing or proposed residential, commercial, and industrial buildings; places of assembly, surface waterbodies and designated open spaces.
2. The location of pipelines shall be evaluated on a case by case basis, with determine locational factor being the size and type of pipeline being proposed.
3. Coordinates of all flow lines shall be provided.

T. Temporary Water Lines:

1. Temporary waterlines shall be used, unless technically infeasible.
2. Temporary waterlines shall be buried at all existing driveway and road crossing, or utilize existing culverts, if available.

U. Financial Assurance:

1. The Applicant must demonstrate the financial capability to reclaim all disturbed areas during each phase of the site development and following termination of the oil and gas operation on the site.
2. The Applicant must, for the life of the use, carry environmental liability insurance for all potential pollution events.

17.3.1 - Enhanced Standards for Administrative Review Process.

- A. All applications considered in the administrative review process and all oil and gas operations approved under this process shall be subject to and comply with the following guidelines as applicable, in addition to the standards and requirements in code Section 17.3.
- B. The operator shall designate these standards and requirements, to the extent applicable, as agreed upon best management practices on any application the operator files with the Commission.

17.4 - Guidelines for Oil and Gas Developments

- A. Applications for oil and gas facilities are strongly encouraged to incorporate the following guidelines (best management practices). Where reasonably necessary, the County may require some or all of the following guidelines depending on the location and characteristics of the proposed facility.
 1. To mitigate the adverse impacts of air emissions generated by oil and gas facilities, Applicants are encouraged to:
 - a. use tankless production techniques,
 - b. use zero emission dehydrators,
 - c. use pressure-suitable separator and vapor recovery units,
 - d. use no-bleed continuous and intermittent pneumatic devices, or alternatives such as replacing natural gas with electric or instrument air, or by routing discharged emissions to closed loop-systems of processes,
 - e. use automated tank gauging, and
 - f. eliminate all flaring except during emergencies or upset conditions, which shall be reported to the County (see std ____).
 2. To mitigate the adverse impacts of odor generated by oil and gas facilities, Applicants are encouraged to:
 - a. Add odorants that are not a masking agent, to adding chillers to the mud systems,
 - b. Using filtration systems or additives to minimize odors from drilling and fracturing fluids except that the Applicant shall not mask odors by using masking fragrances,
 - c. Enclose shale shaker to contain fumes from exposed mud where safe and feasible,
 - d. Wipe down drill pipe each time drilling operation “trips” out of hole,
 - e. Increasing additive concentration during peak hours provided additive does not create a separate odor. Additive must be used per manufacturer’s recommended level,
 - f. Use minimum low odor Category III drilling fluid. This could include non-diesel-based drilling muds including drilling muds that are low odor and do not contain benzene, toluene, ethylbenzene or xylene (BTEX),

- g. Apply 'green frac' methods, utilizing only sand and water as fracking materials or other 'green frac' materials agreed upon between the community and industry, and
 - h. The Applicant is encouraged to communicate the schedule/timing of well completions activities to residents, which could allow for voluntary shutting of windows and air intakes or temporary relocation.
3. To mitigate the impacts of multiple pipeline corridors, Applicants are encouraged to consolidate and share pipeline easements and corridors, unless it is technically infeasible or creates unsafe operating conditions.

17.5. - Application Requirements

- A. In addition to the submittal requirements necessary to demonstrate compliance with the applicable Sections of the Land Use Code, applications for oil and gas facilities shall also include, when relevant, the following:
 - a. A Site Inventory Map.
 - b. A Safety Management Plan.
 - c. A Containment and Spill Prevention Plan.
 - d. A Noise Mitigation Plan.
 - e. An Emergency Preparedness Plan.
 - f. An Odor Mitigation Plan.
 - g. A Hazardous Material Plan.
 - h. A Dust Mitigation Plan.
 - i. A Site Security Plan.
 - j. A Production Water Supply Plan.
 - k. A Containment and Spill Plan.
 - l. A Waste Management Plan.
 - m. A Reclamation Plan.
 - n. A Surface Use Agreement.
 - o. A statement verifying the legal right to extract the mineral resources.

17.6. - Appeals

- A. Any decision made pursuant to this section may be appealed pursuant to Section 22 of the Larimer County Code.

17.7. - Enforcement and Inspection

- A. Applicants shall demonstrate compliance with the Larimer County Land Use Code, and with this Section. Failure to maintain compliance with the County approval of an oil and gas facility may result in the revocation of the approval pursuant to the procedures in Section 12 of the Land Use Code. The County retains the right to seek whatever remedy or redress is legally allowable.
- B. The County reserves the right to inspect the property for compliance.

17.8. - Fees and Security for Reclamation

- A. The following fees are applicable to oil and gas facilities.
 - a. TBD
- B. An impact fee will be assessed as follows:
 - a. Capital Transportation Impact Fees

- C. Each application shall include financial security for the purpose of ensuring maintenance and reclamation may be accomplished if the applicant is unable or unwilling to perform its obligations.

17.9. - Termination of Use or Modification.

- A. No modification to an approved oil and gas facility shall be made without obtaining appropriate land use approval from the county.
- B. Upon termination of use, the oil and gas facility must be reclaimed pursuant to the reclamation plan provided.

17.10. - Definitions.

- A. Unless otherwise listed herein, the definitions found within the Colorado Revised Statutes and COGCC regulations shall control.

DRAFT for discussion only

October 30, 2019 Draft
Comments Letter by COGA



1800 GLENARM PL.

SUITE 1100

DENVER, CO 80202

Phone 303.861.0362

Fax 303.861.0373

WWW.COGA.ORG

December 1, 2019

VIA EMAIL – NO ORIGINAL TO FOLLOW

Matt Lafferty, Principle Planner
Lesli Ellis, Community Development Director

Larimer County
200 W. Oak St.
Fort Collins, CO 80521

RE: Colorado Oil & Gas Association – Comments on Larimer County’s draft Oil and Gas Regulations, version 1.

Dear Larimer County staff,

The Colorado Oil & Gas Association (“COGA”) respectfully submits comments to Larimer County for consideration in response to the November 21st open house discussion regarding the County’s draft Oil and Gas Regulations, version 1 (“Proposed Regulations”).

COGA has identified several areas of concern within the Proposed Regulations, as shared in person on November 21. Below you will find a summary of some key items:

Section 17.2 – Required Process and Permits

- COGA would like to see language outlining administrative approval tract as previously outlined and has included a suggested model. Please see attached.
- Special Review can run concurrent to state process, but would prefer Larimer approval prior to COGCC approval.

Section 17.3.E – Well Liquids Unloading

- Who supervises this process?

Section 17.3.F – Noise

- Clarify measurements are to be from outside soundwall.

Section 17.3.G – Odors

- Replace #2 and #3 with, “Operator shall submit an odor mitigation plan that includes a process for response to odor complaints.”

Section 17.3.J – Chemical Handling

- Industry maintains that banning specific chemicals used in the hydraulic fracturing process represents downhole and is therefore outside the regulatory authority of local governments.

Section 17.3.L – Water Bodies

- Clarify #4 pertains to disposal within Larimer County

Section 17.3.N – Well Plugging and Abandonment

- Remove “gathering lines” as those are owned by the midstream company and the company doing the P&R cannot agree to regulatory requirements for infrastructure they do not own. Furthermore, because Larimer County does not have a certification agreement with PHSMA, it is preempted by federal and state law from regulating gas gathering lines.

Section 17.3.S – Flow Lines, Transfer Lines, and Gathering Lines

- Same as above. #3 should outline flowlines only

Section 17.3.U – Financial Assurance

- What is the mechanism for demonstrating financial capability? Please clarify.

COGA and its members respectfully request that the County give due consideration to their reasonable and practical concerns raised herein and incorporate the provided recommendations in the final approved regulations.

COGA continues to offer itself as a resource to the County. Please contact me with any questions you may have or to schedule a meeting.

Sincerely,

Jason Grubb
Community Outreach Coordinator

Enclosures:

- Proposed Administrative Approval process

cc: Rich Coolidge – Director of Regulatory Affairs, COGA

October 30, 2019 Draft Comments by
Colorado Parks & Wildlife



COLORADO

Parks and Wildlife

Department of Natural Resources

Area 4/ Fort Collins Office
 317 W Prospect Rd
 Fort Collins, CO 80526
 P 970.472.4300 | F 970.472.4458

December 5, 2019

Lesli Ellis
 Larimer County
 Community Development Director
 200 W. Oak Street
 Fort Collins, CO 80521

RE: Larimer County SB-181 Draft Oil and Gas Rules

Dear Ms. Ellis:

Thank you for the opportunity to comment on the Larimer County SB-181 Draft Oil and Gas Rules planning process. The mission of Colorado Parks and Wildlife (CPW) is to perpetuate the wildlife resources of the state, to provide a quality state parks system, and to provide enjoyable and sustainable outdoor recreation opportunities that educate and inspire current and future generations to serve as active stewards of Colorado's natural resources. Our goal in responding to land use proposals such as this is to provide complete, consistent, and timely information to all entities who request comment on matters within our statutory authority.

Area Wildlife Managers Ty Petersburg (Area 4 Fort Collins) and Kristin Cannon (Area 2 Loveland) recently reviewed the Larimer County SB-181 O&G Rules Draft document. Larimer County is included within Area 2 south of HWY 392 and Trilby Road while Area 4 consists of Larimer County north of Hwy 392 and Trilby Road. Refer to CPW Area Boundaries Map.

CPW appreciates the efforts made by Larimer County to create a thorough plan regarding resource development and is eager to work with Larimer County early in the draft planning process. CPW representatives would appreciate the opportunity to provide site specific recommendations for any new oil and gas developments including access easements through sensitive wildlife habitats and corridors, as well as any proposals for expansion, plough and abandonment and additions/improvements to existing developments. Recommendations would assess wildlife needs and operational constraints, as well as collaborate on a planning document that provides guidelines to avoid or minimize impacts to wildlife resources.

CPW is currently updating best management practices or "Actions to Minimize Adverse Impacts to Wildlife Resources," which can be made available to Larimer County upon completion. These recommendations may be incorporated into county guidelines as appropriate. At a minimum, CPW would like to address the following specific concerns related to oil and gas development.



Habitat loss and fragmentation from development (both site-specific and cumulative)
The main impacts to wildlife from oil and gas development include fragmentation and loss of habitat. Although it is impossible to eliminate fragmentation and habitat loss with any development, impacts to wildlife can be minimized through clustering configurations, density reduction, and providing open space for wildlife.

Fragmentation of wildlife habitat has been shown to impede the movement of wildlife across the landscape. Thus, Colorado Parks and Wildlife (CPW) recommends that Larimer County employ a collaborative approach with cities and towns, and with other developments within the county. Effort should be made to maintain wildlife habitat in as whole a state as possible by restricting development within open space areas and migration corridors and clustering oil and gas developments within already disturbed areas (i.e. industrial, residential, commercial). The implementation of appropriate density thresholds on development as well as maximizing the utility of surface facilities by directional drilling and co-locating multipurpose functions can avoid unnecessary habitat fragmentation and disturbance of additional geographic areas.

Loss of Wildlife Movement/Migration Corridors

Riparian corridors provide some of the most species-diverse wildlife habitat found below 6,000 feet of elevation in Colorado. These corridors provide benefit to wildlife in a number of ways, including connecting protected areas and providing a place for wildlife to migrate from one place to another with minimal disturbance and conflicts from people. Disturbance of wildlife corridors through development causes fragmentation.

CPW recommends >200-ft buffer along riparian areas to maintain wildlife movement corridors. This will help CPW be in line with SO3326 and EO 2019-011. Visual and audio buffers should be either maintained with existing vegetation or enhanced with native plants to protect the viability of riparian habitat. Any re-vegetation planned for the riparian area should allow for regeneration of shrubby undergrowth.

Roads and Fencing

The presence of roads and fences can greatly impact wildlife movement across a landscape. This impact can be reduced by minimizing the number, length and footprint of oil and gas development roads and using existing routes where possible. Avoidance or mitigation of migration corridor disturbance when considering the location and construction of roads, fences and other linear structures reduces vehicle/wildlife collisions and wildlife/fencing entanglements. CPW supports development and implementation of portable wildlife-proof fencing that could be used temporarily to protect vegetation during early stages of development. The consideration of Wildlife Friendly Fencing standards for long term fencing is recommended. CPW has produced a document titled “Fencing with Wildlife in Mind” that can be provided upon request or can be found at www.cpw.state.co.us.

Increased Human Presence

The effort to reduce disturbance on the actual drill site and the surrounding area, to reduce direct conflict with wildlife and to prevent wildlife access to equipment should be attempted. This can be achieved by scheduling construction, drilling, completion and monitoring activities to avoid particularly sensitive seasonal and diurnal wildlife uses. A reduction of visits to well-sites through remote monitoring and the use of multi-function contractors as well as utilization of centralized pipelines can also greatly reduce the impact of human movement and disturbance to sensitive wildlife.

Water Contamination

CPW requests that surface discharge produced water meets minimum standards for Total Dissolved Solids (TDS) and Sodium Adsorption Ratio (SAR) to benefit wildlife. In addition CPW requests Larimer County avoid locating staging, refueling and storage areas within 300 feet of any reservoir, lake, wetland or natural perennial or seasonally flowing stream or river.

Noise Contamination

Reduce noise by using effective sound dampening devices or techniques. Appropriate noise levels can be found in the species specified recommendations included in the attached document.

Visual Effect

Locate above-ground facilities to minimize the visual effect (e.g. low profile equipment. Appropriate paint color, vegetation screening in wooded areas etc.)

Noxious Weeds

Invasive plants endanger the ecosystem by disturbing natural processes and jeopardizing the survival of native plants and the wildlife that depend on them. CPW recommends implementation of an integrated weed management plan if Larimer County does not already have one in place.

Species Specific Recommendations

CPW would expect a variety of wildlife species to utilize potential oil and gas sites on a regular basis including small to mid-sized mammals, songbirds, and raptors. The potential also exists for large mammals, such as deer and elk, reptiles and amphibians to frequent these sites.

Raptors are protected from take, harassment, and nest disruption at both the state and federal levels. If nests are observed within the development area, CPW recommends that buffer zones around nest sites be implemented during any period of activity that may interfere with nesting season. This will prevent the intentional or unintentional destruction of an active nest. CPW recommends work stay outside of year-round Restricted Surface Occupancy (RSOs) and seasonal Sensitive Wildlife Habitats (SWHs) - please refer to our attached Raptor Buffer Guidelines and to COGCC's map at

https://cogccmap.state.co.us/cogcc_gis_online/ (click on Parks and Wildlife in the middle of the layer list and click RSO & SWH.)

Please note COGCC's wildlife layer hasn't been updated since 2013. CPW is working to update that with COGCC. In the meantime, if you want to make sure your GIS wildlife layers are current (2019) and that you're looking at the same layers CPW is utilizing, email robert.sacco@state.co.us for access to the most up-to-date maps. Your local District Wildlife Manager may be able to facilitate a long term non-disclosure statement for specified county personnel in order to facilitate the flow of current information.

Thank you again for the opportunity to comment on the Larimer County SB-181 Draft Oil and Gas planning process. Please do not hesitate to contact Area Wildlife Managers Kristin Cannon at kristin.cannon@state.co.us or 970-472-4461; or Ty Petersburg at ty.petersburg@state.co.us or 970-472-4315 for updated recommendations or additional information.

Sincerely,



Ty Petersburg
Area Wildlife Manager
Area 4 Fort Collins

cc: M. Leslie, T. Kroening, K. Cannon, P. Canterbury, C. Brossart, J. Koehler, S. Craig, B. McArdle, J. Foster, B. Mueller.

October 30, 2019 Draft
Comments by CPC

Note: This will be a new Section in the Larimer County Land Use Code. This is a preliminary outline of draft oil and gas regulations and is not all inclusive.

To keep the Task Force Committee discussion on track, please focus comments to the intent and purpose of the standards and avoid refrain from making small edits.

17.0. – OIL AND GAS FACILITIES

17.1. – Intent and Purpose.

- A. **Intent and Purpose:** The Intent and purpose of this section is to establish and administer necessary and reasonable regulations for *oil and gas drilling and production* in a manner that protects and promotes the health, safety, and general welfare of the residents and environment of the County. To the extent practicable these regulations will require applications for oil and gas operations to demonstrate how adverse impacts will be mitigated to achieve a minimal negative impact on the environment, wildlife and residents of the County.
- B. **Authority:** Pursuant to the authority granted to the County in C.R.S. 29-20-104(1) the review of such applications may include, without limitation:
 1. Land Use,
 2. Location and siting of oil and gas facilities,
 3. Impacts to public facilities and services,
 4. Water quality and source, noise, vibration, odor, light, dust, air emissions and air quality, land disturbance, reclamation procedures, cultural resources, emergency preparedness, and coordination with first responders, security and traffic and transportation impacts,
 5. Financial securities, indemnification and insurance as appropriate to ensure compliance with the requirements of Larimer County, and
 6. All other nuisance-type effects of oil and gas development.
- C. **Applicability:** These regulations shall be applicable to all *new or future* oil and gas drilling and production activity commenced on any property in Larimer County, after the date of _____, regardless of what zoning district the property is situated in.
- D. **Severability:** If any sections, clause, provision, or portion of these regulations should be found to be unconstitutional or otherwise invalid by a court of competent jurisdiction, the remainder of the regulations in the section shall not be affected thereby and is hereby declared to be necessary for the public health, safety and welfare.

17.2. – Required Process and Permits

- A. Required Process:
 - a. Oil and gas drilling and production activities in Larimer County shall require Special Review approval (Section 4.5). Should we state when the approval must be obtained, i.e. prior to submittal to Colorado Oil and Gas Commission (COGCC)???
- B. Supplemental Review Criteria for Oil and Gas Facilities:
 - a. In addition to the Special Review criteria found in Section 4.5.3 of this Code, each oil and gas facility shall be approved only if it meets the following criteria:
 - i. It complies all the requirements of this Section 17.
 - ii. Reasonable and necessary mitigation steps have been taken to protect the public health, safety, and welfare and environment

Commented [LMK1]: Matt I think the wording in this first paragraph may minimize the research and work that you and Frank have put into this so I would suggest deleting a few of the qualifiers

Commented [FNH2]: To maximize our time together, we'd like to focus on the broad issues at hand as the specific language can be addressed by staff at a later time.

Commented [LMK3]: Do we need a qualifier here minimal negative impact?

Commented [LMK4R3]:

Commented [CJM5]: We would suggest language confirming that existing locations are an approved use that will not need an additional Special Review process for changes, updates, or updates.

Commented [CJM6]: How will the separate permit processes be provided for in the code. Some will require 2 public hearings, while others will be administratively approved. We would suggest separate sections for those processes.

Commented [LMK7]: Either prior to or concurrently?

Commented [FNH8]: It may be good to remind the task force that we can always modify this if needed.

Commented [LKE9]: I think maybe after if our rules are going to supplement the state rules.

Commented [FNH10R9]: I think is a political question, so I'd leave it up to the board and the task force to discuss. Though I think it would be good to maybe highlight some of the pros and cons of either approach. A pro of waiting til after the state is we can benefit from their expertise and let them do some of the heavier lifting, plus, it may give the public some opportunity to address their concerns at the state level. Some of the positives of going first is that we get more control, we look more proactive, and we can have a more local process with more local input earlier on.

Commented [CJM11]: We support concurrent permit processing between state and county for coordination purposes. However, we would ask that it be clear Larimer permit should be approved prior to the state approval. This will help with timing.

- C. Permits required:
 - a. Access permits
 - b. Building permits as required for structures
 - c. Development Construction permit
 - d. All federal, state and local permits for oil and gas operations

17.3. – Standards Required for all Oil and Gas Facilities

A. General:

- 1. All applicants are responsible for compliance with applicable federal, state and local laws and regulations for the operation of Oil & Gas facilities.
- 2. Oil and Gas facilities should be located to minimize impacts on agricultural operations.

Commented [FNH12]: We probably need to somewhere define what these are.

B. Air Quality:

- 1. The use? shall comply with existing federal and state laws and regulations applicable to its operations and emission sources as well as any future laws and regulations adopted by the Colorado Air Quality Control Commission (AQCC).
- 2. Air contaminant emission sources shall apply for and comply with the permit and control provisions prescribed by the Colorado APCD C.R.S. tit.25, Art. 7 (C.R.S. § 25- 7-101 et seq.) and the rules and regulations promulgated by the AQCC all applicable emission sources.
- 3. Environmental Protection Agency (EPA) Reduced Emission Completions shall be used for all completions and well workovers following hydraulic fracturing, unless the application demonstrates that it is economically infeasible or impractical to utilize such a system.
- 4. Closed loop, pitless drilling, completion systems without permanent on-site storage tanks must be utilized for containment and/or recycling of all drilling, completion, and flowback fluids, unless the application demonstrates that it is economically infeasible or impractical to utilize such a system. All emissions shall be routed to and controlled by a flare or combustor operated with at least 98% destruction removal efficiency.
- 5. Oil and Gas facilities shall be equipped with electric-powered engines for motors, compressors, drilling and production equipment, and pumping systems, unless it is demonstrated by the application materials the utilization of such equipment is not economically feasible or practical.
- 6. During construction and exploration, the applicant shall demonstrate that the site, including traffic and construction equipment, complies with all AQCC standards.
- 7. Oil and gas operators shall respond to air quality action day advisories posted by the CDPHE for the front range area by implementing air reduction measures, which should include:
 - a. Minimizing vehicle traffic and engine idling;
 - b.Reduced truck and worker traffic;
 - c.Delay vehicle refueling;
 - d.Suspend or delay use of fossil fuel powered ancillary equipment;
 - e.Postpone construction or maintenance activities; and
 - f. Postpone will maintenance and liquid unloading activities that would result in emission to the atmosphere.

Commented [LMK13]: Same as above

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C. Leak Detection and Repair:

1. Oil and gas facilities shall at a minimum conduct ~~semi-annual~~ leak detection and repair (LDAR) inspections using modern leak detection technologies and equipment. One of the Semi-annual LDAR inspections shall include a five-day notice to the County Local Government Designee (LGD) and County Health Department inviting them to observe, at their discretion, the inspection.
2. Verified leaks to an oil and gas facility shall be reported to the County LGD and County Health Department within 24 hours of the discovered leak.
3. All verified leaks shall be repaired within 72 hours, unless technically or operationally infeasible. ~~If a leak is not repaired within 72 hours, the oil and gas facility shall be shut-in until the leak is repaired.~~
4. ~~Equipment leaks that pose an imminent hazard to persons, property, wildlife or the environment shall be shut down and not allowed to operate until the operator has provided evidence that the leak has been repaired.~~

E.D. Spills and Releases:

1. Any state reportable spill or release at an oil and gas facility, including those reportable to the COGCC, shall be immediately reported, **no later than 24 hours** after the event, to the following local emergency response authorities in Larimer County:
 - a. Larimer County Sheriff
 - b. Larimer County Department of Health and Environment
 - c. Larimer County Local emergency Planning Committee
 - d. Larimer County Oil and Gas LGD
 - e. Local Municipal Police Department if within one mile of a city or town
 - f. Local Fire Department
2. All state reportable spills or releases shall be cleaned up to the satisfaction of state and the local emergency response authorities, listed in item 1 above agencies. Remediation of spills or releases reportable to the COGCC may be deferred to the COGCC and CDPHE.

F.E. Well Liquids Unloading:

1. Best management practices, including artificial lift, automated plunger lifts and at least 90% emissions when utilizing combustion to control venting shall be employed at all facilities.
2. ~~Approved~~ Required manual unloading shall require on-site supervision of the unloading process.

G.F. Noise:

1. A three-day (one day being a weekend day) baseline noise analysis from all receptors within 350 feet of the proposed use, or the property line, whichever is closest to the proposed oil and gas facility, shall be provided.
2. Predicted decibel levels shall be provided for various phases of development, as measured 350 feet from the site of operation/noise source (per COGCC) or at the property line of the adjacent land use, whichever is greatest. The type of land use of the surrounding area shall be determined by the County taking into consideration any applicable zoning of other local land use designation.
3. Proposed mitigation measures demonstrating that the oil and gas operations at any well site, production facility, or gas facility shall comply with the following maximum permissible noise levels appropriate for the zoning designation by the County:

Commented [FNH14]: I think this is fine, a little more than the state.

Commented [LS15R14]: I agree with Frank...not sure construction and traffic flows should be under AQCC? We should be requiring particulate emission (dust) control, and all kinds of odor control to relate with the CDPHE health study of the early stages of development in order to get a producing well.

Commented [LS16R14]: AQCC will be reviewing rulemaking in Dec to require O&G have all air permits in place prior to construction and development.

Commented [LMK17]: I wonder if there is a way to say LDAR or better technology so if something else becomes better we do not have to change this section?

Commented [FNH18]: Do they have to send us a report or something? What if they fail to do the inspection?

Commented [LS19R18]: For reports, we could include something like "This information will be collectively reported on a monthly basis in the same format that Operator uses for reporting to the Air Pollution Control Division under Regulation 7."
-Could also state "The Operator may satisfy this reporting obligation in whole by submitting its AQCC Regulations No. 7 annual (or as often as required by current and future regulations) reports for the prior calendar year to the County and LCDHE, and supplementing them as needed to meet these reporting requirements for covered facilities within the County."

Commented [LS20R18]: Could be 1a.

Commented [LMK21]: Not sure what this means?

Commented [LMK22]: 1a?

Commented [CJM23]: This is suggested language to acknowledge the concurrent requirements that exist with COGCC and CDPHE for remediation and cleanup. This is to limit conflicts.

Commented [CJM24]: This is a rule that must be followed. Also, who will supervise this process

Commented [CJM25]: Measured outside of the sound walls

Commented [LMK26]: ?

Commented [LS27]: This is an application requirement, not a Standard for Development? Maybe for this section, use:

1. Decibel levels shall meet the identified level for the appropriate activity and adjacent land use. Decibels shall be measured at 350 feet from the site of operation/noise source (per COGCC) or at the property line of the adjacent land use, whichever is greatest. The type of land use of the surrounding area shall be ...

4. Decibel levels shall meet the identified level for the appropriate activity and adjacent land use. Decibels shall be measured at 350 feet from the site of operation/noise source (per COGCC) or at the property line of the adjacent land use, whichever is greatest. The type of land use of the surrounding area shall be determined by the County taking into consideration any applicable zoning or other local land use designation.
5. Oil and gas operations at any well site, production facility, or gas facility shall comply with the following maximum permissible noise levels appropriate for the zoning designation by the County:

<u>ZONE</u>	<u>7:00 am to next 7:00 pm</u>	<u>7:00 pm to next 7:00 am</u>
Residential/Agricultural/Rural	55 db(A)	50 db(A)
Commercial	60 db(A)	55 db(A)
Light Industrial	70 db(A)	65 db(A)
Industrial	80 db(A)	75 db(A)

In the hours between 7:00 a.m. and the next 7:00 p.m., the noise levels permitted above may be increased by ten db(A) for a period of not to exceed fifteen minutes in any one-hour period.

Construction projects (pipeline or facility construction/installation) shall be subject to the maximum permissible noise levels specified for industrial zones for the period within which construction is to be completed pursuant to any applicable construction permit issued by proper authority or, if no time limitation is imposed, for a reasonable period of time for completion of project.

H.G. Odors:

1. Oil and gas operations shall be in compliance with the Department of Public Health and Environment, Air Quality Control Commission, Regulation No. 2 Odor Emission, 5 C.C.R. 1001-4, Regulation No. 3 (5 C.C.R. 1001-5), and Regulation No. 7 Section XVII.B.1 (a-c) and Section XII.
- ~~2. Operations shall prevent odors from oil and gas facilities from affecting the health and welfare of the public during development activities including drilling, fracking, and flowback to the extent reasonably possible.~~
- ~~3.2. A system shall be established for immediate response to odor complaints that includes options for ceasing operations, notification of affected residents, and temporary relocation of residents until the source of the odor is identified and resolved. Operator shall submit an odor mitigation plan that includes a process for response to odor complaints.~~
- ~~4.3. We encourage the Operator to communicate the schedule/timing of well completions activities to residents, which could allow for voluntary shutting of windows and air intakes or temporary relocation.~~

Commented [CJM28]: Rule number 1 is sufficient as the standard set forth by CDPHE is health and welfare.

Commented [CJM29]: Certain operations are unable to be shut down immediately for safety reasons. Stakeholder complaints are handled on a case by case basis depending on the issue and the operation. Also, it is unclear who would manage such a process. We would suggest the operator should have to flexibility to manage in coordination with Larimer county.

Commented [CJM30]: The code may not be the proper place to define individual resident actions

H.H. Dust:

1. Best management practices for the mitigation of dust associated with on-site and traffic activities shall be employed at the facility.
2. Produced water and other process fluids shall not be used for dust suppression.
3. Safety Data Sheets (SDS) shall be provided with the application for any proposed chemical based dust suppressants.

4. Water only, unless otherwise approved by the County Health and Engineering Department, will be used for dust suppression activities within 300 feet of the ordinary high-water mark of any body of water.

Commented [LMK31]: Potable?

H. Access:

1. Private access drives shall conform to the Local Low Volume cross section found in the Larimer County Rural Area Road Standards, and shall include the following:
 - a. The first 50 feet of access drive from the edge of pavement of the adjacent road will be paved and the remaining portions of the access drive shall be composed of a minimum of 6 inches of compacted Class 5 road base.
 - b. The access drive entrance shall include returns with a 30-foot radius.
 - c. The access drive shall be treated with Magnesium Chloride during the entire construction phase, and any time there after when the level of use exceeds 200 vehicle trips per day.
 - d. A mud and debris tracking pad shall be located at the end of the paved portion of the access drive.

Commented [LMK32]: Seems to be missing something

Commented [LKE33]: Caps?

Commented [FNH34]: Should we include some language about making sure that fire apparatus can get in, or complying with the standards of the local fire district?

K.J. Chemical Handling:

1. Prior to any hydraulic fracturing activity, the operator shall provide the County with a copy on the chemical disclosure registry form provided to the COGCC pursuant to the COGCC's "Hydraulic Fracturing Chemical Disclosure".
2. Drilling and completion chemicals shall be removed from the site within sixty days of the drilling completion.

Commented [LMK35]: Would thirty be better?

3. The following toxic, including orally toxic chemicals shall not be added or utilized in the hydraulic fracturing fluid:

Commented [LKE36]: Is this a defined term? Sounds odd

- a. Benzene
- b. Lead
- e. Mercury
- d. Arsenic
- e. Cadmium
- f. Chromium
- g. Ethylbenzene
- h. Xylene
- i. 1,3,5 trimethylbenzene
- j. 1,4 dioxane
- k. 1 butanol
- l. 2 butoxyethanol
- m. N,N dimethylformamide
- n. 2 ethylhexanol
- o. 2 mercaptoethanol
- p. Benzene, 1, 1' oxybis ,tetrapropylene derivatives, sulfonated, sodium salts
- q. Butyl glycidyl ether
- r. Polysorbate 80
- s. Quaternary ammonium compounds, dicoco alkyl dimethyl, chlorides
- t. Bis hexamethylene triamine penta methylene phosphonic acid
- u. Diethylenetriamine penta
- v. FD&C blue no 1.

Commented [CJM37]: We would suggest this is a down hole regulation not granted to the county under SB19-181.

~~w-a.~~ Tetrakis (triethanolaminate) zirconium (IV) (TTZ)

Commented [FNH38]: I don't know whether the industry will say anything about whether any of these are necessary, I am just not sure where this list came from, but we may want to make sure that the industry is aware and isn't going to say that they have to be able to use some of these or they can't develop at all in the county.

L-K. Recycle, Reuse and Disposal of Fluids:

1. Drilling, completion flowback and produced fluids shall be recycled, unless technically infeasible.
2. Exploration and production waste may be temporarily stored, not to exceed two weeks, in tanks while awaiting transport to licensed disposal or recycling sites.
3. Produced water shall be transported by pipeline unless economically or technically infeasible.

M-L. Water Bodies:

1. The applicant shall provide documentation to the County ~~documentation~~, as required by the COGCC, demonstrating how the COGCC water quality protection standards ~~a~~Are being complied with.
2. The Larimer County Health Department shall be provided with all water source tests, that are typically submitted to the COGCC or CDPHE if approved by owner.
3. Proposed oil and gas operations proposed with in a flood-plain shall require review and approval of the Floodplain Permit prior to the Board of County Commissioners hearing for an oil and gas special review application.
4. Produced water disposal via wastewater injection wells shall not be allowed.

Commented [CJM39]: It might be that a private water well owner may not want those test results disclosed. This is to protect those individual property owners

Commented [LMK40]: Do we need to qualify where – unincorporated area, at the well site, anywhere in the county?

N-M. Visual:

1. The application shall demonstrate compliance with the visual and aesthetic rules of COGCC and the Larimer County regulations for landscaping, fencing and lighting for all phase of the development of the site and in accordance with the development requirements for the zone development is proposed in.
2. All oil and gas facilities shall be painted with colors that are matched to or slightly darker than the surrounding landscape, and shall utilized paint with uniform, noncontracting, nonreflective color tones based upon the Munsell Soil Color Coding System.
3. The location of all outdoor lighting shall be designed to minimize off-site light spillage and glare.
4. Fencing shall for all the phases of an Oil and Gas facility development to ensure the security and visual aesthetics of the use.
5. Landscaping for screening and visual quality from off-site shall be required within 6 months from the time of well completion.
6. O&G Oil and Gas facility applications, including access roads serving the facility, shall demonstrate how compliance with weed control requirements of the County Weed District and Forestry Services Department will be met.

Commented [FNH41]: Within Larimer County or anywhere. If they are drilling here but hauling the water to weld county to an injection well, why would we care?

Commented [CJM42]: We would suggest that existing zoning standards apply based on the proposed location of development

Commented [LMK43]: At some point reach consistency in O & G or Oil and Gas facility

O-N. Well Plugging and Abandonment:

1. Well abandonment and reclamation shall comply with the COGCC rules, and shall include the following:
 - a. Removal of all equipment from the well site,
 - b. Restoration of the site surface to the conditions of the site reclamation plan,
 - c. Notice to the County LGD of the commencement and completion of such activity, and

Commented [CJM44]: As a general matter, we would suggest this is a down hole regulation not granted under SB19-181

- d. Coordinates for the location of the decommissioned well(s), and any associated gathering or flow lines, shall be provided with the notice of the completion of well abandonment.

Commented [CJM45]: Gathering lines are typically owned by a third-party entity, not an operator. Thus if an operator is conducting a plug and abandonment, they cannot accept liability for another entities lines.

Commented [LMK46]: Any inspection requirements after closure?

P.O. Flammable Material:

1. The location of flammable materials on site shall conform to all COGCC safety standards and local fire codes.
2. A minimum 25-foot buffer, free of weeds and dried grasses, shall be required around anything flammable.

Q-P. Waste Disposal:

1. Oil and gas facilities shall remain free of debris and excess materials during all phases of operation.
2. Burning of debris, trash or other flammable material is not allowed.

R-Q. Removal of Equipment:

1. There shall be no permanent storage of equipment on the site of an oil and gas facility.
2. When not in use, or no longer needed for on-site operations all equipment not being used on the site shall be removed.

S-R. Maintenance of Machinery:

1. There shall be no maintenance of field equipment involving hazardous material within 300 feet of a water body.
2. Any fueling on-site shall occur over an impervious surface and shall not occur during storm events.

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T-S. Flow Lines, Transfer Lines and Gathering Lines:

1. All off-site lines transporting process materials, production wastes, product and any other items used or generated by the facility shall be located to avoid existing or proposed residential, commercial, and industrial buildings; places of assembly, surface waterbodies and designated open spaces.
2. The location of pipelines shall be evaluated on a case by case basis, with determine locational factor being the size and type of pipeline being proposed.
- 2.3. Coordinates of all flow lines, gathering lines, and transfer lines shall be provided.

Commented [CJM47]: Again, these are typically not operator owned, and thus they will likely not have this information.

U-T. Temporary Water Lines:

1. Temporary waterlines shall be used, unless technically infeasible.
2. Temporary waterlines shall be buried at all existing driveway and road crossing, or utilize existing culverts, if available.

V-U. Financial Assurance:

1. The operator/Applicant must demonstrate the financial capability to reclaim all disturbed areas during each phase of the site development and following termination of the oil and gas operation on the site.
2. The operator/Applicant must, for the life of the use, carry environmental liability insurance for gradual all potential pollution events.

Commented [FNH48]: Who is going to check this, or decide how much, or that it is still there when we need it?

Commented [CJM49]: Operators already post bonds. How would this section be implemented in practice?

17.4.- Guidelines for Oil and Gas Developments

- A. Applications for oil and gas facilities are strongly encouraged to incorporate the following guidelines (best management practices). Where reasonably necessary, the County may require some or all of the following guidelines depending on the location and characteristics of the proposed facility.
1. To mitigate the adverse impacts of air emissions generated by oil and gas facilities, ~~operator~~~~operator~~Applicants are encouraged to:
 - a. use tankless production techniques,
 - b. use zero emission dehydrators,
 - c. use pressure-suitable separator and vapor recovery units,
 - d. use no-bleed continuous and intermittent pneumatic devices, or alternatives such as replacing natural gas with electric or instrument air, or by routing discharged emissions to closed loop-systems of processes,
 - e. use automated tank gauging, and
 - f. eliminate all flaring except during emergencies or upset conditions, which shall be reported to the County (see ~~std~~).
 2. To mitigate the adverse impacts of odor generated by oil and gas facilities, ~~operator~~~~operator~~Applicants are encouraged to:
 - a. Add odorants that are not a masking agent, to adding chillers to the mud systems,
 - b. Using filtration systems or additives to minimize odors from drilling and fracturing fluids except that the ~~operator~~Applicant shall not mask odors by using masking fragrances,
 - c. Enclose shale shaker to contain fumes from exposed mud where safe and feasible,
 - d. Wipe down drill pipe each time drilling operation “trips” out of hole,
 - e. Increasing additive concentration during peak hours provided additive does not create a separate odor. Additive must be used per manufacturer’s recommended level,
 - f. Use minimum low odor Category III drilling fluid. This could include non-~~diesel based~~~~diesel-based~~ drilling muds including drilling muds that are low odor and do not contain benzene, toluene, ethylbenzene or xylene (BTEX), or
 - g. Apply ~~green~~ frac' methods, utilizing only sand and water as fracking materials or other 'green frac' materials agreed upon between the community and industry, and-
 - h. The ~~Operator~~Applicant is encouraged to communicate the schedule/timing of well completions activities to residents, which could allow for voluntary shutting of windows and air intakes or temporary relocation.
 3. To mitigate the impacts of multiple pipeline corridors, ~~operator~~~~operator~~Applicants are encouraged to consolidate and share pipeline easements and corridors, unless it is technically infeasible.

Commented [LMK50]: ?

Commented [LMK51]: Is this possible? Last I looked (a long time ago) this was cost prohibitive and not the best technology?

17.5. - Application Requirements

- A. In addition to the submittal requirements necessary to demonstrate compliance with the applicable Sections of the Land Use Code, applications for oil and gas facilities shall also include, when relevant, the following:
- a. A Site Inventory Map.
 - b. A Safety Management Plan.
 - c. A Containment and Spill Prevention Plan.

- d. A Noise Mitigation Plan.
- e. An Emergency Preparedness Plan.
- f. An Odor Mitigation Plan.
- g. A Hazardous Material Plan.
- h. A Dust Mitigation Plan.
- i. A Site Security Plan.
- j. A Production Water Supply Plan.
- k. A Containment and Spill Plan.
- l. A Waste Management Plan.
- m. A Reclamation Plan.
- n. A Surface Use Agreement.
- o. A statement verifying the legal right to extract the mineral resources.

17.6. - Appeals

- A. Any decision made pursuant to this section may be appealed pursuant to Section 22 of the Larimer County Code.

17.7. - Enforcement and Inspection

- A. Applicants shall demonstrate compliance with the Larimer County Land Use Code, and with this Section. Failure to maintain compliance with the County approval of an oil and gas facility may result in the revocation of the approval pursuant to the procedures in Section 12 of the Land Use Code. The County retains the right to seek whatever remedy or redress is legally allowable.
- B. The County reserves the right to inspect the property for compliance.

Commented [LMK52]: ?

Commented [LMK53]: Should there be some notice requirement?

17.8. - Fees and Security for Reclamation

- A. The following fees are applicable to oil and gas facilities.
 - a. TBD
- B. An impact fee will be assessed as follows:
 - a. Capital Transportation Impact Fees
- C. Each application shall include financial security for the purpose of ensuring maintenance and reclamation may be accomplished if the applicant is unable or unwilling to perform its obligations.

Commented [LMK54]: In addition to any COGCC?

17.9. - Termination of Use or Modification.

- A. No modification to an approved oil and gas facility shall be made without obtaining appropriate land use approval from the county.
- B. Upon termination of use, the oil and gas facility must be reclaimed pursuant to the reclamation plan provided.

17.10. - Definitions.

- A. Unless otherwise listed herein, the definitions found within the Colorado Revised Statutes and COGCC regulations shall control.

October 30, 2019 Draft
Comments by ESAB

Here are changes suggested by the work group from the esab all of whom work in the energy field.

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Note: This will be a new Section in the Larimer County Land Use Code. This is a preliminary outline of draft oil and gas regulations and is not all inclusive. NEED TO NUMBER THE PAGES

Commented [RA1]:

Commented [LMK2]: Matt I think the wording in this first paragraph may minimize the research and work that you and Frank have put into this so I would suggest deleting a few of the qualifiers

To keep the Task Force Committee discussion on track, please focus comments to the intent and purpose of the standards and avoid refrain from making small edits.

Commented [FNH3]: To maximize our time together, we'd like to focus on the broad issues at hand as the specific language can be addressed by staff at a later time.

17.0. – OIL AND GAS FACILITIES

17.1. – Intent and Purpose.

A. **Intent and Purpose:** The Intent and purpose of this section is to establish and administer necessary and reasonable regulations for *oil and gas drilling and production* in a manner that protects and promotes the health, safety, and general welfare of the residents and environment of the County. To the extent practicable these regulations will require applications for oil and gas operations to demonstrate how adverse impacts will be mitigated to achieve a minimal negative impact on the environment, wildlife and residents of the County. perhaps a sentence to acknowledge the rights of surface owners and referencing the relevant section of the CO constitution may be in order.

Commented [LMK4]: Do we need a qualifier here minimal negative impact?

Commented [LMK5R4]:

B. **Authority:** Pursuant to the authority granted to the County in C.R.S. 29-20-104(1) the review of such applications may include, without limitation: It was suggested that in a county 1041 process the applicant has to propose 3 sites for an oil gas facility. Industry personnel may be familiar with the need to evaluate three sites under 1041 so it might work for them here.

1. Land Use,
2. Location and siting of oil and gas facilities,
3. Impacts to public facilities and services,
4. Water quality and source, noise, vibration, odor, light, dust, air emissions and air quality, land disturbance, reclamation procedures, cultural resources, emergency preparedness, and coordination with first responders, security and traffic and transportation impacts,
5. Financial securities, indemnification and insurance as appropriate to ensure compliance with the requirements of Larimer County, and
6. All other nuisance-type effects of oil and gas development.

C. **Applicability:** These regulations shall be applicable to all oil and gas drilling and production activity commenced on any property in Larimer County, after the date of _____, regardless of what zoning district the property is situated in.

D. **Severability:** If any sections, clause, provision, or portion of these regulations should be found to be unconstitutional or otherwise invalid by a court of competent jurisdiction, the remainder of the regulations in the section shall not be affected thereby and is hereby declared to be necessary for the public health, safety and welfare.

17.2. – Required Process and Permits

A. Required Process:

- a. Oil and gas drilling and production activities in Larimer County shall require Special Review approval (Section 4.5). Should we state when the approval must be obtained, i.e. prior to submittal to Colorado Oil and Gas Commission (COGCC)???
- Adapt and conform the special review approval so it is relevant to the particulars of the oil and gas industry vs other applications of the special review process. In addition to B below, is there something about the practices and time frames of oil and gas fracking which might suggest different timing notice and process requirements within section 4.5.3? Application of this to ag should be a test pilot project. Not clear it makes sense. We were advised that the state requires concurrent processing of state and county permits. If true that would seem to respond to this question.
- B. Supplemental Review Criteria for Oil and Gas Facilities:
- a. In addition to the Special Review criteria found in Section 4.5.3 of this Code, each oil and gas facility shall be approved only if it meets the following criteria:
- It complies all the requirements of this Section 17.
 - Reasonable and necessary mitigation steps have been taken to protect the public health, safety, and welfare and environment
 - iii. The exception from the special review process where an administrative decision is made in lieu of special review needs clear standards specifying the scope of administrative review, what shall be produced by the applicant and what standards will be applied to a decision upon administrative review. Perhaps a small simpler project request does not require all the submittals outlined in 17.5
- C. Permits required: in the reg or in an information sheet there should be an explanation of where this land use approval special process fits in the development process of a fracking facility. This Section C seems to suggest that each of these is required before or after (unclear) the approval of the special review, presumably before.
- Access permits
 - Building permits as required for structures
 - Development Construction permit
 - All federal, state and local permits for oil and gas operations

17.3. – Standards Required for all Oil and Gas Facilities

A. General:

- All applicants are responsible for compliance with applicable federal, state and local laws and regulations for the operation of Oil & Gas facilities.
- Oil and Gas facilities should be located to minimize impacts on agricultural operations.

B. Air Quality:

- The use? shall comply with existing federal and state laws and regulations applicable to its operations and emission sources as well as any future laws and regulations adopted by the Colorado Air Quality Control Commission (AQCC).
- Air contaminant emission sources shall apply for and comply with the permit and control provisions prescribed by the Colorado APCD C.R.S. tit.25, Art. 7 (C.R.S. § 25- 7-101 et seq.) and the rules and regulations promulgated by the AQCC all applicable emission sources.
- Environmental Protection Agency (EPA) Reduced Emission Completions shall be used for all completions and well workovers following hydraulic fracturing, unless the

Commented [LMK6]: Either prior to or concurrently?

Commented [FNH7]: It may be good to remind the task force that we can always modify this if needed.

Commented [LKE8]: I think maybe after if our rules are going to supplement the state rules.

Commented [FNH9R8]: I think is a political question, so I'd leave it up to the board and the task force to discuss. Though I think it would be good to maybe highlight some of the pros and cons of either approach. A pro of waiting til after the state is we can benefit from their expertise and let them do some of the heavier lifting, plus, it may give the public some opportunity to address their concerns at the state level. Some of the positives of going first is that we get more control, we look more proactive, and we can have a more local process with more local input earlier on.

Commented [FNH10]: We probably need to somewhere define what these are.

application demonstrates that it is economically infeasible or impractical to utilize such a system.

4. Closed loop, pitless drilling, completion systems without permanent on-site storage tanks must be utilized for containment and/or recycling of all drilling, completion, and flowback fluids, unless the application demonstrates that it is economically infeasible or impractical to utilize such a system. All emissions shall be routed to and controlled by a flare or combustor operated with at least 98% destruction removal efficiency.
5. Oil and Gas facilities shall be equipped with electric-powered engines for motors, compressors, drilling and production equipment, and pumping systems, unless it is demonstrated by the application materials the utilization of such equipment is not economically feasible or practical.
6. During construction and exploration, the applicant shall demonstrate that the site, including traffic and construction equipment, complies with all AQCC standards.
7. Oil and gas operators shall respond to air quality action day advisories posted by the CDPHE for the front range area by implementing air reduction measures, which should include:
 - a. Minimizing vehicle traffic and engine idling;
 - b. Reduced truck and worker traffic;
 - c. Delay vehicle refueling;
 - d. Suspend or delay use of fossil fuel powered ancillary equipment;
 - e. Postpone construction or maintenance activities; and
 - f. Postpone will maintenance and liquid unloading activities that would result in emission to the atmosphere.

With respect to Sections C and D below the group wanted to know what the County will do with the reports and information obtained. Would it be used for case by case enforcement, to discover trends in spills and how they are responded to? To consider amendments to these regs?

C. Leak Detection and Repair: It is unclear whether independent third party testing will be required. This would be in the reg vs the county leasing or purchasing testing equipment which would appear in the reg as a requirement for County-led testing. This should be run by CDPHE clarity and coordination with their practice and process. Does this suggest we need to be stricter than the State? Does this suggest there are certain types of facilities that the state does not inspect, test regulate that by this the County seeks to regulate?

1. Oil and gas facilities shall at a minimum conduct semi-annual leak detection and repair (LDAR) inspections using modern leak detection technologies and equipment. One of the Semi-annual LDAR inspections shall include a five-day notice to the County Local Government Designee (LGD) and County Health Department inviting them to observe, at their discretion, the inspection.
2. Verified leaks to an oil and gas facility shall be reported to the County LGD and County Health Department within 24 hours of the discovered leak.
3. All verified leaks shall be repaired within 72 hours, unless technically or operationally infeasible.
4. Equipment leaks that pose an imminent hazard to persons, property, wildlife or the environment shall be shut down and not allowed to operate until the operator has provided evidence that the leak has been repaired.

D. Spills and Releases: With respect to Sections C above and D, there needs to be a definition of what constitutes a leak and a spill. Assuming there is something about in the State regs

Commented [LMK11]: Same as above

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Commented [FNH12]: I think this is fine, a little more than the state.

Commented [LS13R12]: I agree with Frank...not sure construction and traffic flows should be under AQCC? We should be requiring particulate emission (dust) control, and all kinds of odor control to relate with the CDPHE health study of the early stages of development in order to get a producing well.

Commented [LS14R12]: AQCC will be reviewing rulemaking in Dec to require O&G have all air permits in place prior to construction and development.

Commented [LMK15]: I wonder if there is a way to say LDAR or better technology so if something else becomes better we do not have to change this section?

Commented [FNH16]: Do they have to send us a report or something? What if they fail to do the inspection?

Commented [LS17R16]: For reports, we could include something like "This information will be collectively reported on a monthly basis in the same format that Operator uses for reporting to the Air Pollution Control Division under Regulation 7."
-Could also state "The Operator may satisfy this reporting obligation in whole by submitting its AQCC Regulations No. 7 annual (or as often as required by current and future regulations) reports for the prior calendar year to the County and LCDHE, and supplementing them as needed to meet these reporting requirements for covered facilities within the County."

Commented [LS18R16]: Could be 1a.

Commented [LMK19]: Not sure what this means?

that comes thru 17.10 below on definitions, it needs to be clear whether the county definitions of leak and spill is more strict than or equal to the state definition of leak and spill in their regs. Consideration should be given as to Whether to incorporate the State definition into this reg for cases of enforcement and reference.

1. Any spill or release at an oil and gas facility, including those reportable to the COGCC, shall be immediately reported, **no later than 24 hours** after the event, to the following local emergency response authorities in Larimer County:
 - a. Larimer County Sheriff
 - b. Larimer County Department of Health and Environment
 - c. Larimer County Local emergency Planning Committee
 - d. Larimer County Oil and Gas LGD
 - e. Local Municipal Police Department if within one mile of a city or town
 - f. Local Fire Department
2. All spills or releases shall be cleaned up to the satisfaction of the local emergency response authorities, listed in item 1 above. Remediation of spills or releases reportable to the COGCC may be deferred to the COGCC and CDPHE.
is there such a thing as minimal or de minimize spills that do not require reporting or require reporting and fixing over a longer period? Vs major spills?

Commented [LMK20]: 1a?

E. Well Liquids Unloading:

1. Best management practices, including artificial lift, automated plunger lifts and at least 90% emissions when utilizing combustion to control venting shall be employed at all facilities.
2. Approved manual unloading shall require on-site supervision of the uploading process.

F. Noise:

1. A three-day (one day being a weekend day) baseline noise analysis from all receptors within 350 feet of the proposed use, or the property line, whichever is closest to the proposed oil and gas facility, shall be provided.
2. Predicted decibel levels shall be provided for various phases of development, as measured 350 feet from the site of operation/noise source (per COGCC) or at the property line of the adjacent land use, whichever is greatest. The type of land use of the surrounding area shall be determined by the County taking into consideration any applicable zoning of other local land use designation.
3. Proposed mitigation measures demonstrating that the oil and gas operations at any well site, production facility, or gas facility shall comply with the following maximum permissible noise levels appropriate for the zoning designation by the County:
4. Decibel levels shall meet the identified level for the appropriate activity and adjacent land use. Decibels shall be measured at 350 feet from the site of operation/noise source (per COGCC) or at the property line of the adjacent land use, whichever is greatest. The type of land use of the surrounding area shall be determined by the County taking into consideration any applicable zoning or other local land use designation.
5. Oil and gas operations at any well site, production facility, or gas facility shall comply with the following maximum permissible noise levels appropriate for the zoning designation by the County:

Commented [LMK21]: ?

Commented [LS22]: This is an application requirement, not a Standard for Development? Maybe for this section, use:

1. Decibel levels shall meet the identified level for the appropriate activity and adjacent land use. Decibels shall be measured at 350 feet from the site of operation/noise source (per COGCC) or at the property line of the adjacent land use, whichever is greatest. The type of land use of the surrounding area shall be determined by the County taking into consideration any applicable zoning or other local land use designation.

2. Oil and gas operations at any well site, production facility, or gas facility shall comply with the following maximum permissible noise levels appropriate for the zoning designation by the County: and then keep the decibel chart here?

Relocate items 1-3 to the section relating to the application requirements?

<u>ZONE</u>	<u>7:00 am to next 7:00 pm</u>	<u>7:00 pm to next 7:00 am</u>
Residential/Agricultural/Rural	55 db(A)	50 db(A)

Commercial	60 db(A)	55 db(A)
Light Industrial	70 db(A)	65 db(A)
Industrial	80 db(A)	75 db(A)

In the hours between 7:00 a.m. and the next 7:00 p.m., the noise levels permitted above may be increased by ten db(A) for a period of not to exceed fifteen minutes in any one-hour period.

Construction projects (pipeline or facility construction/installation) shall be subject to the maximum permissible noise levels specified for industrial zones for the period within which construction is to be completed pursuant to any applicable construction permit issued by proper authority or, if no time limitation is imposed, for a reasonable period of time for completion of project.

G. Odors:

1. Oil and gas operations shall be in compliance with the Department of Public Health and Environment, Air Quality Control Commission, Regulation No. 2 Odor Emission, 5 C.C.R. 1001-4, Regulation No. 3 (5 C.C.R. 1001-5), and Regulation No. 7 Section XVII.B.1 (a-c) and Section XII.
2. Operations shall prevent odors from oil and gas facilities from affecting the health and welfare of the public during development activities including drilling, fracking, and flowback to the extent reasonably possible.
3. A system shall be established for immediate response to odor complaints that includes options for ceasing operations, notification of affected residents, and temporary relocation of residents until the source of the odor is identified and resolved.
4. We encourage the Operator to communicate the schedule/timing of well completions activities to residents, which could allow for voluntary shutting of windows and air intakes or temporary relocation.

H. Dust:

1. Best management practices for the mitigation of dust associated with on-site and traffic activities shall be employed at the facility.
2. Produced water and other process fluids shall not be used for dust suppression.
3. Safety Data Sheets (SDS) shall be provided with the application for any proposed chemical based dust suppressants.
4. Water only, unless otherwise approved by the County Health and Engineering Department, will be used for dust suppression activities within 300 feet of the ordinary high-water mark of any body of water.

Commented [LMK23]: Potable?

I. Access:

1. Private access drives shall conform to the Local Low Volume cross section found in the Larimer County Rural Area Road Standards, and shall include the following:
 - a. The first 50 feet of access drive from the edge of pavement of the adjacent road will be paved and the remaining portions of the access drive shall be composed of a minimum of 6 inches of compacted Class 5 road base.
 - b. The access drive entrance shall include returns with a 30-foot radius.
 - c. The access drive shall be treated with Magnesium Chloride during the entire construction phase, and any time there after when the level of use exceeds 200 vehicle trips per day.

Commented [LMK24]: Seems to be missing something

Commented [LKE25]: Caps?

d. A mud and debris tracking pad shall be located at the end of the paved portion of the access drive.

Commented [FNH26]: Should we include some language about making sure that fire apparatus can get in, or complying with the standards of the local fire district?

J. Chemical Handling:

1. Prior to any hydraulic fracturing activity, the operator shall provide the County with a copy on the chemical disclosure registry form provided to the COGCC pursuant to the COGCC's "Hydraulic Fracturing Chemical Disclosure".
2. Drilling and completion chemicals shall be removed from the site within sixty days of the drilling completion.
3. The following toxic, including orally toxic chemicals shall not be added to utilized in the hydraulic fracturing fluid:

Commented [LMK27]: Would thirty be better?

Commented [LKE28]: Is this a defined term? Sounds odd

- a. Benzene
- b. Lead
- c. Mercury
- d. Arsenic
- e. Cadmium
- f. Chromium
- g. Ethylbenzene
- h. Xylene
- i. 1,3,5-trimethylbenzene
- j. 1,4-dioxane
- k. 1-butanol
- l. 2-butoxyethanol
- m. N,N-dimethylformamide
- n. 2-ethylhexanol
- o. 2-mercaptoethanol
- p. Benzene, 1, 1'-oxybis-, tetrapropylene derivatives, sulfonated, sodium salts
- q. Butyl glycidyl ether
- r. Polysorbate 80
- s. Quaternary ammonium compounds, dicoco alkyldimethyl, chlorides
- t. Bis hexamethylene triamine penta methylene phosphonic acid
- u. Diethylenetriamine penta
- v. FD&C blue no 1.
- w. Tetrakis (triethanolaminato) zirconium (IV) (TTZ)

w.4. It was felt the safety data sheet would be a more positive reliable indicator than a list of prohibited chemicals. This list is not realistic as to fracking fluids since it prohibits benzene, lead and mercury. This list should not be extended to apply to flow back produced fluids since the owner operator has little or no control over what percolates up or volatilizes from the subsurface or surface. Perhaps this list should be about requiring less toxic alternatives .

Commented [FNH29]: I don't know whether the industry will say anything about whether any of these are necessary, I am just not sure where this list came from, but we may want to make sure that the industry is aware and isn't going to say that they have to be able to use some of these or they can't develop at all in the county.

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K. Recycle, Reuse and Disposal of Fluids:

1. Drilling, completion flowback and produced fluids shall be recycled, unless technically infeasible.
2. Exploration and production waste may be temporarily stored, not to exceed two weeks, in tanks while awaiting transport to licensed disposal or recycling sites.

3. Produced water shall be transported by pipeline unless economically or technically infeasible.

L. Water Bodies:

1. The applicant shall provide documentation to the County ~~documentation~~, as required by the COGCC, demonstrating how the COGCC water quality protection standards are being complied with.
2. The Larimer County Health Department shall be provided with all water source tests that are typically submitted to the COGCC or CDPHE.
3. Proposed oil and gas operations proposed with in a flood-plain shall require review and approval of the Floodplain Permit prior to the Board of County Commissioners hearing for an oil and gas special review application.
4. Produced water disposal via wastewater injection wells shall not be allowed.

M. Visual:

1. The application shall demonstrate compliance with the visual and aesthetic rules of COGCC and the Larimer County regulations for landscaping, fencing and lighting for all phase of the development of the site.
2. All oil and gas facilities shall be painted with colors that are matched to or slightly darker than the surrounding landscape, and shall utilized paint with uniform, noncontracting, nonreflective color tones based upon the Munsell Soil Color Coding System.
3. The location of all outdoor lighting shall be designed to minimize off-site light spillage and glare.
4. Fencing shall for all the phases of an Oil and Gas facility development to ensure the security and visual aesthetics of the use.
5. Landscaping for screening and visual quality from off-site shall be required within 6 months from the time of well completion.
6. O&G Oil and Gas facility applications, including access roads serving the facility, shall demonstrate how compliance with weed control requirements of the County Weed District and Forestry Services Department will be met.

N. Well Plugging and Abandonment:

1. Well abandonment and reclamation shall comply with the COGCC rules, and shall include the following:
 - a. Removal of all equipment from the well site,
 - b. Restoration of the site surface to the conditions of the site reclamation plan,
 - c. Notice to the County LGD of the commencement and completion of such activity, and
 - d. Coordinates for the location of the decommissioned well(s), and any associated gathering or flow lines, shall be provided with the notice of the completion of well abandonment.

O. Flammable Material:

1. The location of flammable materials on site shall conform to all COGCC safety standards and local fire codes.

Commented [LMK30]: Do we need to qualify where – unincorporated area, at the well site, anywhere in the county?

Commented [FNH31]: Within Larimer County or anywhere. If they are drilling here but hauling the water to weld county to an injection well, why would we care?

Commented [LMK32]: At some point reach consistency in O & G or Oil and Gas facility

Commented [LMK33]: Any inspection requirements after closure?

2. A minimum 25-foot buffer, free of weeds and dried grasses, shall be required around anything flammable.

P. Waste Disposal:

1. Oil and gas facilities shall remain free of debris and excess materials during all phases of operation.
2. Burning of debris, trash or other flammable material is not allowed.

Q. Removal of Equipment:

1. There shall be no permanent storage of equipment on the site of an oil and gas facility.
2. When not in use, or no longer needed for on-site operations all equipment not being used on the site shall be removed.

R. Maintenance of Machinery:

1. There shall be no maintenance of field equipment involving hazardous material within 300 feet of a water body.
2. Any fueling on-site shall occur over an impervious surface and shall not occur during storm events.

S. Flow Lines, Transfer Lines and Gathering Lines:

1. All off-site lines transporting process materials, production wastes, product and any other items used or generated by the facility shall be located to avoid existing or proposed residential, commercial, and industrial buildings; places of assembly, surface waterbodies and designated open spaces.
2. The location of pipelines shall be evaluated on a case by case basis, with determine locational factor being the size and type of pipeline being proposed.
- 2-3. Coordinates of all flow lines, gathering lines, and transfer lines shall be provided.

T. Temporary Water Lines:

1. Temporary waterlines shall be used, unless technically infeasible.
2. Temporary waterlines shall be buried at all existing driveway and road crossing, or utilize existing culverts, if available.

U. Financial Assurance:

1. The ~~operator~~Applicant must demonstrate the financial capability to reclaim all disturbed areas during each phase of the site development and following termination of the oil and gas operation on the site.
2. The ~~operator~~Applicant must, for the life of the use, carry environmental liability insurance for ~~gradual~~all potential pollution events.

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Commented [FNH34]: Who is going to check this, or decide how much, or that it is still there when we need it?

17.4.- Guidelines for Oil and Gas Developments

- A. Applications for oil and gas facilities are strongly encouraged to incorporate the following guidelines (best management practices). Where reasonably necessary, the County may require some or all of the following guidelines depending on the location and characteristics of the proposed facility.
 1. To mitigate the adverse impacts of air emissions generated by oil and gas facilities, ~~operators~~operatorApplicants are encouraged to:

- a. use tankless production techniques,
 - b. use zero emission dehydrators,
 - c. use pressure-suitable separator and vapor recovery units,
 - d. use no-bleed continuous and intermittent pneumatic devices, or alternatives such as replacing natural gas with electric or instrument air, or by routing discharged emissions to closed loop-systems of processes,
 - e. use automated tank gauging, and
 - f. eliminate all flaring except during emergencies or upset conditions, which shall be reported to the County (see std).
2. To mitigate the adverse impacts of odor generated by oil and gas facilities, ~~operators~~ operatorApplicants are encouraged to:
- a. Add odorants that are not a masking agent, to adding chillers to the mud systems,
 - b. Using filtration systems or additives to minimize odors from drilling and fracturing fluids except that the operatorApplicant shall not mask odors by using masking fragrances,
 - c. Enclose shale shaker to contain fumes from exposed mud where safe and feasible,
 - d. Wipe down drill pipe each time drilling operation "trips" out of hole,
 - e. Increasing additive concentration during peak hours provided additive does not create a separate odor. Additive must be used per manufacturer's recommended level,
 - f. Use minimum low odor Category III drilling fluid. This could include non-~~diesel based~~ diesel-based drilling muds including drilling muds that are low odor and do not contain benzene, toluene, ethylbenzene or xylene (BTEX), ~~or~~
 - g. Apply 'green frac' methods, utilizing only sand and water as fracturing materials or other 'green frac' materials agreed upon between the community and industry, and-
 - h. The OperatorApplicant is encouraged to communicate the schedule/timing of well completions activities to residents, which could allow for voluntary shutting of windows and air intakes or temporary relocation.
3. To mitigate the impacts of multiple pipeline corridors, ~~operators~~ operatorApplicants are encouraged to consolidate and share pipeline easements and corridors, unless it is technically infeasible.

Commented [LMK35]: ?

Commented [LMK36]: Is this possible? Last I looked (a long time ago) this was cost prohibitive and not the best technology?

17.5. - Application Requirements see comment above at 17.2 C regarding context/sequencing of this approval.

- A. In addition to the submittal requirements necessary to demonstrate compliance with the applicable Sections of the Land Use Code, applications for oil and gas facilities shall also include, when relevant, the following: should there be a chemicals handling plan regarding fracking fluids?? Is this subsumed in one of these plans or maps, possibly item g? If the SDS is submitted very early before a building permit or operating permit is issued, and before the contractor is hired to operate the constructed facility then the proposed listed of fracking fluids may change considerably from the early point of these submittals. Perhaps there should be a continuing duty to supplement at least as to fracking fluids.
 - a. A Site Inventory Map.
 - b. A Safety Management Plan.
 - c. A Containment and Spill Prevention Plan.
 - d. A Noise Mitigation Plan.

- e. An Emergency Preparedness Plan.
- f. An Odor Mitigation Plan.
- g. A Hazardous Material Plan.
- h. A Dust Mitigation Plan.
- i. A Site Security Plan.
- j. A Production Water Supply Plan.
- k. A Containment and Spill Plan.
- l. A Waste Management Plan.
- m. A Reclamation Plan.
- n. A Surface Use Agreement.
- o. A statement verifying the legal right to extract the mineral resources.

17.6. - Appeals

- A. Any decision made pursuant to this section may be appealed pursuant to Section 22 of the Larimer County Code.

17.7. - Enforcement and Inspection

- A. Applicants shall demonstrate compliance with the Larimer County Land Use Code, and with this Section. Failure to maintain compliance with the County approval of an oil and gas facility may result in the revocation of the approval pursuant to the procedures in Section 12 of the Land Use Code. The County retains the right to seek whatever remedy or redress is legally allowable.
- B. The County reserves the right to inspect the property for compliance.

Commented [LMK37]: ?

Commented [LMK38]: Should there be some notice requirement?

17.8. - Fees and Security for Reclamation

- A. The following fees are applicable to oil and gas facilities.
 - a. TBD
- B. An impact fee will be assessed as follows:
 - a. Capital Transportation Impact Fees
- C. Each application shall include financial security for the purpose of ensuring maintenance and reclamation may be accomplished if the applicant is unable or unwilling to perform its obligations.

Commented [LMK39]: In addition to any COGCC?

17.9. - Termination of Use or Modification.

- A. No modification to an approved oil and gas facility shall be made without obtaining appropriate land use approval from the county.
- B. Upon termination of use, the oil and gas facility must be reclaimed pursuant to the reclamation plan provided.

17.10. - Definitions.

- A. Unless otherwise listed herein, the definitions found within the Colorado Revised Statutes and COGCC regulations shall control.

October 30, 2019 Draft Comments
by The Health Department

General Comments:

We would recommend establishing a setback although the risk is likely low here is possible language to consider.

Setbacks: Oil and Gas Facilities shall be at least 1,000 feet from the property line of any existing residences or platted residential lots, schools or future school facilities, state licensed daycares, high occupancy building units, and environmentally sensitive areas.

- a. Administrative Waiver from Setback Requirements: an administrative waiver may be obtained from the setback requirements if the Operator receives a written waiver from each primary resident and property owner located within the setback

For very complex applications or those near sensitive populations ([childcares, schools, etc](#)) there may be value in having access to 3rd party technical assistance.

Consultant Review. Where reasonable and necessary, the Director may submit the application for review and recommendation by consultants retained by the County with the necessary expertise to review technical or other aspects of the application. Among other consultant reviews, third party consultant review may be required to evaluate the risks and associated mitigation plans addressing the use of hydraulic fracturing near residential development ([and sensitive populations or no?](#)). The Applicant shall be notified if the Director decides to retain a consultant, shall be given the opportunity to provide input concerning consultant selection and scope of work, and shall escrow funds sufficient to cover the anticipated cost of the consultant's review. The Applicant shall be responsible for the actual costs associated with this consultant review and shall be refunded any excess escrowed funds.

Moving the “recommendations” listed in 17.3 to “requirements” of 17.4:

We would encourage that the green highlighted elements of 17.4.A, 1 be moved to the Air Quality Requirement section [17.3 and 17.4, A, 2 be moved to the 17.3 Requirements section \(air or odor\)](#)

Note: This will be a new Section in the Larimer County Land Use Code. This is a preliminary outline of draft oil and gas regulations and is not all inclusive.

To keep the Task Force Committee discussion on track, please focus comments to the intent and purpose of the standards and avoid refrain from making small edits.

17.0. – OIL AND GAS FACILITIES

17.1. – Intent and Purpose.

- A. **Intent and Purpose:** The Intent and purpose of this section is to establish and administer necessary and reasonable regulations for *oil and gas drilling and production* in a manner that protects and promotes the health, safety, and general welfare of the residents and environment of the County. To the extent practicable these regulations will require applications for oil and gas operations to demonstrate how adverse impacts will be mitigated to achieve a minimal negative

impact on the environment, wildlife and residents of the County.

B. Authority: Pursuant to the authority granted to the County in C.R.S. 29-20-104(1) the review of such applications may include, without limitation:

1. Land Use,
2. Location and siting of oil and gas facilities,
3. Impacts to public facilities and services,
4. Water quality and source, noise, vibration, odor, light, dust, air emissions and air quality, land disturbance, reclamation procedures, cultural resources, emergency preparedness, and coordination with first responders, security and traffic and transportation impacts,
5. Financial securities, indemnification and insurance as appropriate to ensure compliance with the requirements of Larimer County, and
6. All other nuisance-type effects of oil and gas development.

C. Applicability: These regulations shall be applicable to all oil and gas drilling and production activity commenced on any property in Larimer County, after the date of _____, regardless of what zoning district the property is situated in.

D. Severability: If any sections, clause, provision, or portion of these regulations should be found to be unconstitutional or otherwise invalid by a court of competent jurisdiction, the remainder of the regulations in the section shall not be affected thereby and is hereby declared to be necessary for the public health, safety and welfare.

17.2. – Required Process and Permits

A. Required Process:

- a. Oil and gas drilling and production activities in Larimer County shall require Special Review approval (Section 4.5). Should we state when the approval must be obtained, i.e. prior to submittal to Colorado Oil and Gas Commission (COGCC)???

B. Supplemental Review Criteria for Oil and Gas Facilities:

- a. In addition to the Special Review criteria found in Section 4.5.3 of this Code, each oil and gas facility shall be approved only if it meets the following criteria:
 - i. It complies all the requirements of this Section 17.
 - ii. Reasonable and necessary mitigation steps have been taken to protect the public health, safety, and welfare and environment

Commented [LS1]: Yes - this was the consensus from the Open House

- C. Permits required:
 - a. Access permits
 - b. Building permits as required for structures
 - c. Development Construction permit
 - d. All federal, state and local permits for oil and gas operations

17.3. – Standards Required for all Oil and Gas Facilities

A. General:

1. All applicants are responsible for compliance with applicable federal, state and local laws and regulations for the operation of Oil & Gas facilities. Approval of an oil and gas operation by Larimer County does not exempt the operation from other applicable regulatory agencies.
2. Oil and Gas facilities should be located to minimize impacts on agricultural operations.

Commented [LS2]: Or however Frank would suggest? Do we have to include a statement about whoever's regs are strictest shall be complied with?

B. Air Quality:

1. The user shall comply with existing federal and state laws and regulations applicable to its operations and emission sources as well as any future laws and regulations adopted by the Colorado Air Quality Control Commission (AQCC).
2. Air contaminant emission sources shall apply for and comply with the permit and control provisions prescribed by the Colorado Air Pollution Control Division (APCD), C.R.S. tit. 25, Art. 7 (C.R.S. § 25- 7-101 et seq.) and the rules and regulations promulgated by the AQCC all applicable emission sources.
3. Environmental Protection Agency (EPA) Reduced Emission Completions shall be used for all completions and well workovers following hydraulic fracturing, unless the application demonstrates that it is economically infeasible or impractical to utilize such a system. E.g.
4. Closed loop, pitless drilling, completion systems without permanent on-site storage tanks must be utilized for containment and/or recycling of all drilling, completion, and flowback fluids, unless the application demonstrates that it is economically infeasible or impractical to utilize such a system. All emissions shall be routed to and controlled by a flare or combustor operated with at least 98% destruction removal efficiency.
5. Oil and Gas facilities shall be equipped with electric-powered engines for motors, compressors, drilling and production equipment, and pumping systems, unless it is demonstrated by the application materials the utilization of such equipment is not economically feasible or practical.
6. During construction and exploration, the applicant shall demonstrate that the site, including traffic and construction equipment, complies with all AQCC standards.
7. Oil and gas operators shall respond to air quality action day advisories posted by the CDPHE for the front range area by implementing air reduction measures, which should include:
 - a. Minimizing vehicle traffic and engine idling;
 - b. Reduced truck and worker traffic;
 - c. Delay vehicle refueling;
 - d. Suspend or delay use of fossil fuel powered ancillary equipment;
 - e. Postpone construction or maintenance activities; and
 - f. Postpone will maintenance and liquid unloading activities that would result in emission to the atmosphere.

f.g. Postpone or reduce other operations with high potential to emit VOC or NOx.

Commented [LS3]: Comment for Matt: it was indicated that this section is oddly placed. For item 2, compatibility with land use is in our LUC, correct?

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Commented [LS4]: Thought this may sound like we (Larimer) are asking for retroactive compliance when new regs are adopted? Operation should comply with the regs as required by the appropriate agency per their compliance time lines.

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C. Leak Detection and Repair:

1. Oil and gas facilities shall at a minimum conduct semi-annual leak detection and repair (LDAR) inspections using modern leak detection technologies and equipment. This information and corrective actions shall be reported to Larimer County semi-annually. One of the ~~Semi-annual~~ LDAR inspections each calendar year shall include a five-day notice to the County Local Government Designee (LGD) and County Health Department inviting them to observe, at their discretion, the inspection.
2. Verified leaks to an oil and gas facility shall be reported to the County LGD and County Health Department within 24 hours of the discovered leak.
3. All verified leaks shall be repaired within 72 hours, unless technically or operationally infeasible. If more repair time is needed after a leak is discovered, an explanation of why more time is required must be submitted to the Director.
4. Equipment leaks that pose an imminent hazard to persons, property, wildlife or the environment shall be shut down and not allowed to operate until the operator has provided evidence that the leak has been repaired.

D. Spills and Releases:

1. Any spill or release of of greater than 25 gallons at an oil and gas facility, including those reportable to the COGCC, shall be immediately reported, no later than 24 hours after the event, to the following local emergency response authorities in Larimer County:
 - a. Larimer County Sheriff
 - b. Larimer County Department of Health and Environment
 - c. Larimer County Local Emergency Planning Committee
 - d. Larimer County Oil and Gas LGD
 - e. Local Municipal Police Department if within one mile of a city or town
 - f. Local Fire Department/~~District~~
2. All spills or releases shall be cleaned up to the satisfaction of the local emergency response authorities, listed in item 1 above. Remediation of spills or releases reportable to the COGCC may be deferred to the COGCC and CDPHE.

E. Well Liquids Unloading:

1. Best management practices, including artificial lift, automated plunger lifts and at least 90% emissions when utilizing combustion to control venting shall be employed at all facilities.
2. Approved manual unloading shall require on-site supervision of the uploading process.

F. Noise:

1. ~~A three day (one day being a weekend day) baseline noise analysis from all receptors within 350 feet of the proposed use, or the property line, whichever is closest to the proposed oil and gas facility, shall be provided.~~
2. ~~Predicted decibel levels shall be provided for various phases of development, as measured 350 feet from the site of operation/noise source (per COGCC) or at the property line of the adjacent land use, whichever is greatest. The type of land use of the surrounding area shall be determined by the County taking into consideration any applicable zoning or other local land use designation.~~
3. ~~Proposed mitigation measures demonstrating that the oil and gas operations at any well site, production facility, or gas facility shall comply with the following maximum permissible noise levels appropriate for the zoning designation by the County:~~
4. Decibel levels shall meet the identified level for the appropriate activity and adjacent land use. Decibels shall be measured at 350 feet from the site of operation/noise source (per COGCC) or at the property line of the adjacent land use, whichever is greatest. The type

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Commented [LS5]: Items 1-3 describe what shall be required for the noise mitigation plan submitted as part of the application process. Recommend moving them to the bottom of 17.4 to describe what is required for a mitigation plan at time of application, or locate 1-3 to section 17.5.A.d.

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of land use of the surrounding area shall be determined by the County taking into consideration any applicable zoning or other local land use designation. Zones as defined in the COLORADO REVISED STATUTES – ARTICLE 12 – NOISE ABATEMENT will be considered as part of the County’s determination for surrounding land uses.

- Oil and gas operations at any well site, production facility, or gas facility shall comply with the following maximum permissible noise levels appropriate for the zoning designation by the County:

ZONE	7:00 am to next 7:00 pm	7:00 pm to next 7:00 am
Residential/Agricultural/Rural	55 db(A)	50 db(A)
Commercial	60 db(A)	55 db(A)
Light Industrial	70 db(A)	65 db(A)
Industrial	80 db(A)	75 db(A)

In the hours between 7:00 a.m. and the next 7:00 p.m., the noise levels permitted above may be increased by ten db(A) for a period of not to exceed fifteen minutes in any one-hour period.

Construction projects (drilling/well completion process, pipeline or facility and pipeline construction/installations) shall be subject to the maximum permissible noise levels specified for industrial zones for the period within which construction is to be completed pursuant to any applicable construction permit issued by proper authority or, if no time limitation is imposed, for a reasonable period of time for completion of project.

For well pads that are not electrically operated, use of quiet design mufflers (also referred to as hospital grade or dual dissipative) or equivalent.

Use of acoustically insulated housing or covers to enclose the motor or engine

- As part of the application process, a noise mitigation plan shall be submitted. This noise mitigation plan shall be the result of the noise analysis also required as part of the application process. The noise analysis for the proposed operation shall include:
 - A three-day (one day being a weekend day) baseline noise analysis from all receptors within 350 feet of the proposed use, or the property line, whichever is closest to the proposed oil and gas facility, shall be provided.
 - Predicted decibel levels shall be provided for various phases of development, as measured 350 feet from the site of operation/noise source (per COGCC) or at the property line of the adjacent land use, whichever is greatest. The type of land use of the surrounding area shall be determined by the County taking into consideration any applicable zoning of other local land use designation.
 - Proposed mitigation measures demonstrating that the oil and gas operations at any well site, production facility, or gas facility shall comply with the following maximum permissible noise levels appropriate for the zoning designation by the County.

G. Odors:

- Oil and gas operations shall be in compliance with the Department of Public Health and Environment, Air Quality Control Commission, Regulation No. 2 Odor Emission, 5

Commented [LS6]: Our current Larimer County noise ordinance allows for the industrial decibels during construction phases and is therefore less restrictive than COGCC. The COGCC requires the ‘light industrial’ when in ‘designated setback locations’ close to occupied buildings, etc. Should this section be removed and defer to the COGCC?

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Commented [LS7]: Period of time may not be outlined in permits, as new wells are drilled while in operation. This is like sand and gravel operations which have continued periods of ‘construction’ during their operation. ‘Reasonable time’ is too subjective for this section.

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Commented [LS8]: Items 1-3 describe what shall be required for the noise mitigation plan submitted as part of the application process. Please relocate this to section 17.5.A.d.

C.C.R. 1001-4, Regulation No. 3 (5 C.C.R. 1001-5), and Regulation No. 7 Section XVII.B.1 (a-c) and Section XII.

2. Operations shall prevent odors from oil and gas facilities from affecting the health and welfare of the public during development activities including drilling, fracking, and flowback to the extent reasonably possible.
3. An odor mitigation plan will be required as part of the application process. The A odor mitigation plan system shall include protocols be established ff for immediate response to odor complaints that includes options for ceasing operations, notification of affected residents, and temporary relocation of residents until the source of the odor is identified and resolved.
4. We encourage the Operator to communicate the schedule/timing of well completions activities to residents, which could allow for voluntary shutting of windows and air intakes or temporary relocation.

Commented [LS9]: This could be part of the mitigation plan, or posted timelines on operators websites. Websites shall be listed on the property's posted signs?

Commented [LS10]: This is more of a suggested reason and not a requirement.

H. Dust:

1. Best management practices for the mitigation of dust associated with on-site operations and traffic activities shall be employed at the facility. The BMPs shall be outlined in the dust mitigation plan.
2. Produced water and other process fluids shall not be used for dust suppression.
3. Safety Data Sheets (SDS) shall be provided with the application for any proposed chemical based dust suppressants.
4. Water only, unless otherwise approved by the County Health and Engineering Department, will be used for dust suppression activities within 300 feet of the ordinary high-water mark of any body of water.

Commented [LS11]: Did we find out where this number came from? COGCC?

I. Access:

1. Private access drives shall conform to the Local Low Volume cross section found in the Larimer County Rural Area Road Standards, and shall include the following:
 - a. The first 50 feet of access drive from the edge of pavement of the adjacent road will be paved and the remaining portions of the access drive shall be composed of a minimum of 6 inches of compacted Class 5 road base.
 - b. The access drive entrance shall include returns with a 30-foot radius.
 - c. The access drive shall be treated with Magnesium Chloride during the entire construction phase, and any time there after when the level of use exceeds 200 vehicle trips per day.
 - d. A mud and debris tracking pad shall be located at the end of the paved portion of the access drive.

J. Chemical Handling:

1. Prior to any hydraulic fracturing activity, the operator shall provide the County with a copy on the chemical disclosure registry form provided to the COGCC pursuant to the COGCC's "Hydraulic Fracturing Chemical Disclosure".
2. Drilling and completion chemicals shall be removed from the site within sixty days of the drilling completion.
3. The following toxic chemicals shall not be utilized in the hydraulic fracturing fluid:
 - a. Benzene
 - b. Lead
 - e. Mercury
 - d. Arsenic
 - e. Cadmium
 - f. Chromium
 - g. Ethylbenzene
 - h. Xylene

Commented [LS12]: The use of specific chemicals should be regulated by high entities, but that does not mean that we cannot be part of the surface management of the bulk chemicals, storage of flowback material/drill mud, etc.

- i. ~~1,3,5 trimethylbenzene~~
- j. ~~1,4 dioxane~~
- k. ~~1 butanol~~
- l. ~~2 butoxyethanol~~
- m. ~~N,N dimethylformamide~~
- n. ~~2 ethylhexanol~~
- o. ~~2 mercaptoethanol~~
- p. ~~Benzene, 1, 1' oxybis ,tetrapropylene derivatives, sulfonated, sodium salts~~
- q. ~~Butyl glycidyl ether~~
- r. ~~Polysorbate 80~~
- s. ~~Quaternary ammonium compounds, dioleo allyldimethyl chlorides~~
- t. ~~Bis hexamethylene triamine penta methylene phosphonic acid~~
- u. ~~Diethylenetriamine penta~~
- v. ~~FD&C blue no 1.~~
- w. ~~Tetrakis (triethanolaminate) zirconium (IV) (TTZ)~~

K. Recycle, Reuse and Disposal of Fluids:

1. Drilling, completion flowback and produced fluids shall be recycled, unless technically infeasible.

2. Exploration and production waste may be temporarily stored, not to exceed two weeks, in tanks while awaiting transport to licensed disposal or recycling sites.
3. Produced water shall be transported by pipeline unless economically or technically infeasible.
4. The Operator shall take precautions to prevent adverse environmental impacts to air, water, soil, or biological resources to the extent necessary to protect public health, safety and welfare, including the environment and Wildlife Resources to prevent the unauthorized discharge or disposal of oil, gas, E&P Waste, Chemical substances, trash, discarded equipment or other oil Field waste.

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L. Water Quality and Water Bodies:

1. General. Oil and gas operations shall not cause adverse impacts to surface or ground waters within Adams County. Operators shall comply with all Larimer County rules, COGCC Rules, specifically with respect to spills and releases in floodplains and/or water bodies, and applicable water quality standards set by the Colorado Department of Public Health and Environment (CDPHE).
- ~~2.~~ The applicant shall provide documentation to the County, as required by the COGCC, demonstrating how the COGCC water quality protection standards are being complied with.
- ~~2.~~3. The Larimer County Health Department shall be provided with all baseline and water source tests that are typically submitted to the COGCC or CDPHE.
- ~~3.~~4. Proposed oil and gas operations proposed with in a floodplain shall require review and approval of the Floodplain Permit prior to the Board of County Commissioners hearing for an oil and gas special review application.
5. Produced water disposal via wastewater injection wells shall not be allowed.
- ~~4.~~6. The items listed in this section would not prevent operators from discharging under permits issued by the CDPHE Water Quality Control Division.

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M. Visual:

1. The application shall demonstrate compliance with the visual and aesthetic rules of COGCC and the Larimer County regulations for landscaping, fencing and lighting for all phase of the development of the site.
2. All oil and gas facilities shall be painted with colors that are matched to or slightly darker than the surrounding landscape, and shall utilized paint with uniform, noncontracting, nonreflective color tones based upon the Munsell Soil Color Coding System.
3. The location of all outdoor lighting shall be designed to minimize off-site light spillage and glare. See XXXXX Light Standards
4. Fencing shall for all the phases of an Oil and Gas facility development to ensure the security and visual aesthetics of the use.
- ~~4.~~5. Screening walls? Not only visual but also for noise during well completion? Or would screens for noise be part of the mitigation plan for well completion and possible production if electric was appealed?
- ~~5.~~6. Landscaping for screening and visual quality from off-site shall be required within 6 months from the time of well completion.
- ~~6.~~7. Oil and Gas facility applications, including access roads serving the facility, shall demonstrate how compliance with weed control requirements of the County Weed District and Forestry Services Department will be met.

N. Well Plugging and Abandonment:

1. Well abandonment and reclamation shall comply with the COGCC rules and shall include the following:

- a. Removal of all equipment from the well site,
- b. Restoration of the site surface to the conditions of the site reclamation plan,
- c. Notice to the County LGD of the commencement and completion of such activity, and
- d. Coordinates for the location of the decommissioned well(s), and any associated gathering or flow lines, shall be provided with the notice of the completion of well abandonment.

O. Flammable Material:

1. The location of flammable materials on site shall conform to all COGCC safety standards and local fire codes.

2. A minimum 25-foot buffer, free of weeds and dried grasses, shall be required around anything flammable.

P. Waste Disposal:

1. Oil and gas facilities shall remain free of debris and excess materials during all phases of operation.
2. Burning of debris, trash or other flammable material is not allowed.

Q. Removal of Equipment:

1. There shall be no permanent storage of equipment on the site of an oil and gas facility.
2. When not in use, or no longer needed for on-site operations all equipment not being used on the site shall be removed.

R. Maintenance of Machinery:

1. There shall be no maintenance of field equipment involving hazardous material within 300 feet of a water body.
2. Any fueling on-site shall occur over an impervious surface and shall not occur during storm events.

S. Flow Lines, Transfer Lines and Gathering Lines:

1. All off-site lines transporting process materials, production wastes, product and any other items used or generated by the facility shall be located to avoid existing or proposed residential, commercial, and industrial buildings; places of assembly, surface waterbodies and designated open spaces.
2. The location of pipelines shall be evaluated on a case by case basis, with determine locational factor being the size and type of pipeline being proposed.
3. Coordinates of all flow lines, gathering lines, and transfer lines shall be provided.

T. Temporary Water Lines:

1. Temporary waterlines shall be used, unless technically infeasible.
2. Temporary waterlines shall be buried at all existing driveway and road crossing, or utilize existing culverts, if available.

U. Financial Assurance:

1. The Applicant must demonstrate the financial capability to reclaim all disturbed areas during each phase of the site development and following termination of the oil and gas operation on the site.
2. The Applicant must, for the life of the use, carry environmental liability insurance for all potential pollution events.

17.4.- Guidelines for Oil and Gas Developments

- A. Applications for oil and gas facilities are strongly encouraged to incorporate the following guidelines (best management practices). Where reasonably necessary, the County may require some or all of the following guidelines depending on the location and characteristics of the proposed facility.
 1. To mitigate the adverse impacts of air emissions generated by oil and gas facilities, Applicants are encouraged to:

- a. use tankless production techniques,
 - b. use zero emission desiccant dehydrators,
 - c. Emissions controls of 90% or better for glycol dehydrators
 - d. use pressure-suitable separator and vapor recovery units,
 - e. use no-bleed continuous and intermittent pneumatic devices, or alternatives such as replacing natural gas with electric or instrument air, or by routing discharged emissions to closed loop-systems of processes,
 - f. use automated tank gauging, and
 - g. eliminate all flaring except during emergencies or upset conditions, which shall be reported to the County (see std.).
2. To mitigate the adverse impacts of odor generated by oil and gas facilities, Applicants are encouraged to:
- a. Add odorants that are not a masking agent, to adding chillers to the mud systems,
 - b. Using filtration systems or additives to minimize odors from drilling and fracturing fluids except that the Applicant shall not mask odors by using masking fragrances,
 - c. Enclose shale shaker to contain fumes from exposed mud where safe and feasible,
 - d. Wipe down drill pipe each time drilling operation "trips" out of hole,
 - e. Increasing additive concentration during peak hours provided additive does not create a separate odor. Additive must be used per manufacturer's recommended level,
 - f. Use minimum low odor Category III drilling fluid. This could include non-diesel-based drilling muds including drilling muds that are low odor and do not contain benzene, toluene, ethylbenzene or xylene (BTEX),
 - g. Apply 'green frac' methods, utilizing only sand and water as fracking materials or other 'green frac' materials agreed upon between the community and industry, and
 - h. The Applicant is encouraged to communicate the schedule/timing of well completions activities to residents, which could allow for voluntary shutting of windows and air intakes or temporary relocation.
3. To mitigate the impacts of multiple pipeline corridors, Applicants are encouraged to consolidate and share pipeline easements and corridors, unless it is technically infeasible.

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17.5. - Application Requirements

- A. In addition to the submittal requirements necessary to demonstrate compliance with the applicable Sections of the Land Use Code, applications for oil and gas facilities shall also include, when relevant, the following:
- a. A Site Inventory Map.
 - b. A Safety Management Plan.
 - c. A Containment and Spill Prevention Plan.
 - d. A Noise [Analysis Report and](#) Mitigation Plan.
 - e. An Emergency Preparedness Plan.
 - f. An Odor Mitigation Plan.
 - g. A Hazardous Material Plan.
 - h. A Dust Mitigation Plan.
 - i. A Site Security Plan.
 - j. A Production Water Supply Plan.

- ~~k. A Containment and Spill Plan.~~
- l. Water Quality plan (Stormwater and drainage)
- ~~l.m.~~ A Waste Management Plan.
- ~~m.n.~~ A Reclamation Plan.
- ~~n.o.~~ A Surface Use Agreement.
- ~~p.~~ A statement verifying the legal right to extract the mineral resources.

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17.6. - Appeals

- A. Any decision made pursuant to this section may be appealed pursuant to Section 22 of the Larimer County Code.

17.7. - Enforcement and Inspection

- A. Applicants shall demonstrate compliance with the Larimer County Land Use Code, and with this Section. Failure to maintain compliance with the County approval of an oil and gas facility may result in the revocation of the approval pursuant to the procedures in Section 12 of the Land Use Code. The County retains the right to seek whatever remedy or redress is legally allowable.
- B. The County reserves the right to inspect the property for compliance.

17.8. - Fees and Security for Reclamation

- A. The following fees are applicable to oil and gas facilities.
 - a. TBD
- B. An impact fee will be assessed as follows:
 - a. Capital Transportation Impact Fees
- C. Each application shall include financial security for the purpose of ensuring maintenance and reclamation may be accomplished if the applicant is unable or unwilling to perform its obligations.

17.9. - Termination of Use or Modification.

- A. No modification to an approved oil and gas facility shall be made without obtaining appropriate land use approval from the county.
- B. Upon termination of use, the oil and gas facility must be reclaimed pursuant to the reclamation plan provided.

17.10. - Definitions.

- A. Unless otherwise listed herein, the definitions found within the Colorado Revised Statutes and COGCC regulations shall control.

October 30, 2019 Draft
Comments by Josh Joswick

This is intended as comment on the draft Larimer County oil and gas regulations. Specifically, the comments pertain to Section 17.3. – Standards Required for all Oil and Gas Facilities Sub-section S. Flow Lines, Transfer Lines and Gathering Lines, and on the need to include the siting of oil and natural gas gathering lines in that section.

By means of introduction, my name is Josh Joswick; my background is that I have worked for roughly 30 years as a private citizen, mayor of Bayfield, CO, three term La Plata County commissioner, and community organizer for the San Juan Citizens Alliance and the Earthworks Oil and Gas Accountability Project, in an effort to hold the oil and gas industry accountable for its impacts to communities and their residents.

Recently, I have been giving presentations to Front Range local governments and citizens' groups on the need for local governments to become involved in the siting of gathering lines. The following is for your consideration for inclusion in the Larimer County regulations.

Background :

In general, distinction should be made between commercial/retail lines and production lines. Commercial/retail lines are usually smaller, lower pressure lines that move gas to structures to be used by consumers, and these are regulated by the Colorado Public Utilities Commission (COPUC). These comments do not pertain to commercial lines.

Production lines are lines that move product from the well to market; and there are essentially 3 kinds of production lines: transmission, flow, and gathering lines.

- Transmission lines are large, high pressure lines, usually interstate and regulated by the Pipeline Hazardous Materials Safety Administration, a federal agency.
- Flowlines are smaller, lower pressure lines regulated by the Colorado Oil and Gas Conservation Commission.
- Gathering lines fall between these two in size and pressure. While there are aspects of their installation that are regulated (how they are installed) , their siting (where they are installed) is not regulated by any state or federal agency.

And this lack of regulatory oversight over the siting of gathering lines is where local governments must come in to fill the regulatory gap.

By their nature, pipelines experience failure events. If failure events are seen as infrequent, they must also be seen for the potentially serious consequences that may significantly impact the general public.

Failure events create areas of impact. In the case of oil lines, that means spills; in the case of natural gas lines, that means explosions. It is these impact areas (especially if they are in what would be considered *High Consequence Areas*, that is, areas of significant population densities) that are critical for local governments to be aware of and base their actions on.

Actions:

Where this is leading is local governments' need to do two things:

1. Get full disclosure from operators on the location of existing gathering lines;
2. Establish a permitting process for the placement of proposed gathering lines.

For existing lines, local governments need to know:

- Location and depth
- Age
- Content and Daily Flow Rate
- Size
- Pressure
- Estimated worst case scenario for spill or explosion

This is information the pipeline operator will have readily available and should be required to disclose to the community.

For proposed gathering lines, local governments need to establish a permitting process through which operators would have to go in order to get local government approval to put in a line.

Local governments need to know:

- The same things as are listed above for existing lines, most especially where the line will be, its size, and the pressure under which it will be operating.

With this information, local governments can then determine the adequacy of proposed locations by determining the impact area a failure event would create. In other words, local governments should assess if the distance (setbacks) of the proposed line from structures and infrastructure is adequate for public safety.

There are ways to make that assessment. In the case of natural gas lines, these distances or setbacks can be determined by application of the industry-accepted equation found in the Gas Research Institute (GRI) *Report 00/0189 A Model For Sizing High Consequence Areas Associated with Natural Gas Pipelines*. The report describes itself as “A simple and defensible approach to sizing the ground area potentially affected by a worst-case ignited rupture of a high-pressure natural gas pipeline.”

The diameter and operating pressure of a pipeline are put into the equation and the size of the affected area, in the event of a credible worse-case failure event, is determined. Application of this formula will tell the permitting agency if the proposed pipeline location is safe.

There are local governments that are, on some level, already doing this, and have not been challenged in court by the industry. And with SB 181 now giving local governments the ability to more fully regulate oil and gas development in their jurisdictions, there is no legal obstacle to putting a permitting process for the siting of gathering lines in place.

This is a matter of public safety, and the information and process described herein increase the safety of the residents of Larimer County.

Thank you for affording me the opportunity to comment of Larimer County’s draft regulations. If you have any questions, need anything clarified, or would like to have a presentation to staff of what I discuss in this comment document, please do not hesitate to contact me.

Josh Joswick

josh_joswick2004@yahoo.com

970-903-0876

October 30, 2019 Draft Comments
by King & Wellington

December 1, 2019

Matt Lafferty
 Principal Planner
 Larimer County Planning Department
 200 W. Oak Street, Third Floor
 Fort Collins, CO 80521
mlafferty@larimer.org
laffermn@co.larimer.co.us

RE: Public Comment on Proposed Draft Oil & Gas Regulations

Mr. Lafferty:

In response to the request for public comments regarding Larimer County's proposed draft oil and gas regulations, King Operating Corporation ("King"), an oil and gas lease holder in Larimer County, and Wellington Operating Company ("Wellington"), the operator of the Wellington Muddy Sandstone Unit, submit the following comments, attached hereto.

King and Wellington appreciate the opportunity to provide input on the proposed regulations and wish to participate as an engaged stakeholder going forward. In the interest of efficiency, we are submitting our collective comments to the draft oil and gas rules. Wellington has been an operator in the County for over thirty years, without incident, and the Wellington Field has been continuously produced since 1923. Wellington offers the perspective of a long-term operator in the County and who is deeply familiar with the issues relating to mature, conventional oil and gas operations and changing land use. King provides the perspective of a new operator seeking to invest in Larimer County.

We believe that with prudent regulation, residents can have a healthy environment and a diversified economy. We have worked hard to be good neighbors and establish collaborative relationships with surface owners in our respective operating areas and believe the rules should provide responsible, responsive operators with efficient review and timely regulatory approval. County regulations can contribute to protecting the public's safety and the environment by considering that circumstances unique to Larimer County, but should not be duplicative of State and Federal regulations and there should be a clear path to timely regulatory approval of projects that are compliant with the regulations.

Accordingly, we encourage the County to consider adopting a two-track process whereby, under appropriate circumstances, an operator may seek administrative approval of oil and gas development without the need for a hearing. Administrative approval is appropriate where the surface owner(s) support oil and gas development and where low environmental impacts are anticipated. We look forward to participating in the ongoing dialogue regarding the appropriate criteria for administrative review.

We also hope the rule making acknowledges that each oil and gas field involves a unique combination of surface conditions, subsurface geology and resources, and technical constraints; and, that these circumstances can change over the decades an oil and gas field can operate. Good regulations rely on goal-based performance criteria to achieve policy objectives, and do not impose "one-size-fits-all" technical requirements that may or may not be suitable given the specific circumstances and can discourage innovation and deployment of new, technologies that may facilitate achieving the County's policy objectives. And, in some cases, prescriptive technical and, or operating rules can have unintended consequences, by failing to consider the entirety of the circumstance, that may damage the environment and, or reduce safety.

Lastly, the rules should accommodate existing operations that may be unable to comply with new standards due to changing land use over the past century and the geologically controlled, pre-existing infrastructure that cannot be duplicated, or moved. Land use changes have, and may bring residences, commercial structures, or even ponds and water bodies to an oil and gas facility long after it is constructed. County regulations should acknowledge and accommodate historical prior use and attempt to prevent this type of encroachment in the future.

Thank you for your time and consideration.

Respectfully,

/s/ _____
Mr. Jay Young
President
King Operating Corporation

/s/ _____
Mr. Bradley Pomeroy
President
Wellington Operating Company

Attachments:

- 1. King and Wellington Comments on Larimer County’s Draft Oil & Gas Regulations
- 2. Appendix A

**Comments on Larimer County’s Draft (Version 1) Oil & Gas Regulations
King Operating Corporation and Wellington Operating Company**

	Draft Regulation	Comment	Similar State Rule or Regulation
17.0	OIL AND GAS FACILITIES		
17.1	Intent and Purpose.		
A.	<p><u>Intent and Purpose:</u> The Intent and purpose of this section is to establish and administer necessary and reasonable regulations for oil and gas drilling and production in a manner that protects and promotes the health, safety, and general welfare of the residents and environment of the County. To the extent practicable these regulations will require applications for oil and gas operations to demonstrate how adverse impacts will be mitigated to achieve a minimal negative impact on the environment, wildlife and residents of the County.</p>	<p>The regulations should promote both economic growth and environmental protection. We propose alternative language similar to the oil and gas regulations from Adams County’s Oil and Gas Regulations (§§2-02-14-01 and 4-10-02-03-03-01) as set forth in Appendix A which acknowledge the economic benefits of responsible oil and gas operations and the property rights of mineral and surface owners, attached hereto, which may serve to similarly accomplish the proposed goal for this provision.</p>	
B.	<p><u>Authority:</u> Pursuant to the authority granted to the County in C.R.S. 29-20-104(1) the review of such applications may include, without limitation:</p> <ol style="list-style-type: none"> 1. Land Use, 2. Location and siting of oil and gas facilities, 3. Impacts to public facilities and services, 4. Water quality and source, noise, vibration, odor, light, dust, air emissions and air quality, land disturbance, reclamation procedures, cultural resources, emergency preparedness, and coordination with first responders, security and traffic and transportation impacts, 5. Financial securities, indemnification and insurance as appropriate to ensure compliance with the requirements of Larimer County, and 	<p>We have concerns regarding the complications of multiple county departments reviewing each, individual application.</p>	

	<p>6. All other nuisance-type effects of oil and gas development.</p>	<p>The date of applicability must not be retroactive.</p>	
<p>C.</p>	<p><u>Applicability:</u> These regulations shall be applicable to all oil and gas drilling and production activity commenced on any property in Larimer County, after the date of _____, regardless of what zoning district the property is situated in.</p>		
<p>D.</p>	<p><u>Severability:</u> If any sections, clause, provision, or portion of these regulations should be found to be unconstitutional or otherwise invalid by a court of competent jurisdiction, the remainder of the regulations in the section shall not be affected thereby and is hereby declared to be necessary for the public health, safety and welfare.</p>		
<p>17.2</p>	<p>Required Process and Permits.</p>		
<p>A.</p>	<p><u>Required Process:</u></p> <p>a. Oil and gas drilling and production activities in Larimer County shall require Special Review approval (Section 4.5). Should we state when the approval must be obtained, i.e. prior to submittal to Colorado Oil and Gas Commission (COGCC)?</p>	<p>The County should accept, and process permit applications while state and federal approval is pending.</p> <p>Currently, the Colorado Oil and Gas Conservation Commission (“COGCC”) will not approve an APD until the operator can certify on the permit application that (1) it has filed a permit with the local jurisdiction with siting authority and (2) that local jurisdiction has issued a final disposition (meaning that the local government has made the final siting determination or waived the statutory provision allowing it to undertake siting in the first place). Consequently, the County rules, as drafted, set up a “Catch-22”: the State will not consider a permit until the County has made a determination, but the County won’t make a determination without State approval of an APD.</p> <p>Does the County intend to waive its siting authority (much as Weld County has done) insofar as it is required that an operator secure disposition of a permit application from a jurisdiction with local siting authority <i>prior</i> to filing permits with the State?</p> <p>The rules should provide a timeframe for approval. Based on the current draft of proposed regulations, no clear guardrails appear in place for timely approval or denial of permits. Same concern carries through to Access Permits (§ C.a., <i>infra</i>), Building permits (§ C.b., <i>infra</i>) and Development Construction permits (§ C.c, <i>infra</i>).</p>	<p>See COGCC Operator Guidance, SB 19-181: Hearings and Permit Applications (“SB 181 Guidance”), available as provided in Appendix A.</p>

		<p>Corresponding revisions to Zoning Tables in §§ 4.1 and 4.3.7.F of the Code need updates to the Zones in which oil and gas development requires Special Use Review</p> <p>Lastly, we request the County clarify that existing sources and sites are grandfathered into any new regulations</p>	
<p>B.</p>	<p><u>Supplemental Review Criteria for Oil and Gas Facilities:</u></p> <ol style="list-style-type: none"> a. In addition to the Special Review criteria found in Section 4.5.3 of this Code, each oil and gas facility shall be approved only if it meets the following criteria: <ol style="list-style-type: none"> i. It complies all the requirements of this Section 17. ii. Reasonable and necessary mitigation steps have been taken to protect the public health, safety, and welfare and environment 	<p>Lack of clarity regarding the differences between § 17.2.B.a.i. and ii. Subsection ii. is reiterative of requirements necessary for approval or permits by the COGCC pursuant to the changes to the Oil and Gas Act resulting from the enactment of Colorado Senate Bill 2019-181. In that regard, compliance with state and federal requirements should presumptively establish that reasonable and necessary mitigation steps have been taken.</p> <p>How does the County intend to make a determination or what criterion will be used to determine “reasonable and necessary?”</p> <p>Furthermore, to the extent a dispute exists, does the County have a conflict resolution process that will allow for a timely decision?</p> <p>We also propose County revise § 17.B.a.ii. to include “technically feasible”</p>	
<p>C.</p>	<p><u>Permits Required:</u></p> <ol style="list-style-type: none"> a. Access permits b. Building permits as required for structures c. Development Construction permit d. All federal, state and local permits for oil and gas operations 	<p>Section 18.2.C.d. is inconsistent with the requirements of the state permitting process which requires an operator submit and obtain approval of permits from the local jurisdiction with siting authority before filing permit applications with the state.</p>	<p>See SB 181 Guidance, <i>supra</i>.</p>
<p>17.3</p>	<p>Standards Required for all Oil and Gas Facilities.</p>		
<p>A.</p>	<p><u>General:</u></p> <ol style="list-style-type: none"> 1. All applicants are responsible for compliance with applicable federal, state and local laws and regulations for the operation of Oil & Gas facilities. 	<p>Comment(s) re: 17.3.A.1.: Will existing oil and gas operations be grandfathered?</p> <p>Comment(s) re: 17.3.A.2.: “Minimize impacts” is vague, and the process for making this determination is unclear. No further action should be required if an operator and the surface owner have negotiated and executed</p>	

<p>B.</p>	<p>2. Oil and Gas facilities should be located to minimize impacts on agricultural operations</p> <p><u>Air Quality:</u></p> <ol style="list-style-type: none"> The use? shall comply with existing federal and state laws and regulations applicable to its operations and emission sources as well as any future laws and regulations adopted by the Colorado Air Quality Control Commission (AQCC). Air contaminant emission sources shall apply for and comply with the permit and control provisions prescribed by the Colorado APCD C.R.S. tit.25, Art. 7 (C.R.S. § 25- 7-101 et seq.) and the rules and regulations promulgated by the AQCC all applicable emission sources. Environmental Protection Agency (EPA) Reduced Emission Completions shall be used for all completions and well workovers following hydraulic fracturing, unless the application demonstrates that it is economically infeasible or impractical to utilize such a system. Closed loop, pitless drilling, completion systems without permanent on-site storage tanks must be utilized for containment and/or recycling of all drilling, completion, and flowback fluids, unless the application demonstrates that it is economically infeasible or impractical to utilize such a system. All emissions shall be routed to and controlled by a flare or combustor operated with at least 98% destruction removal efficiency. Oil and Gas facilities shall be equipped with electric-powered engines for motors, compressors, drilling and production equipment, and pumping systems, unless it is demonstrated by the application materials the utilization of such equipment is not economically feasible or practical. During construction and exploration, the applicant shall demonstrate that the site, including traffic and construction equipment, complies with all AQCC standards. Oil and gas operators shall respond to air quality action day 	<p>a surface use agreement covering the proposed surface location.</p> <p>Colorado has the nation’s most stringent air quality rules and will adopt more in 2019-2020. We propose the County rely on state and federal rules unless local conditions necessitate additional regulations.</p> <p>Comment(s) re: 17.3.B.3.: We propose inserting the word “technically” prior to “impractical.”</p> <p>Comment(s) re: 17.3.B.4.: “All emissions” should not include fugitive emissions, which by definition cannot reasonably be routed to a control device. We have concerns regarding the technical feasibility of these requirements (including but not limited to 98% destruction efficiency) and the potential to cause more significant adverse impacts than those being mitigated. Further, by being prescriptive as to the allowable technologies, this rule precludes innovation and adoption or practice that may be more effective in achieving the goal of protecting air quality.</p> <p>We propose the County insert “technically” prior to word “impractical.”</p> <p>Comment(s) re: 17.3.B.5.: How does the County intend to make a determination or what criterion will be used to determine what is “economic” and “feasible?” Furthermore, to the extent a dispute exists, does the County have a conflict resolution process?</p> <p>A requirement to use electric powered mobile engines is likely pre-empted by the Federal Clean Air Act.</p> <p>Electric drilling and work over rigs are uncommon and equipment is not widely available and requires onsite generation, which in itself creates emissions or requires construction of infrastructure. We propose alternative language regarding governance of emissions using Best Management Practices (“BMPs”). We propose inserting the word “technically” prior to the word “impractical.”</p> <p>Comment(s) re: 17.3.B.6.: See Whitepaper, (Nov. 1, 2019) (“Whitepaper”) at p. 19, available as provided in Appendix A (“Staff proposes amending Rule 805.c. to require operators to develop a dust control plan. The plan would address each phase of oil and gas operation</p>
		<p>AQCC Reg. 7 addresses storage tank design and control, flare/combustor standards, destruction efficiency, venting, engine standards, pneumatic pumps and controllers, recordkeeping and reporting. CDPHE air permits often impose additional requirements.</p> <p>17.3.B.3, green completions: COGCC Rule 805.b(3)(A); 40 C.F.R. §§60.5375, 5375a; Colo. AQCC Reg. 6 (incorporating 40 CFR Part 60, Subpart OOOO)</p> <p>17.3.b.4, drilling standards: COGCC Rules 317B, 323, 604; COGCC 900 series rules</p> <p>17.3.B.6, construction: AQCC Reg. 1 § III.D; EPA vehicle standards</p>

	<p>advisories posted by the CDPHE for the front range area by implementing air reduction measures, which should include:</p> <ol style="list-style-type: none"> Minimizing vehicle traffic and engine idling; Reduced truck and worker traffic; Delay vehicle refueling; Suspend or delay use of fossil fuel powered ancillary equipment; Postpone construction or maintenance activities; and Postpone will maintenance and liquid unloading activities that would result in emission to the atmosphere. 	<p>and propose site-specific BMPs to minimize and suppress dust.”).</p> <p>Comment(s) re: 17.3.B.7.: What is the standard for economical and feasible, and how are disputes in concerning that determination resolved.</p> <p>CDPHE issues ozone advisories as part of a voluntary program that lacks regulatory standards and is designed to provide flexibility and operators implement a range of response options. Depending on the circumstances, some responses may be inapplicable or infeasible, and a blanket requirement to implement specific response actions is problematic. For example, there may be operational needs to drive vehicles, refuel, or use ancillary equipment to conduct maintenance or repair leaks on ozone advisory days. We support a requirement to participate in CDPHE’s otherwise-voluntary ozone action program if operators retain the flexibility to select appropriate response actions.</p>	
<p>C. <u>Leak Detection and Repair:</u></p> <ol style="list-style-type: none"> Oil and gas facilities shall at a minimum conduct semi-annual leak detection and repair (LDAR) inspections using modern leak detection technologies and equipment. One of the Semi-annual LDAR inspections shall include a five-day notice to the County Local Government Designee (LGD) and County Health Department inviting them to observe, at their discretion, the inspection. Verified leaks to an oil and gas facility shall be reported to the County LGD and County Health Department within 24 hours of the discovered leak. All verified leaks shall be repaired within 72 hours, unless technically or operationally infeasible. Equipment leaks that pose an imminent hazard to persons, property, wildlife or the environment shall be shut down and not allowed to operate until the operator has provided evidence that the leak has been repaired. 	<p>Comment(s) re: 17.3.C.1.: CDPHE mandates monthly to annual inspections, depending on facility emissions rate. On December 17-19, 2019, the AQCC will consider a proposal to increase LDAR frequency. We would suggest the County rely on state regulations, current and future. Recommend clarifying that § 17.3.C, applies only to leaks of “regulated air pollutants” and not liquids.</p> <p>Comment(s) re: 17.3.C.2.: Unclear what is intended by “verified” leaks. Operators should be allowed to proactively repair leaks without first verifying that a leak exists. County rules should be consistent with the AQCC’s leak repair and reporting requirements.</p> <p>The purpose of reporting leaks is unclear; leaks are not violations if timely repaired and the AQCC has already established leak reporting requirements as prescribed by state law.</p> <p>Dual reporting requirements are duplicative. County should establish procedures for the reports (e.g., via phone, electronically, form, etc.).</p> <p>Comment(s) re: 17.3.C.3.: Repair deadlines should allow time for unsuccessful repairs, parts unavailability, and the potential need to shut down. We propose a 72-hour extension if an appropriate response plan is in place.</p> <p>Furthermore, we recommend following CDPHE’s leak inspection and</p>	<p>AQCC Reg. 7 §§ XII.L, XVII.C, E & F. 40 C.F.R. 60.5397a</p>	

		<p>repair requirements (which have detailed provisions defining leaks requiring repair and governing situations where inspection or repair is unsafe, parts are unavailable, or the repair may cause more emissions than the leak itself (e.g., equipment blowdown)).</p> <p>Comment(s) re: 17.3.C.4.:</p> <p>Clarify that an “imminent hazard” means an imminent safety risk.</p> <p>Most leaks are repaired on the spot, in which case shutdown is unnecessary and may cause unnecessary emissions.</p> <p>Lastly, there are operating conditions such as well control events where a shut-down can result in an inherently more dangerous and unstable operating condition. We would suggest the following language: “shall be repaired in such a manner as to reduce the hazard as quickly as possible consistent with safety standards and practices.”</p>	
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<p>D. <u>Spills and Releases:</u></p> <ol style="list-style-type: none"> 1. Any spill or release at an oil and gas facility, including those reportable to the COGCC, shall be immediately reported, no later than 24 hours after the event, to the following local emergency response authorities in Larimer County: <ol style="list-style-type: none"> a. Larimer County Sheriff b. Larimer County Department of Health and Environment c. Larimer County Local emergency Planning Committee d. Larimer County Oil and Gas LGD e. Local Municipal Police Department if within one mile of a city or town f. Local Fire Department 2. All spills or releases shall be cleaned up to the satisfaction of the local emergency response authorities, listed in item 1 above. Remediation of spills or releases reportable to the COGCC may be deferred to the COGCC and CDPHE. 	<p>Comment(s) re: 17.3.D.: The proposed regulation addresses (1) reporting and (2) clean-up of spills/releases, which are duplicative of existing COGCC Rules that address prevention of spills/releases. We recommend maintaining consistency with existing COGCC rules.</p> <p>Comment(s) re: 17.3.D.1.: The rule should be clear that it only applies to a spill or release of a regulated pollutant. The rule should specify the types of spills and releases and minimum reportable quantities, particularly if the County adopts rules that are more stringent than COGCC regulations.</p> <p>Per COGCC Rules, a “spill” is any unauthorized sudden discharge of E&P waste to the environment. <i>See</i> COGCC 100-Series Definitions.</p> <p>It should be noted that single point reporting to emergency responders provides for a greater level of agency coordination and reduces the risk of incomplete information sharing.</p> <p>If reporting is required within 24 hours, reporting infrastructure and procedures need to be in place within each listed agency for accepting reports on weekends and holidays.</p> <p>We would propose establishing reporting thresholds and clarifying that spills or releases below the thresholds are not reportable. For a Spill Prevention, Control, and Countermeasure (SPCC) Plan, typically there are triggers for “immediate” notifications if an incident poses an immediate threat of fire, explosion, or other impact to safety, health, or the environment. SPCC Plans impose lesser requirements for spills or releases that are insufficient volumes to create a hazard.</p> <p>Lastly, reporting rules should integrate with existing reporting requirements and emergency response procedures to avoid duplicative reporting, and ensure critical information is transmitted to the appropriate authorities in a timely, concise and clear way. Before promulgating additional reporting requirements the County should establish a clear plan regarding how it will use the information to increase safety and protect the environment.</p>	<p><i>See</i> COGCC 100-Series Definitions for SPILL and EXPLORATION AND PRODUCTION WASTE (E&P WASTE), as provided in Appendix A.</p> <p><i>See</i> COGCC Rule 324A. Pollution</p> <p><i>See</i> COGCC Rule 324D. Criteria to Establish Points of Compliance</p> <p><i>See</i> COGCC Rule 327. Well Control</p> <p><i>See</i> COGCC Rule 337. COGCC Form 19. Spill/Release Report</p> <p><i>See</i> COGCC Rule 523. Procedures for Assessing Penalties</p> <p><i>See</i> COGCC Rule 524. Determination of Responsible Party</p> <p><i>See</i> COGCC Rule 906. Spills and Releases</p> <p><i>See</i> COGCC Rule 909. Site Investigation, Remediation, and Closure.</p> <p><i>See</i> COGCC Rule 910. Concentrations and Sampling for Soil and Ground Water.</p>
<p>E. <u>Well Liquids Unloading:</u></p> <ol style="list-style-type: none"> 1. Best management practices, including artificial lift, automated plunger lifts and at least 90% emissions when utilizing combustion 	<p>Comment(s) re: 17.3.E.1.: Operators should retain flexibility to determine which best management practices to utilize. The AQCC currently requires BMPs (“Best Management Practices”) for well liquids unloading and in December 2019 will vote on adding new reporting requirements and</p>	<p>AQCC Reg. 7 § XVII.H</p>

	<p>to control venting shall be employed at all facilities.</p> <p>2. Approved manual unloading shall require on-site supervision of the unloading process.</p>	<p>extending this requirement to well plugging. We recommend maintaining consistency with AQCC regulations.</p> <p>Comment(s) re: 17.3.E.2.: Operators are in the best position to determine when manual unloading is necessary. The approval process and criteria are unclear, as is the requirement for on-site supervision. Consistent with AQCC regulations, we recommend that the County require the owner or operator to be present on-site during any planned well liquids unloading event and not require external approval.</p> <p>We reserve further comments until the specifics of this rule are clarified.</p>	
<p>F. <u>Noise:</u></p> <ol style="list-style-type: none"> 1. A three-day (one day being a weekend day) baseline noise analysis from all receptors within 350 feet of the proposed use, or the property line, whichever is closest to the proposed oil and gas facility, shall be provided. 2. Predicted decibel levels shall be provided for various phases of development, as measured 350 feet from the site of operation/noise source (per COGCC) or at the property line of the adjacent land use, whichever is greatest. The type of land use of the surrounding area shall be determined by the County taking into consideration any applicable zoning of other local land use designation. 3. Proposed mitigation measures demonstrating that the oil and gas operations at any well site, production facility, or gas facility shall comply with the following maximum permissible noise levels appropriate for the zoning designation by the County: 4. Decibel levels shall meet the identified level for the appropriate activity and adjacent land use. Decibels shall be measured at 350 feet from the site of operation/noise source (per COGCC) or at the property line of the adjacent land use, whichever is greatest. The type of land use of the surrounding area shall be determined by the County taking into consideration any applicable zoning or other local land use designation. 5. Oil and gas operations at any well site, production facility, or gas facility shall comply with the following maximum permissible 	<p>COGCC Rule 802 addresses noise abatement. We recommend consistency with state regulations unless specific neighboring land uses require additional protections.</p> <p>Noise limits should grandfather existing operations and provide allowances for ambient, background noise.</p> <p>Comment(s) re: 17.3.E.5.: County would be better served to rely on existing COGCC regulatory noise standards.</p> <p>We would also propose a provision recognizing a Mitigation Agreement between the effected property owner and operator. Most noise impacts during oil and gas operations are temporary and transient (such as drilling operations). There should be a mechanism that allows operators and effected surface owner(s) (e.g., a receptor) to reach mutually agreeable solutions without the intervention of the County.</p> <p>Any decibel standards in non-residential areas should be established in reference to ambient noise conditions. Absolute thresholds must consider time of year, weather conditions, and proximity and materiality of impacts on receptors. As an example, high winds on November 20th created 80db ambient conditions in an open field, with variations of +/-15db.</p> <p>The table of maximum permissible noise levels relies on land use and zoning categories that do not align with Larimer County's zoning districts.</p> <p>Need to clarify when the noise measurement regulations are implemented. The COGCC regulations are implemented when there is a complaint. That detail was left out when the COGCC regulations were pulled into this draft</p>	<p>See COGCC Rule 802. Noise Abatement.</p>	

	<p>noise levels appropriate for the zoning designation by the County (table not included)</p> <p>In the hours between 7:00 a.m. and the next 7:00 p.m., the noise levels permitted above may be increased by ten (10) db (A) for a period of not to exceed fifteen minutes in any one-hour period.</p> <p>Construction projects (pipeline or facility construction/installation) shall be subject to the maximum permissible noise levels specified for industrial zones for the period within which construction is to be completed pursuant to any applicable construction permit issued by proper authority or, if no time limitation is imposed, for a reasonable period of time for completion of project.</p>	for the County Regulations.	
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<p>G. <u>Odors:</u></p> <ol style="list-style-type: none"> Oil and gas operations shall be in compliance with the Department of Public Health and Environment, Air Quality Control Commission, Regulation No. 2 Odor Emission, 5 C.C.R. 1001-4, Regulation No. 3 (5 C.C.R. 1001-5), and Regulation No. 7 Section XVII.B.1 (a-c) and Section XII. Operations shall prevent odors from oil and gas facilities from affecting the health and welfare of the public during development activities including drilling, fracking, and flowback to the extent reasonably possible. A system shall be established for immediate response to odor complaints that includes options for ceasing operations, notification of affected residents, and temporary relocation of residents until the source of the odor is identified and resolved. We encourage the Operator to communicate the schedule/timing of well completions activities to residents, which could allow for voluntary shutting of windows and air intakes or temporary relocation. 	<p>In lieu of adopting new odor regulations, the County may consider certifying an inspector to assist with enforcement of the AQCC odor rules under contract with the Colorado Department of Public Health and Environment. The County may also consider COGCC Rule 805.</p> <p>Any County-specific rules should include provisions to differentiate odor sources, particularly near agricultural and industrial operations and landfills.</p> <p>Comment(s) re: 17.3.G.1.: AQCC Reg. 2, Part A, uses a dilution ratio as a threshold for determining which odors are noncompliant. Clarify that Section 17.3.G. applies only to odors that are detectable after dilution with a specified ratio of odor free air. Note that AQCC Regulations 3 & 7 do not contain odor standards.</p> <p>Comment(s) re: 17.3.G.2.: This standard is vague and challenging to implement. We recommend relying on AQCC dilution ratios.</p> <p>Comment(s) re: 17.3.G.3.: Proposed language is broad and this category of concerns will be addressed by COGCC in the course of its Mission Change Rulemaking.</p> <p>Response options should begin with providing information and investigating the odor complaint. If a facility is the odor source, odor mitigation actions may be taken. Ceasing operations is a drastic measure that should only be compelled through an enforcement case, e.g. if a facility is confirmed to have violations of objective standards and cannot or will not mitigate odors to an acceptable level.</p> <p>“Immediate response” is ambiguous and likely unattainable. Language should provide a defined period such as 24 hours.</p> <p>Comment(s) re: 17.3.G.4.: Instead of specifying well completion activities, we propose the use of broader language regarding notice of activities anticipated to cause significant odors, perhaps with implementation via an online portal for facilitating communication with neighbors about the status of operations.</p> <p>We also propose a notification exclusion for emergency response.</p>	<p>See AQCC Reg. 2, Odor Emission See COGCC Rule 805, Odors and Dust. See Whitepaper, available as provided in Appendix A.</p>
<p>H. <u>Dust:</u></p>	<p>Comment(s) re: 17.3.H.2.: We propose revisions to align with COGCC</p>	<p>See COGCC Rule 805.c. Fugitive Dust</p>

<p>1. Best management practices for the mitigation of dust associated with on-site and traffic activities shall be employed at the facility.</p> <p>2. Produced water and other process fluids shall not be used for dust suppression.</p> <p>3. Safety Data Sheets (SDS) shall be provided with the application for any proposed chemical based dust suppressants.</p> <p>4. Water only, unless otherwise approved by the County Health and Engineering Department, will be used for dust suppression activities within 300 feet of the ordinary high-water mark of any body of water.</p>	<p>surface discharge standards (Rule 907.c.(2)D). This category of concerns will be addressed by COGCC in the course of its Mission Change Rulemaking. We propose that any County rules maintain consistency with COGCC rules.</p> <p>A strict prohibition on using produced water or process fluids may inadvertently restrict beneficial uses. Please note that produced water from the Wellington unit is very fresh. Wellington Operating owns and operates a produced water treatment facility that is permitted, after treatment, to discharge produced water to the surface. A rule setting criteria for using produced water (as COGCC Rule 907 does) is preferable to an outright ban.</p> <p>Comment(s) re: 17.3.H.3.: To whom are SDS submissions to be provided?</p> <p>Comment(s) re: 17.3.H.4.: The draft regulations do not define “body of water.” Further, this provision is duplicative of federal and state discharge regulations.</p> <p>If the County plans to approve or disapprove specific dust suppressants, the rules should include standards for approval.</p>	<p>See COGCC Rule 907.c.(2)D. (“Produced water may be disposed by road spreading on lease roads outside sensitive areas for produced waters with less than 3,500 mg/L TDS when authorized by the surface owner and in accordance with an approved waste management plan.</p> <p>Road spreading of produced waters shall not impact waters of the state, shall not result in pooling or runoff, and the adjacent soils shall meet the concentration levels in Table 910-1. Flowback fluids shall not be used for dust suppression.”).</p> <p>See Whitepaper at p. 19 (“Staff proposes amending Rule 805.c. to require operators to develop a dust control plan. The plan would address each phase of oil and gas operations and propose site-specific BMPs to minimize and suppress dust.”).</p>
<p>I. Access:</p> <p>1. Private access drives shall conform to the Local Low Volume cross section found in the Larimer County Rural Area Road Standards, and shall include the following:</p> <ul style="list-style-type: none"> a. The first 50 feet of access drive from the edge of pavement of the adjacent road will be paved and the remaining portions of the access drive shall be composed of a minimum of 6 inches of compacted Class 5 road base. b. The access drive entrance shall include returns with a 30-foot radius. c. The access drive shall be treated with Magnesium Chloride during the entire construction phase, and any time there after when the level of use exceeds 200 vehicle trips per day. d. A mud and debris tracking pad shall be located at the end of 	<p>Comment(s) re: 17.3.I.1.a.: Does “adjacent road” mean “public road?”</p> <p>Comment(s) re: 17.3.I.1.c.: We would recommend against specifying the use of magnesium chloride for dust control, which inhibits innovation and seeking better solutions, and instead adopting a Best Management (BMP) standard.</p>	

	<p>the paved portion of the access drive.</p> <p><u>Chemical Handling:</u></p> <ol style="list-style-type: none"> 1. Prior to any hydraulic fracturing activity, the operator shall provide the County with a copy on the chemical disclosure registry form provided to the COGCC pursuant to the COGCC’s “Hydraulic Fracturing Chemical Disclosure.” 2. Drilling and completion chemicals shall be removed from the site within sixty days of the drilling completion. 3. The following toxic chemicals shall not be utilized in the hydraulic fracturing fluid: (list excluded) 	
<p>Comment(s) re: 17.3.J.1.: What county agency shall be provided this information?</p> <p>Comment(s) re: 17.3.J.2.: We would request that there be an exemption process to the sixty-day limit if a longer period will mitigate other adverse impacts. The results of a completion may not be fully known for more than 60 days and the proposed rule may reduce the benefits of continuous pad-style operations. Complying with the 60-day limit may result in drilling and completion materials being transported to and from the same location multiple times and increase vehicle trips and handling.</p> <p>Comment(s) re: 17.3.J.3.: We have significant concerns regarding the practical feasibility of “zero limits” for compounds that are naturally occurring constituents of crude oil and groundwater, such as benzene, lead, mercury, cadmium, and chromium. For example, benzene is a naturally occurring component of crude oil, and a zero limit would preclude lease oil fracking (i.e., the practice of using natural occurring, indigenous formation fluids as a frack medium, which reduces the fluid volume to frack because of the lower formation damage). And trace benzene can be present in groundwater due to releases during agricultural operations and from transportation fuels.</p> <p>Additionally, lead, mercury, arsenic, cadmium, and chromium are naturally occurring trace elements in groundwater, particularly non-potable ground water which is a preferred source of water for the use of hydraulic fracturing. We propose the use of standards set forth by the EPA for agricultural water.</p>		<p>See COGCC Rule 907.</p>
<p>J.</p>	<p><u>Recycle, Reuse and Disposal of Fluids:</u></p> <ol style="list-style-type: none"> 1. Drilling, completion flowback and produced fluids shall be recycled, unless technically infeasible. 2. Exploration and production waste may be temporarily stored, not to exceed two weeks, in tanks while awaiting transport to licensed disposal or recycling sites. 3. Produced water shall be transported by pipeline unless 	<p>Wellington Operating has been a pioneer in recycling and reuse of produced water in the State of Colorado and wishes to provide information to County staff regarding produced fluid management options, processes, and terminology to ensure the rules allow and promote effective treatment, disposal, recycling or beneficial reuse.</p> <p>Comment(s) re: 17.3.K.1.: The term “recycled” is not currently defined by the proposed regulation. We propose revising to provide that “...fluids shall be recycled <i>or reused</i>, unless <i>economically or technically infeasible</i>.”</p> <p>Comment(s) re: 17.3.K.2: Two weeks is likely too brief a period provided</p>

	<p>economically or technically infeasible.</p>	<p>potential winter weather conditions, limits on equipment availability, and potential mitigation of noise and dust impacts on seasonal habitats. We propose a revision to thirty (30) days and an exception process when transportation activities may adversely impact seasonal habitats.</p> <p>Comment(s) re: 17.3.K.3.: We propose a limit (such as 1000 barrels of water per day) above which pipeline transportation would require evaluation, but below which evaluating pipeline transportation in clearly impractical and evaluation unnecessary.</p> <p>We further suggest addressing situations where pipeline transport may not be possible, such as where easements are not reasonably available or where pipeline construction would be having significant adverse environmental impacts.</p>
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<p>L. Water Bodies:</p> <ol style="list-style-type: none"> The applicant shall provide documentation to the County, as required by the COGCC, demonstrating how the COGCC water quality protection standards are being complied with. The Larimer County Health Department shall be provided with all water source tests that are typically submitted to the COGCC or CDPHE. Proposed oil and gas operations proposed with in a floodplain shall require review and approval of the Floodplain Permit prior to the Board of County Commissioners hearing for an oil and gas special review application. Produced water disposal via wastewater injection wells shall not be allowed. 	<p>We request further dialogue with the County to develop a definition of “water bodies” to include in this rule. The rules should protect water quality/resources and promote beneficial use of produced water in a cost-effective manner that allows oil and gas development. In some cases, injecting produced water is the environmentally preferred management option.</p> <p>Comment(s) re: 17.3.L.3.: What floodplain standard does the County propose for use (i.e., 50-year, 100-year, 200-year event) and what floodplain map is relevant? The applicable floodplain standard and reference maps should be defined.</p> <p>As an alternative, the County’s concerns may be more readily addressed by requiring the floodplain permit as a condition of approval prior to finalization of the Special Review application.</p> <p>If the County adopts a two-track approval process, Section 17.3.L.3 should be revised to reflect that BOCC hearings will not be required for applications subject to an administrative review process.</p> <p>Lastly, it would be recommended that the Flood Plain Review and Permit process be in parallel with the County and COGCC permitting process.</p> <p>Comment(s) re: 17.3.L.4.: The provision needs clarification as to what UIC Class wells will be prohibited from use for injection. Currently,</p> <p>Class II – Injection Wells are regulated by the COGCC.</p> <p>Class I, III-VI – Injection Wells are regulated by the EPA (some UIC I wells are regulated by the COGCC).</p> <p>Additionally, the County should grandfather previously permitted disposal wells, such as those that exist in the Wellington Field.</p> <p>We propose that injection of produced water not be prohibited, but that reasonable monitoring practices be required for this activity to take place. A blanket ban of all injection is outside the scope of the rules and may not be the County’s true intent. Injection in a permitted disposal facility may be the best or only management option as recognized by federal law. Injection permits are designed to protect water resources.</p> <p>Also, we propose an exception for permitted surface discharge. COGCC</p>	<p>See COGCC Rules:</p> <p>316A. Form 14 Non-Produced Water Injection</p> <p>325. Underground Disposal of Water</p> <p>326. Mechanical Integrity Testing (a) Injection Wells</p> <p>401. Authorization (Injection for enhanced recovery)</p> <p>402. Notice of hearing (injection)</p> <p>403. Additional notice (injection)</p> <p>404. Casing and Cementing of Injection Wells</p> <p>405. Notice of Commencement and Discontinuance of Injection Operations</p> <p>712 Surface facilities and structures appurtenant to Class II Commercial Underground Injection Control Wells.</p>
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		<p>Rule 907.c.(2)E allows disposal into state waters and Wellington Operating owns, and has operated, a water treatment plant for the treatment of produced water and its surface discharge since 2005 under the authority of the COGCC with the consent of the Office of the State Engineer and Larimer County.</p>	
<p>M.</p>	<p><u>Visual:</u></p> <ol style="list-style-type: none"> 1. The application shall demonstrate compliance with the visual and aesthetic rules of COGCC and the Larimer County regulations for landscaping, fencing and lighting for all phase of the development of the site. 2. All oil and gas facilities shall be painted with colors that are matched to or slightly darker than the surrounding landscape, and shall utilized paint with uniform, noncontracting, nonreflective color tones based upon the Munsell Soil Color Coding System. 3. The location of all outdoor lighting shall be designed to minimize off-site light spillage and glare. 4. Fencing shall for all the phases of an Oil and Gas facility development to ensure the security and visual aesthetics of the use. 5. Landscaping for screening and visual quality from off-site shall be required within 6 months from the time of well completion. 6. Oil and Gas facility applications, including access roads serving the facility, shall demonstrate how compliance with weed control requirements of the County Weed District and Forestry Services Department will be met. 	<p>Comment(s) re: 17.3.M.1.: We suggest a more specific reference to the Larimer County and COGCC aesthetic rules for clarity. This category of concerns will be addressed by COGCC in the course of its Mission Change Rule Making. We encourage the County to maintain consistency with COGCC rules.</p> <p>Comment(s) re: 17.3.M.2.: Language is duplicative of COGCC Rule 804. We propose alternative language that requires the facilities be painted in a manner that helps the facility “blend in” with the local, natural environment rather than “match” (i.e., clarify that standard color tan is acceptable).</p> <p>Comment(s) re: 17.3.M.4.: We propose establishing minimum and maximum fencing heights and opacity in collaboration with emergency first responders and police, and after consideration of potentially hazardous conditions. Fencing does reduce access to oil and gas facilities and reduce visual impacts, but it can also inhibit evacuation and emergency response. Fence material expectations can become problematic as operators and regulators are often not aligned in their respective understanding and approach; therefore, it would be beneficial to establish permissible fence types and design for consistency.</p> <p>Comment(s) re: 17.3.M.5.: Six months may be too short a time for vegetation to take root. Landscaping can be problematic when water is scarce, and the provision is not clear regarding the County’s expectations pertaining to landscaping. We propose a revision that would recognize the water scarcity concerns (i.e., landscaping which does not require operators to install a tank and irrigation system), consideration of introduction of invasive species, and changes to habitat (e.g., planting trees in open grassland).</p> <p>The proposed language is unclear regarding the type of screening, which is appropriate, or environmentally sound in an open landscape with few trees</p>	<p>See COGCC Rules 803 and 804.</p> <p>See Whitepaper at p. 19 (“Staff proposes refining its Rules to better account for aesthetic impacts. Staff is also considering the role its 800 Series Rules play in local jurisdictions that elect to regulate for aesthetic concerns.”)</p> <p>See Adams County Development Standards and Regulations 4-10-02-03-03-03, specific language for which is available in Appendix A.</p>

		<p>or large plants and limited water (e.g., we note that Adams County’s oil and gas regulations do not appear to require landscaping within six months of completion).</p> <p>Well completion is not the final step in constructing a well production facility, and many facilities have more than one well. Instead of tying the deadline to well completion, we suggest a deadline of 6 months from the completion of construction activities within an approved Surface Use Area.</p> <p>Comment(s) re: 17.3.M.6.: We have questions regarding the form of these applications but will wait for clarification of the process described.</p>	<p>See Whitepaper, available as provided in Appendix A.</p>
<p>N.</p>	<p><u>Well Plugging and Abandonment:</u></p> <ol style="list-style-type: none"> 1. Well abandonment and reclamation shall comply with the COGCC rules and shall include the following: <ol style="list-style-type: none"> a. Removal of all equipment from the well site, b. Restoration of the site surface to the conditions of the site reclamation plan, c. Notice to the County LGD of the commencement and completion of such activity, and d. Coordinates for the location of the decommissioned well(s), and any associated gathering or flow lines, shall be provided with the notice of the completion of well abandonment. 	<p>We request ongoing dialogue regarding the applicability of this regulation to existing wells, which do not require a Site Reclamation Plan.</p> <p>This category of concerns will be addressed by COGCC in the course of its Mission Change Rule Making. The AQCC will vote in December 2019 on a proposal to require BMPs for well plugging. We encourage the County to maintain consistency with COGCC and CDPHE rules.</p> <p>Comment(s) re: 17.3.N.1 a. and b.:</p> <p>Historically, the COGCC has allowed assignment of well bores to landowners for the purpose of re-permitting as groundwater wells. The new regulations should not prohibit this practice.</p>	
<p>O.</p>	<p><u>Flammable Material:</u></p> <ol style="list-style-type: none"> 1. The location of flammable materials on site shall conform to all COGCC safety standards and local fire codes. 2. A minimum 25-foot buffer, free of weeds and dried grasses, shall be required around anything flammable. 	<p>Comment(s) re: 17.3.O.2:</p> <p>The regulation, as proposed, may increase the disturbed ground around some wellheads.</p> <p>Clarify the applicability of the rule; the term “anything flammable” is very broad and would include native vegetation. Compliance would require stripping the ground within the buffer area, which would conflict with 17.3.H Dust</p>	
<p>P.</p>	<p><u>Waste Disposal:</u></p> <ol style="list-style-type: none"> 1. Oil and gas facilities shall remain free of debris and excess 	<p>Comment(s) re: 17.3.P.1: Excess materials is an undefined term.</p> <p>Comment(s) re: 17.3.P.2: The prohibition on burning “other flammable</p>	

	<p>materials during all phases of operation.</p> <p>2. Burning of debris, trash or other flammable material is not allowed.</p>	<p>material” in § 17.3.P.2. conflicts with state and federal requirements for combustion to reduce emissions and air quality flaring requirements. Should be reworded to be clear other flammable material excludes oil and gas production.</p>
<p>Q.</p>	<p><u>Removal of Equipment:</u></p> <ol style="list-style-type: none"> 1. There shall be no permanent storage of equipment on the site of an oil and gas facility. 2. When not in use, or no longer needed for on-site operations all equipment not being used on the site shall be removed. 	<p>Comment(s) re: 17.3.Q.1.: Storage is by definition a temporary activity. As is common in the agricultural industry, it is similarly a common oilfield practice to store equipment for well maintenance, such as tubing, casing, spare pumps, etc., within a field area. This practice reduces heavy truck traffic, and related emissions and dust, and facilitates timely repairs. Consequently, the provision appears in conflict with § 17.3 B 7.a. and b. (regarding the reduction of vehicle traffic for dust control) and § 17.3 C Leak Detection and Repair.</p> <p>We propose revision of this provision to permit equipment storage with appropriate installation of screening, if necessary, to mitigate aesthetic impacts from public rights-of-way or if requested by landowner.</p> <p>Comment(s) re: 17.3.Q.2.: Wellington Operating has acquired 35 acres of fee land specifically for locating its facilities, including storage of equipment. The rules should not inadvertently prohibit or restrict a specific land use of land owned in fee.</p>
<p>R.</p>	<p><u>Maintenance of Machinery:</u></p> <ol style="list-style-type: none"> 1. There shall be no maintenance of field equipment involving hazardous material within 300 feet of a water body. 2. Any fueling on-site shall occur over an impervious surface and shall not occur during storm events. 	<p>Comment(s) re: 17.3.R.1.:</p> <p>Field equipment is a vague and undefined term. As written, field equipment could be interpreted as including artificial lift systems, and this proposed regulation effectively bans using artificial lift systems within 300 feet of a water body.</p> <p>The term “water body” is not defined, nor is the reference point for the 300’ measurement.</p> <p>Comment(s) re: 17.3.R.2.:</p> <p>Many jurisdictions require on-site fueling areas to be bermed and a collection sump in the event of a spill.</p>
<p>S.</p>	<p><u>Flow Lines, Transfer Lines and Gathering Lines:</u></p> <ol style="list-style-type: none"> 1. All off-site lines transporting process materials, production wastes, 	<p>The regulations should encourage the use of pipelines where appropriate and economically feasible because they have safety and environmental</p> <p>See COGCC Form 44. See Flowline Rulemaking, information for</p>

	<p>product and any other items used of generated by the facility shall be located to avoid existing or proposed residential, commercial, and industrial buildings; places of assembly, surface waterbodies and designated open spaces.</p> <ol style="list-style-type: none"> The location of pipelines shall be evaluated on a case-by-case basis, with determine locational factor being the size and type of pipeline being proposed. Coordinates of all flow lines, gathering lines, and transfer lines shall be provided. 	<p>advantages and they reduce truck traffic. The COGCC significantly revised and expanded its flowline rules in November 2019. We have concerns that the proposed pipeline location rules are not sufficiently flexible to permit access.</p> <p>Comment(s) re: 17.3.R.1.:</p> <p>This section may unduly restrict pipeline access because of ambiguity in the terms avoid, places of assembly, surface waterbodies and designated open spaces. Difficulties identifying proposed development may also restrict pipeline access and lead to disputes. The County may consider the effect of the federal Pipeline and Hazardous Materials Safety Administration’s (PHMSA) pipeline safety regulations.</p> <p>Comment(s) re: 17.3.R.2.:</p> <p>The rules should provide a clear evaluation process and a path to timely approval of safe and responsible development projects. We request ongoing dialogue to clarify the intent and standards for this rule.</p>	<p>which is available as provided in Appendix A.</p> <p>See 49 C.F.R. Parts 190-199 (pipeline safety regulations).</p>
<p>T.</p>	<p><u>Temporary Water Lines:</u></p> <ol style="list-style-type: none"> Temporary waterlines shall be used, unless technically infeasible. Temporary waterlines shall be buried at all existing driveway and road crossing, or utilize existing culverts, if available. 	<p>We propose revising § 17.3.T.1., as follows: “Temporary waterlines shall be used, unless <i>economically impractical</i>, technically infeasible, or <i>where access is otherwise unavailable.</i>”</p>	
<p>U.</p>	<p><u>Financial Assurance:</u></p> <ol style="list-style-type: none"> The Applicant must demonstrate the financial capability to reclaim all disturbed areas during each phase of the site development and following termination of the oil and gas operation on the site. The Applicant must, for the life of the use, carry environmental liability insurance for all potential pollution events. 	<p>This category of concerns will be addressed by COGCC in the course of its Financial Assurances Rule Making in the Fall of 2020. We encourage the County to maintain consistency with COGCC rules.</p> <p>Comment(s) re: 17.3.U.2.:</p> <p>The phrase “potential pollution events” is ambiguous. We propose revising § 17.3.U.2 such that the “Applicant must, for the life of the use, carry customary and usual environmental liability insurance.”</p>	
<p>17.4</p>	<p>Guidelines for Oil and Gas Developments</p>		
	<p>A. Applications for oil and gas facilities are strongly encouraged to incorporate the following guidelines (best management practices).</p>	<p>We support the use of BMPs and performance standards instead of prescriptive technological solutions that may be inappropriate in given</p>	<p>See AQCC Reg. 7 § XVIII (pneumatic</p>

	<p>Where reasonably necessary, the County may require some or all the following guidelines depending on the location and characteristics of the proposed facility.</p> <ol style="list-style-type: none"> 1. To mitigate the adverse impacts of air emissions generated by oil and gas facilities, Applicants are encouraged to: (list excluded) 2. To mitigate the adverse impacts of odor generated by oil and gas facilities, Applicants are encouraged to: (list excluded) 3. To mitigate the impacts of multiple pipeline corridors, Applicants are encouraged to consolidate and share pipeline easements and corridors, unless it is technically infeasible. 	<p>circumstances. Best practices to minimize environmental impacts vary depending on site conditions. If the County imposes specific requirements, it should do so at the time of permit issuance. The following implementation issues demonstrate the advantages of requiring BMPs rather than mandating specific practices:</p> <p>Comment(s) re: 17.4.A.1.a.: Tankless production is not possible in all situations. It may not be economic for low-production facilities or facilities located away from dense development and pipeline infrastructure. At these facilities the environmental impacts of pipeline construction must be weighed against the benefits of tankless production. There is not a standard definition of “tankless production techniques” and nearly all facilities require some tanks for upset conditions or maintenance.</p> <p>Comment(s) re: 17.4.A.1.b.: Zero emission dehydration is prohibitively costly and may require use of environmentally hazardous chemicals</p> <p>Comment(s) re: 17.4.A.1.d.: The AQCC currently regulates pneumatic devices and is likely to consider additional regulations in 2020-2021.</p> <p>Comment(s) re: 17.4.A.1.e.: The AQCC will vote on automatic tank gauging regulations in December 2019.</p> <p>Comment(s) re: 17.4.A.1.f.: Must be allowed to flare to comply with applicable regulations.</p> <p>Comment(s) re: 17.4.A.1.g.: How will “agreed upon by community and industry work”</p> <p>Comment(s) re: 17.4.A.3.: We propose revising the language to state that “...Applicants are encouraged to consolidate and share pipeline easements and corridors, unless <i>economically or</i> technically infeasible.”</p>	<p>device regulations).</p>
<p>17.5 Application Requirements</p>	<p>A. In addition to the submittal requirements necessary to demonstrate compliance with the applicable Sections of the Land Use Code, applications for oil and gas facilities shall also include, when relevant, the following: (list excluded)</p>	<p>How does the County envision coordination between the various agencies to standardize forms?</p>	
<p>17.6 Appeals</p>			

	<p>A. Any decision made pursuant to this section may be appealed pursuant to Section 22 of the Larimer County Code.</p>	<p>Appeals should be limited to interested or aggrieved parties (Larimer County Code § 22 allows third parties to intervene without an interest and potentially use the appeals process to unreasonably delay permits).</p> <p>Currently, § 22 of the Larimer County Code has no such limitation on standing and instead permit “[a] person [that] asserts that there is an error in any order, requirement, decision or refusal made by an administrative officer or agency in the administration or enforcement of the provisions of this code (administrative decisions)” may bring an appeal. Larimer County Code § 22.2.1.A.1. Emphasis added. There are no further requirements imposed on the appellant to demonstrate injury or threat of injury or harm in order to bring the appeal.</p>
<p>17.7 Enforcement and Inspection</p>	<p>A. Applicants shall demonstrate compliance with the Larimer County Land Use Code, and with this Section. Failure to maintain compliance with the County approval of an oil and gas facility may result in the revocation of the approval pursuant to the procedures in Section 12 of the Land Use Code. The County retains the right to seek whatever remedy or redress is legally allowable.</p> <p>B. The County reserves the right to inspect the property for compliance.</p>	<p>Comment(s) re: 17.7.A.: The enforcement penalties are duplicative and potentially put operators at risk of double exposure based on state enforcement penalties.</p> <p>Comment(s) re: 17.7.B.: Will the County impart notice prior to an inspection?</p>
<p>17.8 Enforcement and Inspection</p>	<p>A. The following fees are applicable to oil and gas facilities.</p> <p>a. TBD</p> <p>B. An impact fee will be assessed as follows:</p> <p>a. Capital Transportation Impact Fees</p> <p>C. Each application shall include financial security for the purpose of ensuring maintenance and reclamation may be accomplished if the applicant is unable or unwilling to perform its obligations.</p>	<p>We request ongoing dialogue to clarify the fee requirements and under what conditions such fees will be levied.</p>

<p>17.9</p>	<p>Termination of Use or Modification</p>	<p>The proposed regulations do not contain information regarding how long the Special Review Approval will be valid once issued.</p>	
	<p>A. No modification to an approved oil and gas facility shall be made without obtaining appropriate land use approval from the county. B. Upon termination of use, the oil and gas facility must be reclaimed pursuant to the reclamation plan provided.</p>	<p>Comment(s) re: 17.9.A.: We propose inclusion of a materiality standard and requests ongoing dialogue regarding the standards and process for approval of modifications. Comment(s) re: 17.9.B.: The COGCC reclamation rules address soils, contouring, revegetation, weed control, equipment removal, and release of financial assurance. We recommend maintaining consistency with COGCC regulations to avoid conflicting or duplicative requirements.</p>	<p>See COGCC Rules 1001 – 1004.</p>
<p>17.10</p>	<p>Definitions</p>		
	<p>A. Unless otherwise listed herein, the definitions found within the Colorado Revised Statutes and COGCC regulations shall control.</p>		

Appendix A to King and Wellington's Comments on Larimer County's Draft (Version 1) Oil and Gas Regulations

1. Section 17.1.A.

The purpose of the oil and gas facility regulation is to allow for reasonable development of oil and gas while ensuring that facilities are sited in appropriate areas and utilize best practices to protect the health, safety, and welfare of our residents and the environment and wildlife.

Adams County Code § 2-02-14-01.

This Section is enacted to protect and promote the health, safety, values, convenience, order, prosperity and general welfare of the current and future residents of the County. It is the County's intent by enacting this Section to facilitate the development of oil and gas resources within the unincorporated area of the County while avoiding or mitigating potential land use conflicts between such development and existing, as well as planned, land uses. It is recognized that under state law the surface and mineral estates are separate and distinct interests in land and that one may be severed from the other. Owners of subsurface mineral interests have certain legal rights and privileges, including the right to use that part of the surface estate reasonably required to extract and develop their subsurface mineral interests from a consenting surface owner, subject to compliance with the provisions of this Section and any other applicable statutory and regulatory requirements. Similarly, owners of the surface estate have certain legal rights and privileges, including the right to have the mineral estate developed in a reasonable manner and to have adverse impacts upon their property, associated with the development of the mineral estate, avoided or mitigated through compliance with this Section.

Adams County Code § 4-10-02-03-03-01

2. **COGCC Operator Guidance, SB 19-181:** Hearings and Permit Applications, available here: http://cogcc.state.co.us/documents/sb19181/Guidance/SB_19_181_Guidance_20190806.pdf.

3. COGCC 100 Series Rules

SPILL shall mean any unauthorized sudden discharge of E&P waste to the environment.

EXPLORATION AND PRODUCTION WASTE (E&P WASTE) shall mean those wastes associated with operations to locate or remove oil or gas from the ground or to remove impurities from such substances and which are uniquely associated with and intrinsic to oil and gas exploration, development, or production operations that are exempt from regulation under Subtitle C of the Resource Conservation and Recovery Act (RCRA), 42 USC Sections 6921, et seq. For natural gas, primary field operations include those production-related activities at or near the wellhead and at the gas plant (regardless of whether or not the gas plant is at or near the wellhead), but prior to transport of the natural gas from the gas plant to market.

In addition, uniquely associated wastes derived from the production stream along the gas plant feeder pipelines are considered E&P wastes, even if a change of custody in the natural gas has occurred between the wellhead and the gas plant. In addition, wastes uniquely associated with the operations to recover natural gas from underground storage fields are considered to be E&P waste.

4. **COGCC Mission Change Whitepaper**, dated November 1, 2019, available here: http://cogcc.state.co.us/documents/sb19181/RulemaWe/Mission%20Change/Mission_Change_RulemaWe_Whitepaper_20191101.pdf
5. **Adams County Development Standards and Regulations 4-10-02-03-03**

Section 19. Visual Aesthetics.

- a. Operator shall submit a visual mitigation plan in compliance with COGCC Rules, including but not limited to, a list of the proposed colors for the Facilities, regardless of construction date, which are observable from any public highway, providing for paint that is uniform, noncontrasting, nonreflective color tones (similar to the Munsell Soil Color Coding System), and with colors matched to but slightly darker than the surrounding landscape, a listing of the operations' equipment, proposed fencing, and screening. Plan shall indicate the location of all outdoor lighting on the site and any structures and include cut sheets of all proposed fixtures. Fencing shall be required around all well site equipment, including, but not limited to, storage tanks, well heads, and meters if the well site is visible from a subdivision west of Imboden Road. Such fencing shall screen equipment, provide safety precautions, and be compatible with the surrounding environment. Should fencing apply to a well site, the design and construction of such fencing shall be approved by the Community and Economic Development Department prior to the construction of any site. If a chain link fence is required to achieve safety requirements set by the COGCC, then landscaping and other screening mechanisms shall be required that comply with the County's Development Standards and Regulations and the Operator's safety requirements. Operator shall be responsible for obtaining consent by surface owner allowing any required fencing.
- b. Operator shall submit landscaping and berming plan that includes maintenance and irrigation requirements for planted vegetation throughout the duration of operations, including production. Operator shall be required to provide maintenance funding through bonding to ensure funds are available for upkeep. Weed control is required at the facility and along access roads until final reclamation and abandonment. Required sound walls shall be included in the visual mitigation plan and shall comply with the color scheme approved by the County, blending with natural background. All landscaping shall be in compliance with County requirements and in compliance with the safety requirements of the Operator. Existing vegetation shall be minimally impacted. Motorized equipment shall be restricted to the well sites and access roads to the well sites. Operator is responsible for obtaining consent by surface owner allowing landscaping as well as automatic irrigation for landscaping in urban mitigation areas and/or parks/recreation areas. All plant materials shall be kept in a healthy growing condition at all times.
- c. Operator shall submit lighting mitigation plan for all phases of development and operation, which adheres to best management practices to minimize light escaping the facility including making all lighting downward-facing and fully shielding bulbs to prevent light emissions above a horizontal plane drawn from the bottom of the fixture. Operator shall conduct a photometric study prior to start of construction to indicate impact on surrounding properties and measure the lumens emitted from the facility outside of the walls.
- d. Site access and security. Site shall be properly secured, including, but not limited to, security fencing or barriers to prevent unauthorized access to site. Site shall be properly secured prior to the start of drilling. Proposed fencing, barriers, and screening shall be included in the visual mitigation plan.

6. **COGCC Flowline Rulemaking** information for which is available here:

- http://cogcc.state.co.us/documents/media/Press_Release_Flowline_Rulemaking_November_Commission_Announcement_20191121.pdf
- http://cogcc.state.co.us/sb19181_calendar.html#/rulemaking_flowline

October 30, 2019 Draft
Comments by LOGIC-LA



Larimer County Commissioners
 CC: Matt Lafferty, Leslie Ellis, Tom Gonzales
 200 W. Oak Street
 Ft. Collins, CO 80521

RE: Larimer County Draft “Oil And Gas Facilities” Proposed Regulations to the Larimer County Land Use Code

Dear Commissioners Johnson, Donnelly and Kefalas, and Mr. Lafferty, Mr. Gonzales, and Ms. Ellis,

The League of Oil and Gas Impacted Coloradans (LOGIC) and groups aligned under the Larimer Alliance for Health, Safety and the Environment (Larimer Alliance) appreciate the opportunity to submit the following comments regarding Larimer County’s draft regulations for Oil and Gas Facilities.

These comments reference the Larimer County draft “Oil and Gas Facilities Regulations” in Section 17.0 of the Larimer County Land Use Code. Oil and gas development, both generational and especially new “unconventional” drilling and exploration, pose significant risks and impacts to local communities – to public health, safety, welfare, and the environment of Larimer County.

SB19-181 became law on April 16, 2019. It equips local governments with a new spectrum of tools, rights, and responsibilities regarding oil and gas. In mid-2019 the Larimer Alliance formed and respectfully requested that Larimer County take the time to fully develop local regulations to protect public health, safety, welfare, the environment and wildlife resources. While the Colorado Oil and Gas Conservation Commission (COGCC) is working to develop the new framework and rules to implement SB19-181, we have consistently advocated that our County also commit to putting health, safety, and our environment first.

We began by urging the County to enact a moratorium on new oil and gas development and permits until state government announced new rules. We also encouraged Larimer County to closely review the regulatory frameworks of other Front Range jurisdictions such as Adams County, Commerce City, Erie, or Broomfield, with an eye toward best ideas to protect public health, safety, welfare and the environment.

Under the new law, local governments are explicitly spared from state preemption in their land use authority and may establish regulations that afford more protection than those of the state regarding public health, safety, welfare, the environment and wildlife. As such, local jurisdictions have wide discretion to approve, condition or deny permit applications and to regulate oil and gas operations in a reasonable manner to protect and minimize adverse impacts

to public health, safety, and welfare, the environment, and wildlife resources and to protect against adverse environmental impacts resulting from oil and gas operations. Also very important, SB19-181 directs that no longer is “cost-effectiveness and technical feasibility” to be applied when regulating oil and gas operations. We strongly recommend Larimer County to eliminate loophole language such as “to the maximum extent practicable” and “where feasible”, and replace the term “encourage” with “require” compliance with regulations.

Without a moratorium thus far, now we move to our specific comments on the County’s recently released draft regulations.

To begin, we seek that Larimer County develop and adopt regulatory language that clearly protects public health, safety, welfare, the environment, and wildlife resources. This includes:

- A clearly asserted right to deny, condition or approve permits to protect and to minimize adverse impacts to public health, safety, and welfare, the environment, and wildlife resources, and to protect against adverse environmental impacts resulting from oil and gas operations.
- a comprehensive and transparent public process regarding consideration of new oil and gas development.
- a series of protective and thorough standards for applications for new oil and gas development that include at least a minimum 2,000 foot setback from homes, high occupancy building areas (such as hospitals and schools) and from water sources.
- high standards for all oil and gas operations within Larimer County that thoroughly protect public health, safety, and welfare, the environment, and wildlife resources, and minimize and mitigate the extent and severity of those impacts that cannot be avoided. This begins with expanding requirements regarding air quality, water, odor, noise and vibrations, truck traffic, chemical use, waste management, and financial security for County residents, property owners, taxpayers, and local governments.

With this in mind, LOGIC recommends the following, regarding the Larimer County proposed “Oil and Gas Facilities” Draft language to the Larimer County Land Use Code.

Section 17.1 -- Intent and Purpose

Section 17.1 of the “Oil and Gas Facilities” section of Larimer County Land Use Code states that:

“The Intent and purpose of this section is to establish and administer necessary and reasonable regulations for *oil and gas drilling and production* in a manner that protects and promotes the health, safety, and general welfare of the residents and environment of the County. To the extent practicable these regulations will require applications for oil and gas operations to demonstrate how adverse impacts will be mitigated to achieve a minimal negative impact on the environment, wildlife and residents of the County.”

SB19-181 expressly removes clauses of preemption and in fact empowers local governments to create and implement regulations that protect public health, safety, welfare, environment and wildlife resources. LOGIC, Larimer Alliance and associated community groups request that Larimer County do the following:

- incorporate clear language regarding the intent of the County’s oil and gas regulations;
- eliminate the use of phrases here and throughout the regulations that allow loopholes with regard to protection of public health, safety, and the environment;
- and clearly assert its right to reject or deny and/or to condition any and all permit applications in a manner that prevents adverse impacts to public health, safety, welfare, and the environment.

Section 17.2 -- Required Process and Permits

Section 17.2 begins by referring all oil and gas permitting *Larimer County Code of Ordinances 4.5: Special Review and Minor Special Review* with “Supplemental Review” criteria. Current development of oil and gas using unconventional hydraulic fracturing methods poses significant immediate impacts and nuisances to surrounding neighborhoods; community assets such as shopping centers, schools, and playgrounds; and to local infrastructure such as roads and electrical grids.

We find that the minimalist “Special Review and Minor Special Review requirements”, as well as the “Supplemental Review” criteria in 17.2.B neglect to include public notice or process regarding new oil and gas proposals. Also, they are void of an array of materials required by a number of other Colorado county governments that would allow the County to fully review and vet an oil and gas site proposal to protect public health, safety, welfare, the environment, and wildlife resources in a manner consistent with SB19-181.

We recommend, at minimum:

- The development of specific land use provisions to clearly establish standards for a proposed new oil and gas site to include a minimum 2,000 foot setback from homes, high occupancy buildings (such as hospitals and schools), residential areas, flood plains, air inversion areas, and water sources. This would include use of COGCC maps of underground structure.
- The development of a land use process and special use review process that is entirely specific to new and existing oil and gas development and infrastructure.
- The development of a public process for each new oil and gas facility that includes:
 - At least 60 days-notice of the permit application to all residents, landowners, and parents of school children attending a school within 1 mile of a proposed oil and gas site;

- Public disclosure of all required documents submitted to the County by the Operator;
 - An independent environmental, financial, and risk analysis to be prepared and presented to the County;
 - A public neighborhood meeting, no less than 30 days prior to a hearing, to be presented by the operator and administered by the county;
 - A public hearing at the County Planning Commission;
 - And finally, a public hearing and vote by the Larimer County Commissioners.
- A detailed process for the submission of required materials by the operator to the county; acceptance and acknowledgement of the required materials by the County; and detailed policy directing a process for evaluation that leads to a public accountability process.
 - An affirmation of the right to deny, reject or to condition all proposed oil and gas projects within the County.

We finally recommend, in this section, (17.2.B) that a detailed list of required application materials, (as described in Section 17.5) be moved to Section 17.2.C. Also, this section should clearly define the required planning documentation. This documentation should ensure that the operator has a sense of the County's standards regarding protection of public health, safety, the environment and wildlife resources. We suggest that the following documentation with the following definitions be included:

Section 17.3 -- Standards Required for All Oil and Gas Facilities

Whereas Section 17.3 outlines the County's standards for oil and gas facilities, in keeping with the format proposed by the County, we offer the following changes and additions to the currently proposed County regulations:

- **General :** Paragraph 17.3.A.2 – we request this sentence be amended to include “agricultural operations, residential communities, schools, roadways and other infrastructure, surface water, wetlands, and natural areas.” and that a minimum 2,000 foot setback from all residential or high occupancy buildings, outdoor parks and rec, water bodies, and other environmentally sensitive areas be required.
- **Air Quality:** Southern Larimer County is in Colorado's 8-hour ozone non-attainment area. Oil and gas development is a top contributor of greenhouse gas emissions. Larimer County residents deserve innovative local regulatory measures that prioritize their public health, and the development of stringent air quality monitoring programs are one of the paramount ways to protect public health and safety.
 - Changes to the current draft regulations:

- Sections 17.3.B.1-3 describe that the County is requiring compliance with COGCC, CDPHE, AQCC, and EPA air quality emissions standards. In order to protect public health, we ask that the county require certification of this compliance from operators.
- INSTAAR continuous monitoring equipment be installed by the county at operator expense, with live monitoring available online.
- Provision 17.3.B.3 allows non-compliance with basic EPA Reduced Emission Completions for completions and workovers, however allows for exceptions when this is economically infeasible or impracticable. Whereas, unmonitored, completed oil and gas sites have a tendency to leak, therefore we request that the County first eliminate the “feasibility and practicability” loopholes and simply require that operators comply with this basic EPA Reduced Emissions Standard.
- We seek the removal of loophole language in Section 17.3.B.4 regarding “economic feasibility and practicability” with regard to closed loop, pitless drilling, completions systems without permanent on-site storage tanks.” Such provisions, as well as the prohibition of the use of flares, should be required practices within the County for the protection of Larimer County’s air quality and public health.
- The use of electric drill rigs, engines, and production equipment (Section 17.3.B.4-5) is a standard requirement in at least half a dozen local jurisdictions across the Front Range. We seek that Larimer County follow this standard and require the use of electric drill rigs and production equipment and eliminate the use of all loophole (“economically feasible and practical”) language.
- While the intention of provision 17.3.B.6 to ensure compliance with State Regulations regarding motors, engines, and other equipment is helpful, the inclusion of “exploration” regarding oil and gas development ambiguously opens the door to consideration of exploratory drilling permits within Larimer County, and while this code is intended to address oil and gas permitting, the inclusion of exploratory drilling permitting in Larimer County should be treated as entirely separate, if allowed at all.
- The requirements regarding air quality action days in Section 17.3.B.7 are thorough. However, we ask that delivery of a report of these air pollution reduction measures be presented to the county within 30 days following the air pollution reduction day OR if air pollution action days occur in succession, within 30 days of the conclusion of the succession of air pollution action days.

- Additions: While the provisions in the Air Quality section of the County’s draft regulations are a start, we strongly encourage that the County take seriously the charge of protecting public health, safety, and the environment when it regards oil and gas. Stringent provisions and regulations around air quality at oil and gas sites is foundational to protecting public health and safety. We recommend that the County incorporate further detail and provisions in its code regarding Air Quality and oil and gas as such:
 - We ask that the County begin the section (17.3.B.) asserting the intention that “New Oil and Gas Operations shall not degrade air quality and shall prevent adverse impacts to public health, safety, and welfare and the environment and provide evidence of such compliance in the provisions that follow.”
 - In Section 17.3.B.1, we request that the County further spell out the compliance with EPA, CDPHE, and COHCC standards regarding air emissions, and take steps further to comply with the 2017 CDC Agency for Toxic Substances and Disease Registry and US EPA Integrated Risk Information System ambient Air quality guidelines. Additionally add compliance with all OSHA work practice requirements regarding benzene exposure.
 - Flaring shall be prohibited other than during emergencies or upset conditions, and all flaring shall be reported to the County. If flaring is required, all flares, thermal oxidizers, or combustion devices shall be designed and operated to the manufacturer specification of 98% destruction removal efficiency or better.
 - Use of open pits shall be prohibited.
 - The County should conduct onsite baseline air quality monitoring ahead of all oil and gas permitting considerations, and should require annual Leak Detection and Repair inspections. The results of these inspections and annual onsite air quality monitoring should be reported to the County.
 - For Operators with existing oil and gas operations within Larimer County, demonstrate that the Operation will not result in any increase of volatile organic compounds (VOCs) from Operator’s existing and planned Operations in the County.
 - The County requires in Section 17.B that operators “demonstrate hydrocarbon destruction and control efficiency by using an enclosed combustion device that complies with a design destruction efficiency of 98% or better”.
 - Implement best management practices during liquids unloading (i.e. maintenance activities to remove liquids from existing wells that are

inhibiting production) including at least 95% emissions reductions when utilizing combustion and installation of artificial lift or unloading through the separator where feasible.

- Implement “tankless” production techniques.
- Obtain electrification from the power grid or from renewable sources for all equipment that can be electrified.
- Install, calibrate, operate, and maintain any flare, auto ignition system, recorder, vapor recovery device or other equipment used to meet hydrocarbon destruction or control efficiency requirement in accordance with the manufacturer’s recommendations, instructions, and operating manuals.
- Use of telemetric control and monitoring systems, including surveillance monitors to detect when pilot lights or control devices are extinguished.
- Reduction of emissions from oil and gas maintenance activities such as pigging or blowdowns.
- Require 48-hours notice of any maintenance or emergency condition requiring venting.
- Centralize compression facilities within a well site.
- All venting of exhaust should be done in an upward direction or away from any occupied structure closest to such equipment.
- Establishment of shutdown protocols, approved by the County, with notification and inspection provisions to ensure safe shut-down and timely notification to resident, neighborhoods, and parents of school children within one mile.
- Conduct ongoing maintenance checks of all equipment to minimize the potential for gaseous or liquid leaks.
- Minimize truck traffic to and from the site.
- Hydrocarbon control of 98% or better for crude oil, condensate, and produced water tanks with uncontrolled actual emissions of VOCs greater than two TPY VOCs.
- Use of no-bleed continuous and intermittent pneumatic devices.
- Consolidation of compression facilities within a well pad site.
- A full root cause analysis of any Grade 1 gas leaks.

- Use of other best management practices to control emissions as they become available.
- **Leak Detection and Repair**
 - Section 17.3.D is a standard start to Leak Detection and Repair Requirements; however, we strongly recommend that provision 17.3.D.4 require that all leaks be repaired, with an expedient timeline for repair and inspection of that repair reported to the county.
 - Further, given that leaks and spills at oil and gas sites pose a threat to public health, safety and the environment, not just those that pose an “imminent hazard to persons, property, wildlife or the environment,” the County should exercise its right to require that any oil and gas well with an identified leak shall be shut down and not allowed to operate until the operator has provided evidence that the leak has been repaired if an immediate timeline for repair is not identified by the operator.
 - Additions: It is incumbent on Larimer County to ensure that the public’s right to know about leaks and spills is being met. Leaks at oil and gas sites pose a risk to public health and safety. We ask that the County add to Section 17.3.D an additional bullet regarding public notification, and make information regarding all leaks and spills at oil and gas sites available to the public
- **Spills and Releases:** To protect public health and safety, Larimer County must take further steps and institute further requirements of oil and gas operators regarding spills, response and reporting to Section 17.3.D.
 - Changes to what is proposed: Within Section 17.3.D.1, we seek details regarding how this information will be noticed appropriately to emergency response and nearby residents as well as to parents of school children attending schools within one mile. We further recommend that this section include a place within the County website, where information regarding spills and releases be made publicly available.
 - Additions: We recommend that Section 17.3.D be fleshed out further to include:
 - A provision that any operator in Larimer County demonstrate the ability to control and contain and repair all spills and releases of exploration and production waste.
 - Publicly available records of spills and releases that further detail timelines, exposure, and any findings from subsequent investigations of a spill.
 - A requirement that the Form 19 Spill Release Report (required by the COGCC) and the Form 23 Loss of Well Control Report be filed with the LGD and made available to the public when it is submitted to the LGD.

Further, the Operator shall provide a topographical map showing the location of the spill, any measures regarding immediate mitigation, site investigation and remediation that follow these forms.

- Spills and releases that breach containment measures exceeding one barrel of Exploration and Production Waste or produced fluids shall be reported to the Local Government Designee (LGD) and made publicly available within 24 hours.
- Spills and releases impacting or threatening any waters of the state, residences or occupied structures, livestock, or public byways shall be verbally reported to the LGD within 24 hours, with a written follow-up notice within 48 hours. Documentation of this reporting shall be provided to the public.
- Spills and releases of any size which impact or threaten to impact any water supply area shall be reported to the Colorado Environmental Spill Reporting Hotline at 1-877-518-5608 and to the LGD immediately upon discovery. The LGD shall make appropriate notifications to emergency response and water management teams and systems, and within 24 hours shall make this information available to the public.
- Operator will submit copies of all reports required by state and federal agencies to the LGD, who will make these available to the public.
- Operator shall use steel rimmed berms to surround the project with a capacity of 150% of the largest on site temporary storage tank.

- **Noise**

- Throughout 17.3.F, we seek that the County amend its language regarding baseline noise testing distances and ongoing noise mitigation to:
 - Baseline testing of noise levels at 350, 500, and 1,000 feet from any oil and gas site to the nearest property line in Section 17.3.F.1
 - In Section 17.3.F.4, we seek that the language be amended to test decibel levels intermittently at each phase throughout active drilling and completion at 350, 500, and 1,000 feet from any oil and gas site to the nearest property line.
- Whereas, increasing evidence suggests detrimental impacts to public health regarding significant changes to ambient noise, we ask that Section 17.3.F.5 be adjusted as follows:
 - Noise levels should be measured per COGCC Rule 802 b & c, except no measurements shall be taken when traffic is passing the sound meter.

- For db(C) scale noise, Operator will comply with the requirements of COGCC Rule 802.
 - Continuous monitoring from four sides of the facility, set at 350, 500, and 1,000 feet from the sound wall shall be required, within residential/agricultural/rural and commercial zoned areas.
 - Residential/Agricultural/Rural and Commercial Zoned areas should NOT be subject to “Industrial” scale noise requirements during the construction or completion phases of oil and gas facilities/installation or pipeline construction. Instead, we offer further provisions below regarding noise mitigation requirements.
- Detailed noise mitigation is an imperative component in the development of oil and gas regulations that are truly intended to protect public health, safety, welfare, the environment, and wildlife resources. We offer the following additions for consideration within the “Noise” requirements section (17.3.F) to minimize and mitigate impacts to public health and safety:
- Use of sound controlled drilling and fracking equipment, including quiet fleets that reduce the noise of the pumps and motors associated with hydraulic fracturing.
 - Noise modeling for each well site during all phases of operation, including pre-construction noise modeling that shall be conducted by a third party consultant hired by the County in all areas zoned Residential/Agricultural/Rural and Commercial. Results of modeling shall be submitted to the County and made publicly available.
 - In Residential/Agricultural/Rural and Commercially zoned areas, no well shall be drilled, re-drilled, or equipment operated in a manner so as to create noise which causes exterior noise levels that
 - Exceed the ambient noise level by more than (5) five decibels during daytime hours and more than three (3) decibels during nighttime hours.
 - Exceed the ambient noise level by more than ten (10) decibels over the daytime average ambient noise level during fracturing operations during daytime hours. No fracturing shall be allowed during nighttime hours except for flowback operations related to fracturing.
 - Exceed the ambient noise level by more than three (3) decibels during flowback operations during nighttime hours.
 - Creates pure tones where one-third octave band sound-pressure level in the band with the tone exceeds the arithmetic average of

the sound pressure levels of two contiguous one-third octave bands by five (5) dB for center frequencies of 500 Hertz and above, and by eight (8) dB for center frequencies less than or equal to 125 Hertz or

- Creates low-frequency outdoor noise levels that exceed dB levels:
 - 16Hz Octave band 65 dB
 - 31.5 Hz Octave band 65 dB
 - 64 Hz Octave band 65 dB
- The Operator shall establish and report to the LGD a continuous 72 hour pre-drilling ambient noise level prior to the issuance of a permit. The 72-hour time span shall include at least one 24-hour reading during a weekend. The Operator shall use the prior established ambient noise level for the installation of any new noise generation equipment unless the Operator can demonstrate that the increase in the ambient noise level is not associated with drilling and production activities located either on-site or off-site.
- All workover operations should be restricted to daytime hours only.
- The exterior noise level generated by drilling, redrilling, and other operations of all wells located within 500 feet of a Residential/Agricultural/Rural or Commercial zoned area shall be continuously monitored for compliance. The cost of monitoring shall be borne by the Operator.
- The County shall create a complaint line for the purposes of health and nuisance complaints. All noise complaints shall, within 24-hours of a noise complaint, necessitate communications with the operator and the LGD, under which noise sampling shall be conducted, and if the noise level is outside of county-required decibel levels for specific zoning uses, the operator shall address and immediately mitigate the issue. The Operator then will be charged with reporting on any and all mitigation measures to the County. When notice is given that the issue has been mitigated, noise sampling shall be conducted once more by a third-party testing entity (agreed to by the County) 24 hours later to ensure that the issue has truly been mitigated and addressed.
- **Vibration:** The new regulation fails to address vibration caused by oil and gas activities and development. Whereas, such activity has a significant impact to local residents, and can cause issues with building infrastructure such as residential plumbing and foundations, we seek that the county develop regulations regarding vibration when it comes to oil and gas activity. At the very least, we seek that with regard to vibration:
 - The County require instrumentation and reporting of all vibration within 500 feet for existing oil and gas wells and 2,000 feet for all new oil and

gas development from an abutting residential or commercial development that measures the intensity and seismic impact of all vibration. These readings should further be made publicly available.

- We ask that Larimer County restrict the intensity of all vibrations within 2,000 feet of residential and commercial areas, as well as within 2,000 feet of all Larimer County water sources.
 - We seek that all seismic events that measure above 1.0 on the Richter scale be immediately reported to the County and to the COGCC. If vibrations exceed 2.0 on the Richter scale, the County may stop operations immediately until the operator satisfies the County in taking actions to mitigate the work.
- **Odors:** Exposure to odors from oil and gas development is an initial sign of chemical exposure, and may have acute impacts to public health. The County draft regulations regarding odor allow for potential unmitigated exposure and risk public health. We offer the following additions:
 - The County shall create a public comment portal, that will also be filed with the COGCC, where the county will also file complaints.
 - The County shall notify the Operator no less than 24 hours after receiving an odor complaint.
 - County Health Department workers shall conduct an evening and morning odor inspection at 350 ft, 500 ft, 1,000 ft, and 2,000 ft from the oil and gas site. Further, the County will account for wind speed and direction and make further inspections based on air stream conditions.
 - For existing oil and gas sites, no emission of odorous gases or other odorous matter shall be permitted in quantities readily detectable in residential or commercially zoned areas.
 - Gibson D-822 is prohibited, in the comments section on the Form 2A, LGD shall request the disclosure of water based, low odor fluids.
 - All oil and gas sites are required to utilize filtration systems to minimize odors, however, use of odor-masking chemicals or fragrances should be prohibited.
- **Dust:** The dust suppression section 17.3.H is comprehensive, we only seek that dust suppression tactics (water only) be utilized within at least 1,000 feet of the high water mark of any body of water in 17.3.H.4.
- **Access:** Regarding Section 17.3.I.1, we seek the addition of a bullet (17.3.I.1.e), requiring that the Operator shall be required to clean up any mud or debris that reaches the road way, within 24 hours of identification (through complaint or other means), to the satisfaction of the County LGD.

- **Chemical Handling:** Chemicals used and stored at an oil and gas site pose a definitive risk to public health, safety, and the environment. The County has done a good job in requiring a chemical disclosure list. We recommend that the operator be required to:
 - Present the County with a list of chemicals to be used in the hydraulic fracturing process, in table format including: the name, Chemical Abstracts Service number, storage, containment, and disposal method for such chemicals to be used, which the County shall make available to the public.
 - We ask that chemicals used on site be removed from the site within (30) thirty days following completion of hydraulic fracturing.
- **Recycle, Reuse, and Disposal of Fluids:** The recycling, reuse, and disposal of fluids also poses a definitive risk to public health, safety, and the environment. We ask that the County:
 - Remove the clauses in Section 17.3.K.1 and Section 17.3.K.3 “unless technically infeasible.”
- **Water Bodies:** Water bodies are extremely susceptible to impacts from oil and gas operations. Impacts to a variety of water bodies pose serious risk to public health, safety, welfare, and the environment. We recommend that, in Section 17.3.L, in addition to the requirements already in the draft rules, operators be required to do the following:
 - Not cause adverse impacts to surface or ground water resources within Larimer County.
 - Provide a water quality plan to Larimer County that includes details such as the operator’s plans for water quality testing, prevention of illicit or inadvertent discharges, stormwater discharge management, containment of pollutants, and spill notification and response as required by relevant state and federal agencies.
 - Provide, upon their approval by COGCC, their plans concerning downhole construction details and installation practices, including casing and cementing design to protect surface water and aquifers from contamination.
- **Visual:** The visual aesthetic regarding residential and even commercially zoned areas play a significant role in property values, therefore, we seek the following amendments and additions to section 17.3.M:
 - In Section 17.3.M.1, we seek that the county recognize the importance of visual aesthetics to neighborhoods and residents in Larimer County, and include language in this provision that, “oil and gas operations shall not cause degradation to the scenic attributes and character of residentially zoned areas.
 - Lighting at oil and gas sites is known to be a significant nuisance to surrounding residents, and at times commercial areas; therefore, provision 17.3.M.3 regarding lighting should include the following requirements:

- Operator shall use best management practices to minimize light escaping the facility at all phases of oil and gas development. This includes during workover and lift operations:
 - All lighting must be downward-facing and fully shielding bulbs to prevent light emissions above a horizontal plane drawn from the bottom of the fixture.
 - Operator shall also take into account topography and location of downhill structures to avoid shining light into downhill properties.
 - Operator shall use a minimum 32-foot wall to reduce light escaping the facility at all phases.
 - We ask that the best industry standard fencing be required in Section 17.3.M.4 at all oil and gas sites and for all independent surface equipment for the protection of public safety and for the security of the site.
 - Current and proposed oil and gas development leaves a significant print on the landscape. We ask that Section 17.3.M.5 regarding Landscaping require that:
 - Any new or workover oil and gas development shall be conducted in a manner to prevent and minimize the removal of existing trees and vegetation.
 - Operations shall be sited away from natural features and environmental resources including distinctive rock and land formations, rivers, streams, and distinctive vegetative patterns.
 - Oil and gas shall be buffered from sensitive visual areas by providing landscaping along the perimeter of the site between surface equipment and sensitive visual or residential areas.
 - Under Section 17.3.M.6, Weed mitigation and management at all oil and gas facilities and equipment sites must be required until final reclamation and abandonment.
- **Well Plugging and Abandonment:** In addition to complying with the COGCC’s plugging and abandonment requirements, we suggest additional points Larimer County can adopt to better protect public health, safety, welfare, and the environment. Regarding section 17.3.N, we seek these additions:
 - Notice to the County LGD within 48 hours of both commencement and completion of such activity.
 - A requirement that an oil and gas operator notify the LGD of intent and operations regarding well plug and abandonment. Further, the County should notify residents living within one mile of plug and abandonment activities.

- Upon plug and abandonment operations, the LGD and operator shall conduct an assessment identifying all active and abandoned wells within one mile of the planned reclamation site and conduct an assessment following completion of the plug and abandonment for leaks at nearby wells.
- Operator shall conduct a soil assessment at various depths and distances upon plug and abandonment and report its findings to the county.
- Ongoing air quality monitoring shall be required at intermittent distances from plug and abandonment site during plugging and abandonment.
- A decommissioned oil and gas assessment is performed prior to any hydraulic fracturing, and at periods following hydraulic fracturing, of any site plugged, decommissioned, or removed from use, and dry and removed from use oil and gas wells within ¼ miles of the borehole of the proposed well, to include:
 - All abandoned wells within ¼ mile of the projected track of the borehole of a proposed well based on COGCC and other publicly available records.
 - A risk assessment of leaking gas or water or other fracking fluids to the surface or subsurface water resources, taking into account the plugging and cementing procedures described in any recompletion or plugged and abandoned report filed with the COGCC.
 - Notice to the County and COGCC of the findings from this risk assessment.
 - Permission from each surface owner with an abandoned well on their property to access the abandoned well to test the abandoned well. (Testing of a well would not be required if the operator does not receive permission from the relevant surface owner within 30 days. Operator must notify County of inability to access property prior to commencing hydraulic fracturing.)
 - Soil gas surveys at various distances and depths as suggested by the risk assessment surrounding each abandoned well prior to hydraulic fracturing.
 - Soil gas surveys at distances and depths as suggested by the risk assessment surrounding each abandoned well within 90 days after completion, and at least once a year after production has commenced.
 - Notification to the County and COGCC within 3 weeks of the results of these surveys.
 - In the event that contamination is detected in these surveys, not further operations may continue until the cause of the contamination has been determined and corrected, and the County has given its approval for operations to continue.

- Permanent, physical marking of the location of the abandoned well by setting a brass plaque inscribed with all information required by the COGCC into concrete at the location of the abandoned well.
- **Flowlines, Transfer Lines, and Gathering Lines:** Flowlines, transfer lines, and gathering lines represent a significant amount of infrastructure mixed in communities and environmental resources. We seek these additions to Section 17.3.S:
 - Clarify a setback, commensurate with blow out radiuses and blast radiuses for existing and new pipeline systems, using the existing scientific formula established by industry (GRI-00/0189).
 - Require thorough mapping of flowlines and gathering lines on a scale large enough for real estate owners to discern lots.
 - Develop protocol regarding approval of flowline and transfer line permits as a part of all oil and gas applications.
 - Develop a system under which the County planner and operator maintain a current and comprehensive mapping system and database.
 - Develop a series of setbacks and reverse setbacks from pipelines infrastructure commensurate with their diameter and pressure and the risks posed to public health, safety, and environmental resources.
 - Require regular leak detection inspections and pressure tests, as well as tests and inspections upon request.
 - Require that buried pipelines use tracer wire, so as to be sure of their location and shape.
 - Require that pipelines be buried by at least four feet of cover.

Section 17.4 -- Guidelines for Oil and Gas Development

Protection of public health, safety, welfare and the environment, as required by SB19-181, means that upon asserting local control, local governments should be clear about their standard of operating and performance regarding oil and gas development. We strongly recommend that the language in Section 17.4 be direct and explicit, avoiding ambiguity or subjectivity. We seek that the County adopt language, whereby, “the County requires” specific “guidelines” regarding current oil and gas development and proposals. Therefore, we ask that the County require:

- In Section 17.4.A.1 regarding air quality, require tankless production techniques as applicable, use zero emission dehydrators, use pressure suitable separator and vapor recovery units, use no-bleed continuous and intermittent pneumatic devices; the use of electric rigs and Tier 4 engines; use automated tank gauging, and prohibit flaring except during emergencies or upset conditions.

- We recommend that in Sections 17.4A.2 be moved to Section 17.3.G, and that the county review and adopt regulations similar to other jurisdictions such as Adams County or Gunnison County requiring best management practices and use of best technologies.

Section 17.5 -- Application Requirements and Definitions

Regarding Section 17.5, we ask that the county further define both the documentation it is requiring of operators applying for new oil and gas permits and flesh out section 17.10 applying definitions to terminology as most applicable to local governmental jurisdiction.

Conclusion

In closing, we ask Larimer County to make clear to current and potential oil and gas operators a standard of performance that prevents and, where impossible to prevent, mitigates adverse impacts to public health, safety, welfare and the environment. We also request that the County implement a transparent public process regarding current and proposed oil and gas operations across Larimer County.

To make clear that the priority of the County is the protection of public health, safety, welfare, the environment, and wildlife resources in Larimer County, LOGIC and the Larimer Alliance request the following of the government of Larimer County:

1. Implement a strong system of accountability that keeps the burden of oil and gas development and its impacts from costing Larimer County taxpayers.
2. Develop a clear series of land use code regarding the siting of oil and gas development that ensures that the public health, safety, welfare, and environmental resources of our county are not unduly jeopardized or at risk. This includes implementing a minimum 2,000 foot setback from all residential, high occupancy buildings, outdoor parks and rec, water bodies, and other environmentally sensitive areas. COGCC maps will be referenced for flowlines and gathering lines to be included in this setback.
3. Require standards of performance for operators that directly and definitively address air quality, water quality, odor, light, noise, and traffic. This includes 24/7 air quality monitoring such as the well-proven INSTAAR equipment in use in Boulder County.
4. Remove loophole language that promotes ambiguity or allows unnecessary risk to public health, safety, welfare, and the environment.
5. Assert by printed word and action the county's intent to protect public health, safety, welfare, and the environment. This includes a transparent and timely public process regarding oil and gas development in Larimer County.

6. And last, we point to our original request to place a hold on all oil and gas permitting decisions until the COGCC has completed its rule making and Larimer County has subsequently developed a consistent, comprehensive system for addressing oil and gas.

Thank you for your consideration of these comments. We welcome further dialogue with commissioners and Larimer County staff. We stand ready to answer questions you have about the regulatory recommendations contained herein. Please contact any of the undersigned parties with questions you may have regarding these comments.

Sincerely,

Sara Loflin

Executive Director, League of Oil and Gas Impacted Coloradans

303.819.6531, sloflin@coloradologic.org

October 30, 2019 Draft
Comments by MaryBodesky

Note: This will be a new Section in the Larimer County Land Use Code. This is a preliminary outline of draft oil and gas regulations and is not all inclusive.

To keep the Task Force Committee discussion on track, please focus comments to the intent and purpose of the standards and avoid refrain from making small edits.

17.0. – OIL AND GAS FACILITIES

17.1. – Intent and Purpose.

- A. **Intent and Purpose:** The Intent and purpose of this section is to establish and administer necessary and reasonable regulations for oil and gas operations, including but not limited to pre-production, production and reclamation, in drilling and production in a manner that protects and promotes the health, safety, and general welfare of the residents and environment of the County. To the extent practicable these regulations will require applications for oil and gas operations to demonstrate how adverse impacts will be mitigated to achieve a minimal negative impact on the environment, wildlife and residents of the County.
- B. **Authority:** Pursuant to the authority granted to the County in C.R.S. 29-20-104(1) the review of such applications may include, without limitation:
 1. Land Use,
 2. Location and siting of oil and gas facilities,
 3. Impacts to public facilities and services,
 4. Water quality and source, noise, vibration, odor, light, dust, air emissions and air quality, land disturbance, reclamation procedures, cultural resources, emergency preparedness, and coordination with first responders, security and traffic and transportation impacts,
 5. Financial securities, indemnification and insurance as appropriate to ensure compliance with the requirements of Larimer County, and
 6. All other nuisance-type effects of oil and gas development.

C. **Applicability:** These regulations shall be applicable to all oil and gas drilling and production activity commenced on any property in Larimer County, after the date of _____, regardless of what zoning district the property is situated in.

~~C.~~ Are exploration wells and/or other exploration activities going to be addressed? An exploration well carries many of the same risks and nuisance issues of a multiwell pad though at a lesser scale. Can we look at this? Perhaps administrative review would be appropriate for any exploration wells. We want to be looking out for sensitive water features, residents, cultural resources etc and would want to know the operator took these things into account.

~~D.~~ **Severability:** If any sections, clause, provision, or portion of these regulations should be found to be unconstitutional or otherwise invalid by a court of competent jurisdiction, the remainder of the regulations in the section shall not be affected thereby and is hereby declared to be necessary for the public health, safety and welfare.

17.2. – Required Process and Permits

I agree with Richard Alper who mentioned we should include a statement about if the state's regulations are more stringent, those would apply over the county and vice versa.

Commented [LMK1]: Matt I think the wording in this first paragraph may minimize the research and work that you and Frank have put into this so I would suggest deleting a few of the qualifiers

Commented [FNH2]: To maximize our time together, we'd like to focus on the broad issues at hand as the specific language can be addressed by staff at a later time.

Commented [LMK3]: Do we need a qualifier here minimal negative impact?

Commented [LMK4R3]:

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A. Required Process:

a. Oil and gas drilling and production activities in Larimer County shall require Special Review approval (Section 4.5). Should we state when the approval must be obtained, i.e. prior to submittal to Colorado Oil and Gas Commission (COGCC)???

⊕: I still agree with Special review for all applications. We have not established enough detailed criteria at present to go through administrative review and judgement is needed for all applications. Prior or concurrent review makes most sense to me. I think county applications will have more potential for modifications than the state would so it does not make sense to me to wait until the state has completed their processing.

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Commented [LMK5]: Either prior to or concurrently?

Commented [FNH6]: It may be good to remind the task force that we can always modify this if needed.

Commented [LKE7]: I think maybe after if our rules are going to supplement the state rules.

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B. Supplemental Review Criteria for Oil and Gas Facilities:

a. In addition to the Special Review criteria found in Section 4.5.3 of this Code, each oil and gas facility shall be approved only if it meets the following criteria:

- i. It complies all the requirements of this Section 17.
- ii. Reasonable and necessary mitigation steps have been taken to protect the public health, safety, and welfare and environment
- iii. PLEASE include specific requirements for neighborhood meeting(s) and notification radius to address public concern and interest(I recommend at least 2500' and all mineral rights owners in spacing unit) with a timeline that requires notification and meeting prior to COGCC comment period opening or at least closing and at least 60 days prior to planning commission and BOCC hearings. The notification issue and delays in public awareness is a major concern and if not properly structured/implemented will result in high administrative needs and costs put back on the county. Along with all this, I think it will be a wise investment to have a user-friendly transparent county oil and gas webpage and including notice of these meetings on the webpage.
- iv. Can we please specify "The county will process each site or 2A application separately?" Specifically, comprehensive drilling plans (or similar) to review multiple pads for a single operator at one time are my concern. These do not allow for adequate time dedicated to evaluating each individual site for the county and do not allow adequate time for public involvement and input. If we can't restrict this for whatever reason, please put some added specifications for any comprehensive drilling plan applications- i.e. Processing time may be extended by 3-4 months for applicants including more than 1 site in their applications or submitting applications concurrently for individual sites. Limit of 3?? sites at a time. Comprehensive drilling plans, in my opinion, only serve the operator and would not benefit the county or public in a meaningful way. I don't imagine comprehensive drilling plans would be common place in Larimer but I'd like to see this loophole addressed.

Aurora recently dealt with something of this nature:
<https://sentinelcolorado.com/news/sentinel-biz/aurora-lawmakers-ok-pact-for-300-plus-oil-and-gas-wells-on-6-4-vote/>

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C. Permits required:

a. Access permits

- b. Building permits as required for structures
- c. Development Construction permit including proposed flowlines, gathering lines?
- d. All federal, state and local permits for oil and gas operations

17.3. – Standards Required for all Oil and Gas Facilities

A. General:

- ~~1.~~ All applicants are responsible for compliance with applicable federal, state and local laws and regulations for the operation of Oil & Gas facilities.
- 1. Maybe add: Including any future changes to state and federal laws that may arise after these local regulations are adopted
- 2. Oil and Gas facilities should be located to minimize impacts on agricultural operations. This is bizarre to me. I agree with minimizing impacts on agricultural operations/time of year issues, but there are many other things to be looked at as mentioned in the intent and purpose section. If we mention this, do we need to mention other things like wildlife habitat or migrations, residents, and school zones, etc? Maybe this doesn't belong in the "General" category but could be mentioned elsewhere.
- ~~2-3.~~ Can we please set a time limit on operations? For some of these pads operators will complete a couple wells and then come back multiple times for additional well completions significantly extending the time of high impact activities. 18-24 months from beginning of construction to have wells into production phase? Time extension requests will need to go through another review? Please address this need for some structure and time constraints and make it a required portion of application to have a proposed timeline for completion of all wells on site(I know COGCC asks proposed date of commencement, but no other details are listed)

Commented [FNH8]: We probably need to somewhere define what these are.

B. Air Quality:

- 1. The use? shall comply with existing federal and state laws and regulations applicable to its operations and emission sources as well as any future laws and regulations adopted by the Colorado Air Quality Control Commission (AQCC).
 - 2. Air contaminant emission sources shall apply for and comply with the permit and control provisions prescribed by the Colorado APCD C.R.S. tit.25, Art. 7 (C.R.S. § 25- 7-101 et seq.) and the rules and regulations promulgated by the AQCC all applicable emission sources.
- The exemption of a federal permit for the first 90 days is an issue. Continuous air monitoring can address and track this data and I would ask the county consider it 's options to require this. It can be complicated, but given our poor air quality here, I think it warrants an up-to-date air monitoring and data collection system. Maybe this isn't in regulations but the cost to the county for implementing such a system is incorporated into application fees or a separate "air impact fee"
- ~~2.~~
 - 3. Environmental Protection Agency (EPA) Reduced Emission Completions shall be used for all completions and well workovers following hydraulic fracturing, unless the application demonstrates that it is economically infeasible or impractical to utilize such a system. I agree this may not be "economically feasible or practical" for all applicants. If we can't eliminate this, can we include a statement with the items we leave with this disclaimer "economically infeasible or impractical" under air quality that states applicant

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should be prepared with alternative emission reduction plan they are able to implement if unable to comply with any of these specific items. (This gives some leeway but also puts a responsibility and expectation on the applicant that says this is important and you need to do something. Even if it's planting trees, at least require some effort here)

- 4. Closed loop, pitless drilling, completion systems without permanent on-site storage tanks must be utilized for containment and/or recycling of all drilling, completion, and flowback fluids, unless the application demonstrates that it is economically infeasible or impractical to utilize such a system. All emissions shall be routed to and controlled by a flare or combustor operated with at least 98% destruction removal efficiency.

Commented [LMK9]: Same as above

I mentioned this during our meeting, but please look at this. I think this needs to be a requirement. Uses less water and drilling fluids, more environmentally friendly and likely is cheaper for the operator. And even if it costs a bit more upfront, we need to require some of these BMPs if the point of county regs is to enhance state regs.

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<https://www.ogj.com/home/article/17234439/technology-closed-loop-drilling-systems-can-eliminate-reserve-pit-costs>

Field Code Changed

<https://aerion.com/closed-loop-waste-management-systems-reduce-well-costs/>

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https://earthworks.org/issues/alternatives_to_pits/
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- 5. Oil and Gas facilities shall be equipped with electric-powered engines for motors, compressors, drilling and production equipment, and pumping systems, unless it is demonstrated by the application materials the utilization of such equipment is not economically feasible or practical. Please require grid mapping for those that say it is not practical. Please define a distance to grid that is deemed practical so there is a standard here

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- 6. During construction and exploration, the applicant shall demonstrate that the site, including traffic and construction equipment, complies with all AQCC standards. How will this be demonstrated? Require applicant to meet with county prior to or during these phases? County inspection paid by who?

- 7. Oil and gas operators shall respond to air quality action day advisories posted by the CDPHE for the front range area by implementing air reduction measures, which should include:

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- a. Minimizing vehicle traffic and engine idling;
- b. Reduced truck and worker traffic;
- c. Delay vehicle refueling;
- d. Suspend or delay use of fossil fuel powered ancillary equipment;
- e. Postpone construction or maintenance activities; and
- f. Postpone will maintenance and liquid unloading activities that would result in emission to the atmosphere.

- 8. I would like to add no flaring or venting except in emergency situations(harmful to air and wasting of resources/royalties to mineral owners), and all emergency venting or flaring must be reported within 12? Hours to the county along with a plan to remedy the situation

All emergency venting and flaring will be shared on the county website within 24 hours of occurrence.

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9. Require use of no/low bleed pneumatic devices and have a plan/timeline for required replacement of devices. (I know this is mentioned as a BMP further down)

f. https://www.epa.gov/sites/production/files/2017-08/documents/pneumatic_controllers_farm_2006.pdf

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C. Leak Detection and Repair:

1. Oil and gas facilities shall at a minimum conduct semi-annual leak detection and repair (LDAR) inspections using modern leak detection technologies and equipment. One of the Semi-annual LDAR inspections shall include a five-day notice to the County Local Government Designee (LGD) and County Health Department inviting them to observe, at their discretion, the inspection. Please have more county oversight and involvement in this. Ideally more frequent 3rd party monitoring contracted by the county, paid for by the operator(or account for and include this cost in application fee somehow). Aerial infrared monitoring can be very cost effective to cover a large number of operations. Can we please look into this and what the cost estimate would be on a per well basis for at least quarterly monitoring? Perhaps more frequent monitoring for the 1st two years of operation with the ability to go to the minimum listed if operator has no violations during that time.
2. Verified leaks to an oil and gas facility shall be reported to the County LGD and County Health Department within 24 -hours of the discovered leak. 12 hours
3. All verified leaks shall be repaired within 72 hours, unless technically or operationally infeasible. 24 hours, unless technically.... And operator must present repair plans and ongoing monitoring plans to the county and local emergency response department.
4. Equipment leaks that pose or may pose? an imminent hazard to persons, property, wildlife or the environment shall be shut down and not allowed to operate until the operator has provided evidence that the leak has been repaired. Again, in consultation with local emergency response authorities

Commented [FNH10]: I think this is fine, a little more than the state.

Commented [LS11R10]: I agree with Frank...not sure construction and traffic flows should be under AQCC? We should be requiring particulate emission (dust) control, and all kinds of odor control to relate with the CDPHE health study of the early stages of development in order to get a producing well.

Commented [LS12R10]: AQCC will be reviewing rulemaking in Dec to require O&G have all air permits in place prior to construction and development.

Commented [LMK13]: I wonder if there is a way to say LDAR or better technology so if something else becomes better we do not have to change this section?

Commented [FNH14]: Do they have to send us a report or something? What if they fail to do the inspection?

Commented [LS15R14]: For reports, we could include something like "This information will be collectively reported on a monthly basis in the same format that Operator uses for reporting to the Air Pollution Control Division under Regulation 7."
-Could also state "The Operator may satisfy this reporting obligation in whole by submitting its AQCC Regulations No. 7 annual (or as often as required by current and future regulations) reports for the prior calendar year to the County and LCDHE, and supplementing them as needed to meet these reporting requirements for covered facilities within the County."

Commented [LS16R14]: Could be 1a.

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Commented [LMK17]: Not sure what this means?

D. Spills and Releases:

1. Any spill or release at an oil and gas facility, including those reportable to the COGCC, shall be immediately reported, no later than 24 hours I support 8-12 hours as was mentioned at the task force meeting-after discovery of the event, to the following local emergency response authorities in Larimer County:
 - a. Larimer County Sheriff
 - b. Larimer County Department of Health and Environment
 - c. Larimer County Local emergency Planning Committee
 - d. Larimer County Oil and Gas LGD
 - e. Local Municipal Police Department if within one mile of a city or town
 - f. Local Fire Department
2. All spills or releases shall be cleaned up to the satisfaction of the local emergency response authorities, listed in item 1 above. Remediation of spills or releases reportable to the COGCC may be deferred to the COGCC and CDPHE? I think this is something the county has authority over with SB181. I'd prefer the county remain actively involved regardless even if we utilize state remediation standards.
- 2- In addition, all spills and ongoing remediation details will be shared on the county website within 24?hours. I think transparency of incidences and accountability

Commented [LMK18]: 1a?

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creates further motivation to prevent spills in the first place.

E. Well Liquids Unloading:

1. Best management practices, including artificial lift, automated plunger lifts and at least 90% emissions when utilizing combustion to control venting shall be employed at all facilities.
2. Approved manual unloading shall require on-site supervision of the unloading process. What is this level of on-site supervision? Do they just need to be on site at the time or do they need to actually observe all aspects of this operation? Is it just another worker supervising or a person of authority, like a certified supervisor? I think this should be specified and if appropriate, require someone with training specific to this area and indicate how the supervision should occur and perhaps any specifics that are concerning about well liquids unloading- i.e. to minimize spills and/or to ensure worker safety and safe handling of liquids.

F. Noise:

1. A three-day (one day being a weekend day) baseline noise analysis from all receptors within 350 feet of the proposed use, or the property line, whichever is closest to the proposed oil and gas facility, shall be provided.
2. Predicted decibel levels shall be provided for various phases of development, as measured 350 feet from the site of operation/noise source (per COGCC) or at the property line of the adjacent land use, whichever is greatest. Can we specify including noise from compressors? These can be quite loud. The type of land use of the surrounding area shall be determined by the County taking into consideration any applicable zoning of other local land use designation.
3. Proposed mitigation measures demonstrating that the oil and gas operations at any well site, production facility, or gas facility shall comply with the following maximum permissible noise levels appropriate for the zoning designation by the County:
4. Decibel levels shall meet the identified level for the appropriate activity and adjacent land use. Decibels shall be measured at 350 feet from the site of operation/noise source (per COGCC) or at the property line of the adjacent land use, whichever is greatest. The type of land use of the surrounding area shall be determined by the County taking into consideration any applicable zoning or other local land use designation.
5. Oil and gas operations at any well site, production facility, or gas facility shall comply with the following maximum permissible noise levels appropriate for the zoning designation by the County:

ZONE	7:00 am to next 7:00 pm	7:00 pm to next 7:00 am
Residential/Agricultural/Rural	55 db(A)	50 db(A)
Commercial	60 db(A)	55 db(A)
Light Industrial	70 db(A)	65 db(A)
Industrial	80 db(A)	75 db(A)

In the hours between 7:00 a.m. and the next 7:00 p.m., the noise levels permitted above may be increased by ten db(A) for a period of not to exceed fifteen minutes in any one-hour period.

Commented [LMK19]: ?

Commented [LS20]: This is an application requirement, not a Standard for Development? Maybe for this section, use:

1. Decibel levels shall meet the identified level for the appropriate activity and adjacent land use. Decibels shall be measured at 350 feet from the site of operation/noise source (per COGCC) or at the property line of the adjacent land use, whichever is greatest. The type of land use of the surrounding area shall be determined by the County taking into consideration any applicable zoning or other local land use designation.

2. Oil and gas operations at any well site, production facility, or gas facility shall comply with the following maximum permissible noise levels appropriate for the zoning designation by the County: and then keep the decibel chart here?

Relocate items 1-3 to the section relating to the application requirements?

Construction projects (pipeline or facility construction/installation) shall be subject to the maximum permissible noise levels specified for industrial zones for the period within which construction is to be completed pursuant to any applicable construction permit issued by proper authority or, if no time limitation is imposed, for a reasonable period of time for completion of project.

I know noise complaints occur with COGCC even at allowed decibel levels. This is not usually just a constant noise, the intermittent nature of the noise with drilling, hydraulic fracturing and associated truck traffic can be very disturbing to residents trying to sleep and wildlife. Couple that with odors, light pollution and vibrations that come with these operations. How are we considering or addressing these cumulative impacts? Consider adding "hours of operation may be restricted based on surrounding land uses and potential impacts to residents and wildlife" or further specify to say if occupied buildings within 1500? Feet, school zone, etc or sensitive wildlife habitat within 1000? feet hours of operation may be restricted.

Consider vibrational impacts as a separate section. I'm not sure if the county has vibrational standards in code, I didn't see anything, but this is a separate issue with O&G operations that is not always adequately addressed with state minimum setbacks

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G. Odors:

1. Oil and gas operations shall be in compliance with the Department of Public Health and Environment, Air Quality Control Commission, Regulation No. 2 Odor Emission, 5 C.C.R. 1001-4, Regulation No. 3 (5 C.C.R. 1001-5), and Regulation No. 7 Section XVII.B.1 (a-c) and Section XII.
2. Operations shall prevent odors from oil and gas facilities from affecting the health and welfare of the public during development activities including drilling, fracking, and flowback to the extent reasonably possible.
3. A system shall be established for immediate response to odor complaints that includes options for ceasing operations, notification of affected residents, and temporary relocation of residents until the source of the odor is identified and resolved.
4. We encourage the Operator to communicate the schedule/timing of well completions activities to residents I agree with this first part. However, I don't think it's unreasonable to require communication and not just encourage. It's minor but could go a long way with public and alleviate inquiry burden on county staff. I'd like to see that information also readily available on county website, which could allow for voluntary shutting of windows and air intakes or temporary relocation. This last part concerns me. If it's that bad people can't have their windows open or would need to relocate, that is too much of an imposition and does not fit with the application being approved under the intent and purpose of "minimal negative impact" or under the review criteria for special review applications. Well drilling and completion timeline can be highly variable and if not all wells are drilled and they come back to do more later, operations can extend intermittently for years. Perhaps you eliminate this last part of the statement, but require the communication of schedule. Then each resident could use that information however they see fit but please specify all changes to schedule must also be communicated with county and residents within so many feet as the operator becomes aware of these changes.

H. Dust:

1. Best management practices for the mitigation of dust associated with on-site and traffic activities shall be employed at the facility.
2. Produced water and other process fluids shall not be used for dust suppression.
3. Safety Data Sheets (SDS) shall be provided with the application for any proposed chemical based dust suppressants.
4. Water only, unless otherwise approved by the County Health and Engineering Department, will be used for dust suppression activities within 300 feet of the ordinary high-water mark of any body of water.

Commented [LMK21]: Potable?

I. Access:

1. Private access drives shall conform to the Local Low Volume cross section found in the Larimer County Rural Area Road Standards, and shall include the following:
 - a. The first 50 feet of access drive from the edge of pavement of the adjacent road will be paved and the remaining portions of the access drive shall be composed of a minimum of 6 inches of compacted Class 5 road base. Andy Peterson made a good point with inability to pave in winter months and listing appropriate alternatives is reasonable. Please put some time of year or weather restriction disclaimer with the alternatives.
 - b. The access drive entrance shall include returns with a 30-foot radius.
 - c. The access drive shall be treated with Magnesium Chloride during the entire construction phase, and any time there after when the level of use exceeds 200 vehicle trips per day. I appreciated Andy Peterson's input on this. However, water conservation is also a concern and if water is insufficient or would need to be used in great quantity and MgCl can be used as an environmentally safe option, I support this as written.
 - d. A mud and debris tracking pad shall be located at the end of the paved portion of the access drive.

Commented [LMK22]: Seems to be missing something

Commented [LKE23]: Caps?

Commented [FNH24]: Should we include some language about making sure that fire apparatus can get in, or complying with the standards of the local fire district?

J. Chemical Handling:

1. Prior to any hydraulic fracturing activity, the operator shall provide the County with a copy on the chemical disclosure registry form provided to the COGCC pursuant to the COGCC's "Hydraulic Fracturing Chemical Disclosure".
2. Drilling and completion chemicals shall be removed from the site within sixty days of the drilling completion. I agree a shorter time period like 30 days is appropriate. It just increases risk of spills and contamination to have them onsite longer than necessary.
3. The following toxic, including orally toxic chemicals shall not be added ~~utilized~~ in the hydraulic fracturing fluid:
 - a. Benzene
 - b. Lead
 - c. Mercury
 - d. Arsenic
 - e. Cadmium
 - f. Chromium
 - g. Ethylbenzene
 - h. Xylene
 - i. 1,3,5-trimethylbenzene
 - j. 1,4-dioxane

Commented [LMK25]: Would thirty be better?

Commented [LKE26]: Is this a defined term? Sounds odd

- k. 1-butanol
- l. 2-butoxyethanol
- m. N,N-dimethylformamide
- n. 2-ethylhexanol
- o. 2-mercaptoethanol
- p. Benzene, 1, 1'-oxybis-, tetrapropylene derivatives, sulfonated, sodium salts
- q. Butyl glycidyl ether
- r. Polysorbate 80
- s. Quaternary ammonium compounds, dicoco alkyldimethyl, chlorides
- t. Bis hexamethylene triamine penta methylene phosphonic acid
- u. Diethylenetriamine penta
- v. FD&C blue no 1.
- w. Tetrakis (triethanolaminato) zirconium (IV) (TTZ)

Sean Hackett's, CDPHE, recommendations in response to request for recompletion of a pad in Larimer County, Prospect Energy MSSU #30-8 references this chemical list, which is from CU's AirWaterGas water quality team. I'm not completely sure of the background of this list, but I support it as research-based. I would also be interested to see if there is data on chemical combinations that should be avoided. Thomas Borch may have research on this or know if some exists. I think this is equally as important to look into as individual chemicals. I would also support reporting of all spills of these chemicals and disclosure of all chemicals, including proprietary, if a spill does occur. (I'm not certain this is required with current state regs)

w-

Commented [FNH27]: I don't know whether the industry will say anything about whether any of these are necessary, I am just not sure where this list came from, but we may want to make sure that the industry is aware and isn't going to say that they have to be able to use some of these or they can't develop at all in the county.

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K. Recycle, Reuse and Disposal of Fluids:

1. Drilling, completion flowback and produced fluids shall be recycled, unless technically infeasible.
2. Exploration and production waste may be temporarily stored, not to exceed two weeks, in tanks while awaiting transport to licensed disposal or recycling sites.
3. Produced water shall be transported by pipeline unless economically or technically infeasible.
4. I do have concerns about irrigation with any water previously used or produced. I'd ask the county look into some standards in regards to irrigation and release to surface water, even if it's treated. I know the state has rules with this, but because it impacts surface we should have authority. If we aren't allowing for dust suppression, why would we allow for irrigation? That doesn't make sense to me.
3. Research showing negative impacts when produced water used to irrigate crops
<https://pubs.acs.org/doi/10.1021/acs.estlett.9b00539>

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L. Water Bodies:

1. The applicant shall provide documentation to the County ~~documentation~~, as required by the COGCC, demonstrating how the COGCC water quality protection standards are being complied with.

- 2. The Larimer County Health Department shall be provided with all water source tests that are typically submitted to the COGCC or CDPHE.
- 3. Proposed oil and gas operations proposed with in a flood-plain shall require review and approval of the Floodplain Permit prior to the Board of County Commissioners hearing for an oil and gas special review application.
- 4. Produced water disposal via wastewater injection wells shall not be allowed. I agree with this within Larimer County, and within 1/2 mile of our boundary
- 5. Disposal of drill cuttings. I support county regulations for safe, out of county disposal of these, as well, though I'm not sure it should go in this section.
- 6. I support increased protections and testing standards beyond state regs for ground and surface water sources. Thomas Borch mentioned in one of our meetings how slowly ground water travels and inadequacies of current testing standards due to this. Given the importance of the Big Thompson and Poudre river, I think we need to look at enhanced water monitoring designed and monitored by someone with expertise outside of the industry
- 7. I support preservation of our water resources and would ask the county prohibit selling of county owned water rights for use in fracking.

Commented [LMK28]: Do we need to qualify where – unincorporated area, at the well site, anywhere in the county?

Commented [FNH29]: Within Larimer County or anywhere. If they are drilling here but hauling the water to weld county to an injection well, why would we care?

M. Visual:

- 1. The application shall demonstrate compliance with the visual and aesthetic rules of COGCC and the Larimer County regulations for landscaping, fencing and lighting for all phase of the development of the site.
- 2. All oil and gas facilities shall be painted with colors that are matched to or slightly darker than the surrounding landscape, and shall utilized paint with uniform, noncontracting, nonreflective color tones based upon the Munsell Soil Color Coding System.
- 3. The location of all outdoor lighting shall be designed to minimize off-site light spillage and glare.
- 4. Fencing shall for all the phases of an Oil and Gas facility development to ensure the security and visual aesthetics of the use.
- 5. Landscaping for screening and visual quality from off-site shall be required within 6 months from the time of well completion.
- 6. O&G Oil and Gas facility applications, including access roads serving the facility, shall demonstrate how compliance with weed control requirements of the County Weed District and Forestry Services Department will be met.
- 7. I don't see sound walls mentioned. Is this part of "fencing" in #4? From a noise, dust, light pollution, safety and visual standpoint, is this something we should require? I spoke with a resident who had horses impacted by lack of sound walls on 2 sides at a site in Larimer County. So COGCC standards may not be enough. I support requiring sound walls on all sides.

Commented [LMK30]: At some point reach consistency in O & G or Oil and Gas facility

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N. Well Plugging and Abandonment:

- 1. Well abandonment and reclamation shall comply with the COGCC rules and shall include the following:
 - a. Removal of all equipment from the well site,

- b. Restoration of the site surface to the conditions of the site reclamation plan,
- c. Notice to the County LGD of the commencement and completion of such activity, and
- d. Coordinates for the location of the decommissioned well(s), and any associated gathering or flow lines, shall be provided with the notice of the completion of well abandonment.

Commented [LMK31]: Any inspection requirements after closure?

O. Flammable Material:

1. The location of flammable materials on site shall conform to all COGCC safety standards and local fire codes.
2. A minimum 25-foot buffer, free of weeds and dried grasses, shall be required around anything flammable.

P. Waste Disposal:

1. Oil and gas facilities shall remain free of debris and excess materials during all phases of operation.
2. Burning of debris, trash or other flammable material is not allowed.

Q. Removal of Equipment:

1. There shall be no permanent storage of equipment on the site of an oil and gas facility.
2. When not in use, or no longer needed for on-site operations all equipment not being used on the site shall be removed.

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R. Maintenance of Machinery:

1. There shall be no maintenance of field equipment involving hazardous material within 300 feet of a water body.
2. Any fueling on-site shall occur over an impervious surface and shall not occur during storm events.

S. Flow Lines, Transfer Lines and Gathering Lines:

1. All off-site lines transporting process materials, production wastes, product and any other items used or generated by the facility shall be located to avoid existing or proposed residential, commercial, and industrial buildings; places of assembly, surface waterbodies and designated open spaces.
2. The location of pipelines shall be evaluated on a case by case basis, with determine locational factor being the size and type of pipeline being proposed.
- 2.3. Coordinates of all flow lines, gathering lines, and transfer lines shall be provided.

T. Temporary Water Lines:

1. Temporary waterlines shall be used, unless technically infeasible.
2. Temporary waterlines shall be buried at all existing driveway and road crossing, or utilize existing culverts, if available.

U. Financial Assurance:

1. The operator/Applicant must demonstrate the financial capability to reclaim all disturbed areas during each phase of the site development and following termination of the oil and gas operation on the site. This is a concern for the life of a well which could be 30-40

Commented [FNH32]: Who is going to check this, or decide how much, or that it is still there when we need it?

years, do they just have to demonstrate this at the beginning of operations? This is why bonding is so important.

2. The ~~operator~~Applicant must, for the life of the use, carry environmental liability insurance for ~~gradual~~all potential pollution events.
- 2-3. Adequate per well bonding to cover all costs of remediation. State standards do not adequately cover costs. Or consider an “escrow fund” to cover anticipated costs, where the operator has to put in so much per year for the first 5? years, with a certain amount held until plugging and abandonment occurs. Somehow the short fall needs to be accounted for due to the volatility of this industry and not putting that potential cost burden on the tax payers.

17.4.- Guidelines for Oil and Gas Developments

A. Applications for oil and gas facilities are strongly encouraged to incorporate the following guidelines (best management practices). Where reasonably necessary, the County may require some or all of the following guidelines depending on the location and characteristics of the proposed facility.

1. To mitigate the adverse impacts of air emissions generated by oil and gas facilities, ~~operator~~operatorApplicants are encouraged to:
 - a. use tankless production techniques,
 - b. use zero emission dehydrators,
 - c. use pressure-suitable separator and vapor recovery units,
 - d. use no-bleed continuous and intermittent pneumatic devices (please require this, it's feasible), or alternatives such as replacing natural gas with electric or instrument air, or by routing discharged emissions to closed loop-systems of processes,
 - e. use automated tank gauging, and
 - f. eliminate all flaring except during emergencies or upset conditions, which shall be reported to the County (see std). See my comments under 17.3B 8
2. To mitigate the adverse impacts of odor generated by oil and gas facilities, ~~operator~~operatorApplicants are encouraged to:
 - a. Add odorants that are not a masking agent, to adding chillers to the mud systems,
 - b. Using filtration systems or additives to minimize odors from drilling and fracturing fluids except that the ~~operator~~Applicant shall not mask odors by using masking fragrances,
 - c. Enclose shale shaker to contain fumes from exposed mud where safe and feasible,
 - d. Wipe down drill pipe each time drilling operation “trips” out of hole,
 - e. Increasing additive concentration during peak hours provided additive does not create a separate odor. Additive must be used per manufacturer’s recommended level,
 - f. Use minimum low odor Category III drilling fluid. This could include non-~~diesel based~~diesel-based drilling muds including drilling muds that are low odor and do not contain benzene, toluene, ethylbenzene or xylene (BTEX), I would like this to be required. It’s not unreasonable to say no hydrocarbon based drilling fluids, or
 - g. Apply ‘green frac’ methods, utilizing only sand and water as fracking materials or other ‘green frac’ materials agreed upon between the community and industry, and-

Commented [LMK33]: ?

Commented [LMK34]: Is this possible? Last I looked (a long time ago) this was cost prohibitive and not the best technology?

- h. The ~~Operator~~Applicant is encouraged to communicate the schedule/timing of well completions activities to residents, which could allow for voluntary shutting of windows and air intakes or temporary relocation. Please require this as mentioned under 17.2 B
3. To mitigate the impacts of multiple pipeline corridors, ~~operators~~operator~~Applicants~~ are encouraged to consolidate and share pipeline easements and corridors, unless it is technically infeasible.

17.5. - Application Requirements

- A. In addition to the submittal requirements necessary to demonstrate compliance with the applicable Sections of the Land Use Code, applications for oil and gas facilities shall also include, when relevant, the following:
- a. A Site Inventory Map.
 - b. A Safety Management Plan.
 - c. A Containment and Spill Prevention Plan.
 - d. A Noise Mitigation Plan.
 - e. An Emergency Preparedness Plan.
 - f. An Odor Mitigation Plan.
 - g. A Hazardous Material Plan.
 - h. A Dust Mitigation Plan.
 - i. A Site Security Plan.
 - j. A Production Water Supply Plan.
 - k. A Containment and Spill Plan.
 - l. A Waste Management Plan.
 - m. A Reclamation Plan.
 - n. A Surface Use Agreement.
 - o. A statement verifying the legal right to extract the mineral resources.
- ~~o.p.~~ Water and product transport plan

17.6. - Appeals

- A. Any decision made pursuant to this section may be appealed pursuant to Section 22 of the Larimer County Code.

17.7. - Enforcement and Inspection

- A. Applicants shall demonstrate compliance with the Larimer County Land Use Code, and with this Section. Failure to maintain compliance with the County approval of an oil and gas facility may result in the revocation of the approval pursuant to the procedures in Section 12 of the Land Use Code. The County retains the right to seek whatever remedy or redress is legally allowable.
- B. The County reserves the right to inspect the property for ~~compliance.~~

Commented [LMK35]: ?

Commented [LMK36]: Should there be some notice requirement?

17.8. - Fees and Security for Reclamation

- A. The following fees are applicable to oil and gas facilities.
- a. TBD
- B. An impact fee will be assessed as follows:
- a. Capital Transportation Impact Fees. Sliding scale based on number of wells and use of pipeline??

C. Each application shall include financial security for the purpose of ensuring maintenance and reclamation may be accomplished if the applicant is unable or unwilling to perform its obligations. Adequate per well bonding as mentioned under 17.3 U

Commented [LMK37]: In addition to any COGCC?

17.9. - Termination of Use or Modification.

- A. No modification to an approved oil and gas facility shall be made without obtaining appropriate land use approval from the county.
- B. Upon termination of use, the oil and gas facility must be reclaimed pursuant to the reclamation plan provided.

17.10. - Definitions.

A. Unless otherwise listed herein, the definitions found within the Colorado Revised Statutes and COGCC regulations shall control.

17.11 Setbacks. Required minimum setbacks for operator (These really should be a priority and need to be addressed, too much ambiguity without these)

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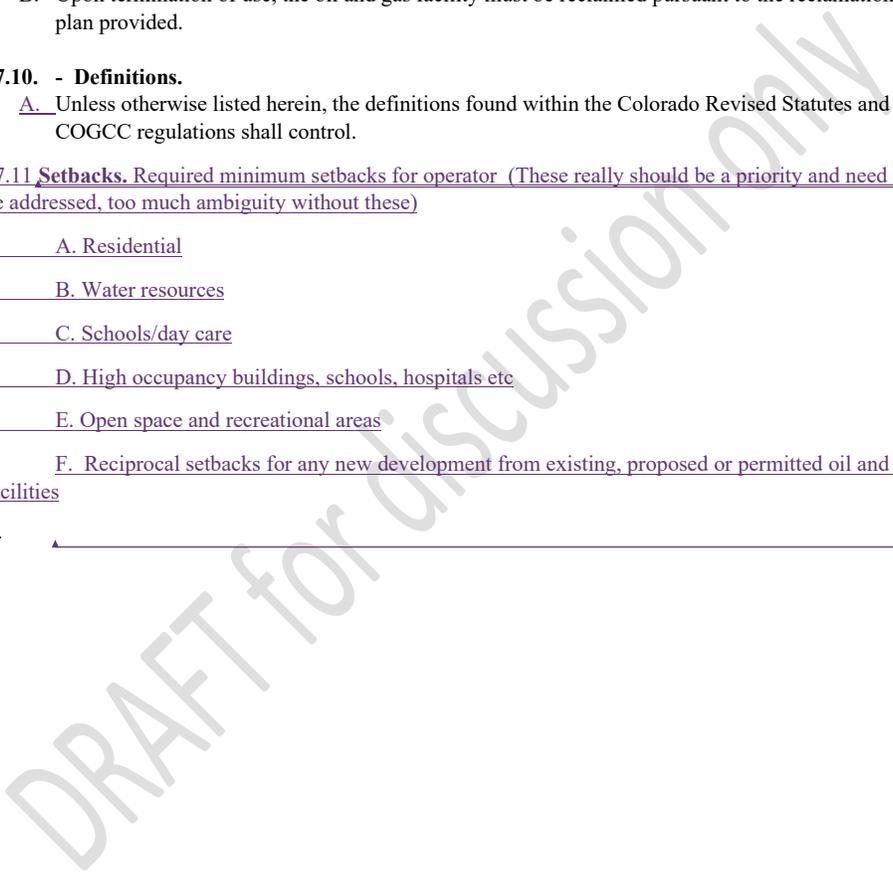
- A. Residential
- B. Water resources
- C. Schools/day care
- D. High occupancy buildings, schools, hospitals etc
- E. Open space and recreational areas
- F. Reciprocal setbacks for any new development from existing, proposed or permitted oil and gas facilities

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October 30, 2019 Draft
Comments by Survey Monkey

#1

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Thursday, November 14, 2019 10:22:29 AM
Last Modified: Thursday, November 14, 2019 11:35:43 AM
Time Spent: 01:13:13
IP Address: 73.243.83.218

Page 1

Q1 Are you associated with a group or organization that will be providing comments to this questionnaire? **No**

Q2 Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose?

No

Q3 Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits?

Should there be a new zoning in Larimer County for oil/gas wells and well production sites? Future zoning could change, but a record of this zoning must be maintained so that future purchasers would know the history of this land.

Q4 Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities.

General	Generally Like(Needs Clarification or Improvement)
Air Quality	Generally Like(Needs Clarification or Improvement)
Leak Detection and Repair	Generally Like(Needs Clarification or Improvement)
Spills and Releases	Dislike
Well Liquids Unloading	Dislike
Noise	Generally Like(Needs Clarification or Improvement)
Odors	Dislike
Dust	Generally Like(Needs Clarification or Improvement)
Access	Dislike
Chemical Handling	Generally Like(Needs Clarification or Improvement)
Recycle, Reuse and Disposal of Fluids	Generally Like(Needs Clarification or Improvement)
Water Bodies	Dislike
Visual	Generally Like(Needs Clarification or Improvement)
Well Plugging and Abandonment	Dislike
Flammable Material	Like Where it is Headed(No Substantive Change)
Waste Disposal	Generally Like(Needs Clarification or Improvement)
Removal of Equipment	Like Where it is Headed(No Substantive Change)
Maintenance of machinery	Generally Like(Needs Clarification or Improvement)
Flow Lines, Transfer Lines and Gathering Lines	Dislike
Temporary Water lines	Generally Like(Needs Clarification or Improvement)
Financial Assurance	Dislike

Q5 Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities?

Not only the applicant, but all successors or assignees must follow these same standards.

Air quality standards must be met starting at day 1 and continuing for the life of the site.

Not just the surface must be restored, but underground to an appropriate distance, perhaps 20 feet.

Even if cleanup is deferred the applicant is still responsible and must respond immediately to initiate cleanup.

Even if technically infeasible to fix, the leak must be stopped immediately.

Technically or operationally infeasible is an ill defined term and means different levels of competence to different operators. Depending upon where this term is used, subsequent action halting the detriment to health or the environment must be defined when the operator makes that claim.

All emissions during well unloading must be captured.

Construction noise must be contained if it exceeds noise levels for zoning in the adjacent properties.

Odor must be continually monitored. The goal is to respond and correct before a complaint can be registered.

The access must be monitored at least daily to ensure that no trackout exists on public roads, sidewalks or right of way. Any trackout must be swept up as soon as it is observed.

All operating equipment must be properly balanced so that ground transmission of noise from drilling and operations is minimized.

If Drilling, completion flowback and produced fluids are not recycled they must be transported to a hazardous waste facility approved for handling that waste.

Proper documentation needs to be used to show that no waste is lost enroute.

Ground water monitoring wells should be encouraged. Any operational water wells located within 1000 feet of the operation must be sampled, beginning one week before start of activity, on a weekly basis to ensure that no change in water quality is observed.

It is the responsibility of all on site employees to maintain the trash and debris free site.

Maintenance involving any fluid (oil, ATF, brake, hydraulic, ...) must be performed over an impervious surface. Any fluid spills from maintenance must be cleaned immediately. Appropriate cleanup material must be available on site if maintenance or fueling is performed.

Applicant must maintain environmental insurance in perpetuity for failure to follow all standards when operating or closing down operations.

Q6 Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities?

Drilling fluids should reference the same list of prohibited chemicals noted in Section 17.3 for fracturing fluid.

Q7 Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements?

A trackout plan should also be required.

Q8 Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals?

Respondent skipped this question

Q9 Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections?

Property inspection is allowed 24 hours per day on any day.

Following a spill, air quality or water quality violation the property must pass inspection before being allowed to restart operation.

Q10 Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation?

Respondent skipped this question

Q11 Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification?

Respondent skipped this question

Q12 Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions?

Respondent skipped this question

Q13 Do you have any other suggestions for topics to add?

Respondent skipped this question

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings?

Name

Marc Brown

Email Address

marcgbrown@comcast.net

#2

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Thursday, November 14, 2019 9:05:09 PM
Last Modified: Thursday, November 14, 2019 9:44:03 PM
Time Spent: 00:38:53
IP Address: 71.205.251.231

Page 1

Q1 Are you associated with a group or organization that will be providing comments to this questionnaire?

No,
 If so what is the name of the Organization?:
 Ms.

Q2 Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose?

no

Q3 Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits?

no

Q4 Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities.

General	Generally Like(Needs Clarification or Improvement)
Air Quality	Dislike
Leak Detection and Repair	Dislike
Spills and Releases	Like Where it is Headed(No Substantive Change)
Well Liquids Unloading	Like Where it is Headed(No Substantive Change)
Noise	Like Where it is Headed(No Substantive Change)
Odors	Dislike
Dust	Dislike
Access	Like Where it is Headed(No Substantive Change)
Chemical Handling	Like Where it is Headed(No Substantive Change)
Recycle, Reuse and Disposal of Fluids	Dislike
Water Bodies	Dislike
Visual	Like Where it is Headed(No Substantive Change)
Well Plugging and Abandonment	Like Where it is Headed(No Substantive Change)
Flammable Material	Like Where it is Headed(No Substantive Change)
Waste Disposal	Like Where it is Headed(No Substantive Change)
Removal of Equipment	Like Where it is Headed(No Substantive Change)
Maintenance of machinery	Like Where it is Headed(No Substantive Change)
Flow Lines, Transfer Lines and Gathering Lines	Like Where it is Headed(No Substantive Change)
Temporary Water lines	Dislike
Financial Assurance	Dislike

Q5 Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities?

Many sections are too vague using language such as ..."unless ...economically infeasible or impractical"(B.3, 4, and 5); "unless technically or operationally infeasible" (C.3); "Best management practices" (E and H.1) "to the extent reasonably possible" (G.2),"unless technically infeasible"(K.1, T.1) ; "We encourage.." (G.4) Language should be specific allowing for no interpretation or room for debate. If it is not feasible, the facility should not be operating. What exactly are "best management practices"? "strongly encouraged...should be changed to require definite practices not open to interpretation.

Q6 Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities?

Guidelines for O and G development applications are "strongly encouraged to incorporate..." These best practices should be spelled out and required. phrases such as "...unless technically infeasible" should not be part of these regulations. If it isn't technically feasible, the facility should not exist.

Q7 Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements?

The phrase "when relevant" should be part of these regulations. This allows too much interpretation.

Q8 Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals?

no

Q9 Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections?

no

Q10 Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation?

no

Q11 Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification?

no

Q12 Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions?

no

Q13 Do you have any other suggestions for topics to add?

COGG setbacks are not adequate. I would like to see setback distances of 2000 feet from any "outside activity areas" or any buildings. This is a minimum safety setback.

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings?

Name

Marion Cox

Email Address

cox.mari@gmail.com

#3

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Sunday, November 17, 2019 9:03:09 PM
Last Modified: Sunday, November 17, 2019 9:27:56 PM
Time Spent: 00:24:47
IP Address: 76.76.91.66

Page 1

Q1 Are you associated with a group or organization that will be providing comments to this questionnaire? **No**

Q2 Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose?

no

Q3 Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits?

yes, B. ii. add and present and future welfare of people, animals and the environment.

Q4 Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities.

General	Like Where it is Headed(No Substantive Change)
Air Quality	Dislike
Leak Detection and Repair	Dislike
Spills and Releases	No Comment
Well Liquids Unloading	No Comment
Noise	Dislike
Odors	Dislike
Dust	Dislike
Access	No Comment
Chemical Handling	Dislike
Recycle, Reuse and Disposal of Fluids	Dislike
Water Bodies	Generally Like(Needs Clarification or Improvement)
Visual	Generally Like(Needs Clarification or Improvement)
Well Plugging and Abandonment	Dislike
Flammable Material	No Comment
Waste Disposal	No Comment
Removal of Equipment	Dislike
Maintenance of machinery	No Comment
Flow Lines, Transfer Lines and Gathering Lines	No Comment
Temporary Water lines	No Comment
Financial Assurance	No Comment

Q5 Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities?

B.4. control by flare is hazardous to air quality and lights up the night sky
 G. 3. Odor complaints are serious, but the response system is too vague
 Where is the policy about concerns of ground vibrations, water disturbances and quakes?
 J. 2.If drilling is continued on an infrequent basis there should be a completion date set. How will the land be reclaimed? Specifically, plants and contours.
 N.1. Disclosure of abandoned well sites and flow lines needs to be public knowledge. How will people be informed in the future?

Q6 Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities?

no

Q7 Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements?

no

Q8 Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals?

no

Q9 Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections?

no

Q10 Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation?

no

Q11 Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification?

no

Q12 Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions?

no

Q13 Do you have any other suggestions for topics to add?

What exactly is the method of notifying the public about new wells, leaks, mitigation, hazards, etc. ?

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings?

Name	Teresa Jones
Email Address	teresajones@usa.net

#4

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Monday, November 18, 2019 12:20:23 PM
Last Modified: Monday, November 18, 2019 12:39:53 PM
Time Spent: 00:19:29
IP Address: 129.82.253.186

Page 1

Q1 Are you associated with a group or organization that will be providing comments to this questionnaire? **No**

Q2 Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose? **Respondent skipped this question**

Q3 Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits? **Respondent skipped this question**

Q4 Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities.

General	Dislike
Air Quality	Dislike
Leak Detection and Repair	Dislike
Spills and Releases	Dislike
Well Liquids Unloading	Dislike
Noise	Dislike
Odors	No Comment
Dust	No Comment
Access	No Comment
Chemical Handling	Dislike

Q5 Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities?

17.3 A2-Oil and gas facilities need to be located to minimize impacts on residential neighborhoods and schools.
 17.3 General comment on all sections--get rid of the language about "unless it is economically infeasible or impractical". Economics don't rule over health, environment and public safety.
 17.3C Leak detection and repair needs to be more than semi annual--continuous monitoring should be required.
 17.3D Why would remediation of spills/releases be deferred to COGCC?
 17.3E How are emissions monitored during well liquid unloading?
 17.3F Permissible noise level should take into account surrounding land use, especially if that is residential.
 17.3J What is the process to verify chemical composition?

Q6 Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities? **Respondent skipped this question**

Q7 Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements? **Respondent skipped this question**

Q8 Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals? **Respondent skipped this question**

Q9 Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections? **Respondent skipped this question**

Q10 Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation?

Respondent skipped this question

Q11 Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification?

Respondent skipped this question

Q12 Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions?

Respondent skipped this question

Q13 Do you have any other suggestions for topics to add?

Have you looked at the Adams county regulations for guidance. I believe they are quite good.

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings?

Name

Shelly Carroll

Email Address

shellycarroll@msn.com

#5

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Monday, November 18, 2019 7:27:02 PM
Last Modified: Monday, November 18, 2019 7:31:05 PM
Time Spent: 00:04:03
IP Address: 66.109.209.160

Page 1

Q1 Are you associated with a group or organization that will be providing comments to this questionnaire? **No**

Q2 Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose?

It seems to me that Larimer County should encourage reuse of water to save fresh water sources. In this regard, Larimer County should encourage use of produced water as a fracking fluid. The way I read the proposed regs it looks like only fresh water can be used as a fracking fluid.

Q3 Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits?

no

Q4 Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities.

General	Generally Like(Needs Clarification or Improvement)
Air Quality	Generally Like(Needs Clarification or Improvement)
Leak Detection and Repair	Generally Like(Needs Clarification or Improvement)
Spills and Releases	Generally Like(Needs Clarification or Improvement)
Well Liquids Unloading	Generally Like(Needs Clarification or Improvement)
Noise	Generally Like(Needs Clarification or Improvement)
Odors	Generally Like(Needs Clarification or Improvement)
Dust	Generally Like(Needs Clarification or Improvement)
Access	Generally Like(Needs Clarification or Improvement)
Chemical Handling	Generally Like(Needs Clarification or Improvement)
Recycle, Reuse and Disposal of Fluids	Dislike
Water Bodies	Dislike
Visual	Dislike

Q5 Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities? **Respondent skipped this question**

Q6 Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities? **Respondent skipped this question**

Q7 Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements? **Respondent skipped this question**

Q8 Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals? **Respondent skipped this question**

Q9 Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections? **Respondent skipped this question**

Q10 Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation? **Respondent skipped this question**

Q11 Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification?

Respondent skipped this question

Q12 Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions?

Respondent skipped this question

Q13 Do you have any other suggestions for topics to add?

Respondent skipped this question

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings?

Name

Tommy Raye

Email Address

tommy@watersupplyllc.com

#6

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Tuesday, November 26, 2019 11:25:05 AM
Last Modified: Tuesday, November 26, 2019 12:29:06 PM
Time Spent: 01:04:01
IP Address: 165.127.8.254

Page 1

Q1 Are you associated with a group or organization that will be providing comments to this questionnaire? **Yes,**
 If so what is the name of the Organization?:
 Colorado Department of Public Health and Environment

Q2 Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose?
 Does the County just intend to establish regulations for drilling and production, or would the County also like to regulate hydraulic fracturing and flowback? If so, consider adding those terms to Section 17.1.

Q3 Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits? **Respondent skipped this question**

Q4 Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities. **Respondent skipped this question**

Q5 Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities?

Consider revising Section 17.3.A.2 to read "Oil and Gas facilities should be located to minimize impacts on public health, safety, welfare the environment and agricultural operations."

Consider revising Section 17.3.A.2 to fully spell out and abbreviate Colorado Department of Public Health and Environment (CDPHE) Air Pollution Control Division (APCD). Also, the word "for" should be added to the following excerpt "and the rules and regulations promulgated by the AQCC [for] all applicable emission sources."

Consider revising Section 17.3.A.4 to read "98% destruction [or] removal efficiency." Manufacturer data is typically based on "destruction efficiency". It's best to be consistent with Air Quality Control Commission regulations and require operators to have the device meet 98% destruction or removal efficiency.

17.3.E- What do you mean by "at least 90% emissions when utilizing combustion to control venting shall be employed at all facilities"? Do you mean 90% emissions reduction, 90% destruction or removal efficiency? Why 90% and not 98%?

17.3.G- consider abbreviating CDPHE and AQCC because those terms should have already been spelled out fully in previous provisions.

Consider revising 17.3.H.4 to read "Unless otherwise approved by the County Health and Engineering Department, only water will be used for dust suppression activities within 300 feet of the ordinary high-water mark of any body of water."

17.3.M.4.- 4. It appears "be installed" or some similar phrase is missing from this section "Fencing shall [be installed] for all the phases of an Oil and Gas facility development to ensure the security and visual aesthetics of the use."

Q6 Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities?

Consider revising 17.4.2.d. to read "Wipe down drill pipes as they exit the wellbore". "Each time drilling operation 'trips' out of hole" is worded somewhat confusingly.

Consider revising 17.4.2.d. to read "manufacturer's recommended specifications" because "specifications" is more encompassing than "levels"

Q7 Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements?

Respondent skipped this question

Q8 Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals?

Respondent skipped this question

Q9 Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections?

Respondent skipped this question

Q10 Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation?

Respondent skipped this question

Q11 Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification?

Respondent skipped this question

Q12 Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions?

Respondent skipped this question

Q13 Do you have any other suggestions for topics to add?

Respondent skipped this question

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings?

Name

Sean Hackett

Email Address

sean.hackett@state.co.us

#7

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Friday, November 29, 2019 6:40:00 AM
Last Modified: Friday, November 29, 2019 6:54:55 AM
Time Spent: 00:14:55
IP Address: 108.18.193.125

Page 1

Q1 Are you associated with a group or organization that will be providing comments to this questionnaire? **No**

Q2 Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose?

Yes, in Section A, the language "and reasonable" should be removed. The intent is health & safety first, regardless of the qualifier word "reasonable". Further "to the extent practical" should also be removed. This is also a qualifier and vague phrase that does not belong based on prioritizing health & safety as being the required outcome.

Q3 Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits?

Yes, "Reasonable and necessary mitigation steps have been taken" is again "light" language that reduces the goal of producing public health. This should state "REQUIRED mitigation steps have been taken..."

Q4 Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities.

General	No Comment
Air Quality	Dislike
Leak Detection and Repair	Dislike
Spills and Releases	Dislike
Well Liquids Unloading	Dislike
Noise	Dislike
Odors	Dislike
Dust	Dislike
Access	Dislike
Chemical Handling	Dislike
Recycle, Reuse and Disposal of Fluids	Dislike
Water Bodies	Dislike
Visual	Dislike
Well Plugging and Abandonment	Dislike
Flammable Material	Dislike
Waste Disposal	Dislike
Removal of Equipment	Dislike
Maintenance of machinery	Dislike
Flow Lines, Transfer Lines and Gathering Lines	Dislike
Temporary Water lines	Dislike
Financial Assurance	Dislike

Q5 Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities?

All sub-sections that contain language such as "unless the application demonstrates that it is economically infeasible or impractical to utilize such a system.", "unless it is demonstrated by the application materials the utilization of such equipment is not economically feasible or practical.", "unless technically or operationally infeasible.", "unless technically infeasible." should be revised. Again, SB181 makes it clear that health & safety should be prioritized first. It is not appropriate, nor in line with this objective, to provide such easy "outs" as it is possible to say anything is economically practical. This in its current state is not acceptable. Spills should be reported immediately instead of waiting 24 hours.

Q6 Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities?

Again, there should be no such language as "unless it is technically infeasible." Anything could be framed as "technically infeasible". The requirement is human health & safety, environment first.

Q7 Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements?

The reclamation plan should include a bond amount to ensure the land within the county is in fact restored regardless of the state of the opportunity at the time that this is required.

Q8 Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals? Respondent skipped this question

Q9 Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections? Respondent skipped this question

Q10 Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation? Respondent skipped this question

Q11 Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification? Respondent skipped this question

Q12 Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions? Respondent skipped this question

Q13 Do you have any other suggestions for topics to add? Respondent skipped this question

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings?

Name	Kevin Krause
Email Address	kevkrause@gmail.com

#8

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Friday, November 29, 2019 2:19:41 PM
Last Modified: Friday, November 29, 2019 4:43:39 PM
Time Spent: 02:23:57
IP Address: 72.19.141.120

Page 1

Q1 Are you associated with a group or organization that will be providing comments to this questionnaire?

No,
 If so what is the name of the Organization?:
 I am submitting these comments independently.

Q2 Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose?

- A. Delete: "To the extent practicable" - not necessary and weaken the language
- B.4. Add: "and wildlife habitat"
- B.5. Delete: "as appropriate" - not necessary, as the rest of the phrase makes appropriateness obvious
- B.6. Rewrite or delete - is vague and unenforceable

Q3 Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits?

Why does this section not follow the same format as previous section? (17.1. A. then 1.; whereas 17.2 A. then a.)

Please put oil and gas activities in a dedicated Special Review section!

It makes a lot more sense to create a dedicated Special Review section for oil and gas activities, and would make compliance and enforcement more straightforward than the suggested referencing to other Code sections.

But, if this proposed language is kept then please INCLUDE:

- * more public participation opportunities
- * do not leave decision responsibility only to the planning director
- * clarify the actual title of the referenced planning director

And

B.a.ii. Rephrase/clarify: "Reasonable and necessary mitigation" - if the County does not clearly define this statement it will be unenforceable, and potentially the subject of legal challenge

Q4 Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities.

General	Generally Like(Needs Clarification or Improvement)
Air Quality	Generally Like(Needs Clarification or Improvement)
Leak Detection and Repair	Generally Like(Needs Clarification or Improvement)
Spills and Releases	Generally Like(Needs Clarification or Improvement)
Noise	Generally Like(Needs Clarification or Improvement)
Odors	Generally Like(Needs Clarification or Improvement)
Dust	Generally Like(Needs Clarification or Improvement)
Access	Generally Like(Needs Clarification or Improvement)
Chemical Handling	Generally Like(Needs Clarification or Improvement)
Recycle, Reuse and Disposal of Fluids	Generally Like(Needs Clarification or Improvement)
Water Bodies	Generally Like(Needs Clarification or Improvement)
Visual	Generally Like(Needs Clarification or Improvement)
Well Plugging and Abandonment	Generally Like(Needs Clarification or Improvement)
Flammable Material	Generally Like(Needs Clarification or Improvement)
Waste Disposal	Generally Like(Needs Clarification or Improvement)
Removal of Equipment	Generally Like(Needs Clarification or Improvement)
Maintenance of machinery	Generally Like(Needs Clarification or Improvement)
Flow Lines, Transfer Lines and Gathering Lines	Generally Like(Needs Clarification or Improvement)
Temporary Water lines	Generally Like(Needs Clarification or Improvement)
Financial Assurance	Generally Like(Needs Clarification or Improvement)

Q5 Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities?

A.1. Add "all" before applicable federal . . .

B.1. Change "The use?" to: "All facilities and operations"

B.1. Add "emissions" before "emission sources" - because they could be different

B.1. Add, at the end, and State and County health departments.

B.3. Delete: from "unless" to the end of the sentence - too vague and County has such authority under other sections

B.4. Delete: "or"

B.4. Delete from "unless" to end of sentence - vague and unenforceable. And, how would the County make sure determination other than the unsupported word of the operator?

B.4. Regarding flaring: The oil and gas industry has admitted that flaring is NOT necessary, except in limited emergency situations. Larimer County needs to clearly and definitively state that flaring is prohibited except in limited emergency situations AND define specifically what those emergency situations are.

B.5. Delete from "unless" to end of sentence - vague and unenforceable. This is another instance of allowing the industry to define its own standards - and I don't think that's what the residents of Larimer County have in mind

B.7. Change "should" to "shall" - "Should" is a nonenforceable term

B.7.d. Add clarification of when "delay" shall occur (as opposed to "suspension" by adding: "if suspension would create unsafe conditions," and define difference between "suspend" and "delay"

B.7.e. Change "or" or "and"

B.7.f. Delete "will" and change "would" to "could"

C.1. Change or delete: "modern leak detection technologies and equipment" - vague and unenforceable, as well as being industry defined

C.2. & 3. Regarding "verified": Who verifies? How? Self-reporting is not adequate.

E.1. Regarding "best management practices": As defined by whom? Currently this term is generally defined by the API in industry-friendly terms, and in many cases does not serve or benefit the health and safety of the general public or the environment. I do not believe the residents of Larimer County are eager to have the industry continue to define what keeps the rest of use safe!

F.1. Should the included weekend day be further defined as a day with operations are occurring in order for such analyses to accurately reflect the noise levels?

G.4. Delete "We encourage" and change to "The operator SHALL communicate . . ."

H.1. See above regarding "best management practices."

H.3. Add that SDS shall be made available to the public, in a timely manner (please define what is timely), along with requiring written justification why the use of such is necessary, practical, and without less toxic alternative

I.1.c. Why is the County requiring the use of Magnesium Chloride when there are more environmentally-friendly methods of treatment?

I. Add new subsection 2. to cover operations occurring with in road GID/taxing district and requiring a. notice to all households within the GID and b. permitting the GID to request that Magnesium Chloride not be used

J. Add new subsection 4. reserving to the County the right to add to the list in subsection 3. at any time as the County deems necessary to protect the health, safety, and welfare of the citizens and environment

K.1. How shall the fluids be "recycled"?

K.1. & 3. "unless technically infeasible" is vague, unenforceable and allows interpretation to be industry-driven, rather than by the County

L.2. Delete "that are typically" - language without this qualifier does what the intent is AND allows the County to request unusual tests that could be critical

M.3. After "off-site" add "and upwards"

M.5. Change from "6 months" to "3 months, seasonal weather permitting"

N.1.d. Change "any" to "all" and "gathering or flow lines" to "gathering, flowlines, and pipelines"

Q.2. Sentence is repetitive

R.2. Add "contained" before "impervious" and define "storm events"

S.1. Change "of" to "or" and include "wildlife habitat in the list

S.2. This statement is confusing

S.3. "shall be provided" by whom? to whom? by when?

U.1. Change from "must demonstrate the financial capability" to "must provide proof of bonding, naming the County as the beneficiary sufficient to reclaim . . ." and define "disturbed areas" - what constitutes a disturbed area, does such include the length of drill lines and pipelines?

Q6 Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities?

A. This entire section encourages non-compliance by all the uses of encouragement; needs to firmly and definitively set forth the powers and authority that SB-181 has permitted local government, i.e., the County, instead of being so darn flaky!

A. Change "strongly encouraged to" to "shall" and delete "Where reasonably necessary"

A.1. Change "are encouraged" to "may be required to"

A.1.f. Elimination of flaring MUST be a REQUIREMENT in ALL cases, except in specifically defined emergencies

A.2. Change "are encouraged" to "may be required"

A.2.g. Define "'green frac' methods"

A.3. Change "are encouraged" to "may be required" and delete "unless technically infeasible"

Q7 Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements?

Why does this list omit most of the plans recommended in section 5 of the September 25, 2019 handouts to the task force?

A. Regulations needs to set forth standards as to when these are relevant or language that gives the County specific authority to determine when they are relevant

A. Does this list of submittals include plans that protect the environment and environmental resources, e.g., protection of natural lands and wildlife habitat?

Q8 Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals?

Did not have the opportunity to review Code section 22, but request that appeals to oil and gas applications include more public input than typical appeals.

Q9 Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections?

A. Change "may" in second sentence to "shall"

Q10 Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation?

Standards in this section must include bonding (held by or naming the County as the sole beneficiary) sufficient to cover potential costs related to the ENTIRE operation - not just the pad - and ALL RISKS to the soil, air, water, and wildlife impacted or related thereto

Q11 Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification?

Respondent skipped this question

Q12 Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions?

Respondent skipped this question

Q13 Do you have any other suggestions for topics to add?

1. Applicants should be required to cover all costs, including of 1) the County review process, 2) all reports/consultations required by the County, and 3) security or bonding sufficient to cover all potential reclamation / remediation / abandonment costs from well pad to end of drilling lines and all associated pipelines from soil, air, water, wildlife, and human destruction
2. Should be an oil and gas-specific Special Review process, and that O&G SR should include:
 - (1) Applicant requirement to engage with community prior to initiating SR requirements with the County
 - (2) Surface agreements shall not be finalized until the applicant has completed SR
 - (3) Applicants should be required to report all instances of non-compliance within the previous 10 years (and pending complaints) to staff during pre-application conference and to make such available to the public during the initial community engagement
 - (4) Pre-application conference shall be required prior to initiation of application and SR process - to review expectations of applicant and mitigate any possibility of mis-communication; should also include County/applicant discussion of location, impacts, etc., and how such might be mitigated as part of application/SR
 - (5) public engagement of prior notification of at least w weeks of all adjacent landowners and residents and businesses within one-half mile
 - (a) after pre-application conference and prior to application and
 - (b) during SR process in timely manner to allow County and applicant to make community-friendly amendments to application
3. Current SR process does not cover oil and gas specific issues that must be addressed to meet the standards and take full advantage of the powers granted local governments by SB-181. Examples include:
 - (1) alternative sites
 - (2) surface and groundwater protection / quality
 - (3) open / natural lands, including:
 - a. habitat and migration corridors
 - b. natural and historical landmarks
 - c. rare plants
 - d. floodplains and riparian corridors
 - e. wetlands
 - (4) agricultural lands
 - (5) impact on surrounding land uses
 - (6) pipeline mapping, and public disclosure of such
 - (7) 24-hours emergency contact information of at least 2 individuals with 24/7 decision-making authority
 - (8) proof of utility agreements
 - (9) traffic plan/assessment
 - (10) cost to GID road district residents
 - (11) setback requirements
 - (12) time frame requirements for
 - a. process
 - b. inactive well, before reclamation is required

In conclusion,

Thank you for the opportunity to express my concerns.

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings?

Name	Sherri Valentine
Email Address	sher@skybeam.com

#9

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Saturday, November 30, 2019 2:47:55 PM
Last Modified: Saturday, November 30, 2019 3:36:35 PM
Time Spent: 00:48:40
IP Address: 129.19.6.125

Page 1

Q1 Are you associated with a group or organization that will be providing comments to this questionnaire?

Yes,
 If so what is the name of the Organization?:
 Platte River Power Authority, Fort Collins, Colorado

Q2 Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose?

In general, Platte River Power Authority ("Platte River") recommends that Larimer County include protections intended to minimize the impacts of oil and gas development on sensitive and critical facilities within the County. These would include additional protections for critical infrastructure and facilities that provide essential public services to Larimer County residents, such as power plants and electrical utility infrastructure. At Section 17.3(2), the proposed Oil and Gas Regulations ("Regulations") note the intent is to minimize impacts on agricultural operations. This wording is too narrow. It should include minimizing impacts on critical facilities and infrastructure and residential areas and incorporate the new mandate of the Colorado Oil and Gas Conservation Commission ("COGCC") to protect and minimize adverse impacts to public health, safety and welfare, the environment, and wildlife resources. Further, Platte River believes the tone of the current Regulations is more advisory than regulatory. In many instances, the draft Regulations establish a requirement, but include language that the requirement may be avoided if compliance is "economically infeasible or impracticable." In other instances, the Regulations state "we encourage the Operator" to do something. We urge Larimer County to adopt requirements that provide clarity, both for oil and gas operators and the community, as to the exact standards required under the proposed Regulations. If applications for oil and gas facilities are processed through special review, open-ended language exposes the special review process to further attack.

Q3 Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits?

Respondent skipped this question

Q4 Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities.

General	Generally Like(Needs Clarification or Improvement)
Air Quality	Generally Like(Needs Clarification or Improvement)
Leak Detection and Repair	Generally Like(Needs Clarification or Improvement)
Spills and Releases	Generally Like(Needs Clarification or Improvement)
Chemical Handling	Generally Like(Needs Clarification or Improvement)
Water Bodies	Generally Like(Needs Clarification or Improvement)
Flammable Material	Generally Like(Needs Clarification or Improvement)
Flow Lines, Transfer Lines and Gathering Lines	Generally Like(Needs Clarification or Improvement)
Financial Assurance	Generally Like(Needs Clarification or Improvement)

Q5 Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities?

Section 17.3(B) deals with air quality. Subsection 4 provides that all emissions shall be routed to and controlled by a flare or combustor operated with at least 98% destruction removal efficiency. Instead of referencing "all emissions" to be controlled, there should be a specific reference to "hydrocarbons." Subsection 7 requires site operations to be modified on air quality action days posted by the Colorado Department of Public Health and Environment. Once these notices are posted they are effective until 4 p.m. the following day. Given the short timeframe to respond to a notice, operators potentially should be required to subscribe to air quality alerts via email. Additionally, the Regulations should define a process or require proper documentation to verify that operators responded to the air quality alerts. The Regulations should also clarify if the requirement to respond to air quality alerts applies countywide or only in the portion of the County located in the Denver Metro/North Front Range ozone nonattainment area.

Section 17.3(D) deals with spills and releases. Platte River believes that any application for an oil and gas facility should include a written plan for spill prevention, control, and countermeasures that would comply with local, state, and federal regulatory requirements.

Regulation 17.3(J)(2) requires that drilling and completion chemicals be removed within 60 days. Platte River encourages Larimer County to require these chemicals be removed within 30 days of drilling completion.

At Section 17.3(L)(1), we propose the language be changed to include the following: "The applicant shall provide documentation to the County, as required by the COGCC, demonstrating how the COGCC water quality protection standards are being complied with, including both surface and groundwater protections."

Section 17.3(S)(3) requires that operators provide the coordinates of all flow lines, gathering lines, and transfer lines, but does not specify when the operator must supply these coordinates. At Section 17.3(N)(1)(d), it states an operator must only supply these coordinates with the notice of completion of well abandonment for any decommissioned wells. We believe these coordinates should be provided within 30 days of completion of any flow lines, transfer lines, or gathering lines. Moreover, given the extreme hazards associated with flow lines, we encourage Larimer County to proactively regulate flow lines and advocate against waiting to see what standards the COGCC will adopt.

Q6 Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities?

Respondent skipped this question

Q7 Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements?

Platte River further encourages Larimer County to adopt a requirement that operators negotiate and obtain surface use agreements for any proposed facilities, and that all applications for oil and gas facilities must include a surface use agreement. At a minimum, Larimer County should mandate that operators obtain a surface use agreement if they intend to locate oil and gas operations near sensitive or critical facilities, including but not limited to power generation or energy utility infrastructure. Given the nature of energy delivery and the threat to public health and safety if it were disrupted, we believe requiring a surface use agreement for lands owned by or used for energy generation and delivery is essential to protect community welfare.

Q8 Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals?

Respondent skipped this question

Q9 Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections?

Respondent skipped this question

Q10 Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation?

Respondent skipped this question

Q11 Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification?

Respondent skipped this question

Q12 Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions?

Respondent skipped this question

Q13 Do you have any other suggestions for topics to add?

Platte River recommends that Larimer County adopt specific setback requirements and advocates against waiting to see what standards the COGCC adopts. At a minimum, we believe the 1,000-foot setback requirement for schools should be adopted for all occupied structures. The COGCC Director's Objective Criteria for the rule-making process subjects any proposed oil and gas well locations within 2,000 feet of an occupied structure to additional analysis. Platte River urges Larimer County to adopt a setback requirement in line with the 2,000 feet used in the Director's Objective Criteria. Additionally, Platte River recommends a setback requirement of 2,500 feet from sensitive and critical facilities, including electric generation facilities and substations.

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings?

Name **Caroline Schmiedt, Deputy General Counsel**
Email Address **schmiedtc@prpa.org**

#10

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Saturday, November 30, 2019 4:50:54 PM
Last Modified: Saturday, November 30, 2019 4:58:49 PM
Time Spent: 00:07:55
IP Address: 24.9.136.3

Page 1

- Q1** Are you associated with a group or organization that will be providing comments to this questionnaire? **No**
- Q2** Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose? **Respondent skipped this question**
- Q3** Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits? **Respondent skipped this question**
- Q4** Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities.
- | | |
|---------------------------------------|--|
| General | Like Where it is Headed(No Substantive Change) |
| Air Quality | Like Where it is Headed(No Substantive Change) |
| Leak Detection and Repair | Like Where it is Headed(No Substantive Change) |
| Spills and Releases | Like Where it is Headed(No Substantive Change) |
| Well Liquids Unloading | Like Where it is Headed(No Substantive Change) |
| Chemical Handling | Like Where it is Headed(No Substantive Change) |
| Recycle, Reuse and Disposal of Fluids | Like Where it is Headed(No Substantive Change) |
| Water Bodies | Like Where it is Headed(No Substantive Change) |
| Waste Disposal | Like Where it is Headed(No Substantive Change) |
- Q5** Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities? **Respondent skipped this question**
- Q6** Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities? **Respondent skipped this question**
- Q7** Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements? **Respondent skipped this question**
- Q8** Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals? **Respondent skipped this question**
- Q9** Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections? **Respondent skipped this question**
- Q10** Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation? **Respondent skipped this question**
- Q11** Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification? **Respondent skipped this question**
- Q12** Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions? **Respondent skipped this question**

Q13 Do you have any other suggestions for topics to add?

I am concerned with air quality and water conservation in Larimer County and Colorado, therefore I strongly support fair and equitable regulation of the oil and gas industry.

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings?

Name	Kevin Woodward
Email Address	kwoodward@yahoo.com

#11

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Saturday, November 30, 2019 5:31:43 PM
Last Modified: Saturday, November 30, 2019 5:40:29 PM
Time Spent: 00:08:45
IP Address: 67.174.104.39

Page 1

Q1 Are you associated with a group or organization that will be providing comments to this questionnaire?

Yes,
 If so what is the name of the Organization?:
 Larimer Alliance for Health, Safety & the Environment

Q2 Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose?

We strongly recommend the limitation of all uses of phrases that allow loopholes with regard to protection of public health, safety, and the environment. SB19-181 eliminated "economic feasibility" considerations from the state's oil and gas regulatory decisions, the COGCC Mission Change White Paper dated Nov. 1, 2019 affirmed this decision, and we encourage Larimer County to take a similar approach and eliminate loophole language such as "to the maximum extent practicable" and "where feasible."

Q3 Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits?

We find that the minimalist "Special Review and Minor Special Review requirements, as well as the "Supplemental Review" criteria referenced in 17.2.B neglect to include public notice or process regarding new oil and gas proposals and are void of an array of materials required by a number of other Colorado county governments that would allow the County to fully review and vet an oil and gas site proposal.

We recommend, at minimum:

- The development of a separate land use process and special use review process that is specific to new and existing oil and gas development and infrastructure.
- The development of a public process for each new oil and gas facility that includes a 60 days-notice of the permit application to all residents, landowners, and parents of school children attending a school within 1 mile of a proposed oil and gas site, public disclosure of all required documents submitted to the County by the Operator, and an independent environmental, financial, and risk analysis to be prepared and presented to the County, and public hearings before the County Planning Commission and Larimer County Commissioners.
- A detailed process for the submission of required materials by the operator to the county. We finally that a detailed list of required application materials, (as described in Section 17.5) be moved to Section 17.2.C. Furthermore, this section should clearly define the required planning documentation. This documentation should further ensure that the operator has a sense of the County's standards regarding protections of public health, safety, the environment and wildlife resources.

Q4 Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities. **Respondent skipped this question**

Q5 Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities?

-- We strongly recommend that the opening paragraph 17.3.A.2 include a required 2,000 foot setback from all residential or high occupancy buildings, outdoor parks, water bodies or other environmentally sensitive areas.

Southern Larimer County falls within Colorado's 8-hour ozone non-attainment area for Air Quality. Oil and gas development is one of the top contributors to greenhouse gas emissions. We believe that Larimer County residents deserve innovative local regulatory measures that require compliance without "feasibility and practicability" loopholes. The County should be clear about what it requires to protect the health and safety of its citizens and the environment.

-- We believe that the county should require certification of compliance with COGCC, CDHPE, AQCC and EPA air quality emission standards, as well as compliance with all OSHA work practice requirements regarding benzene exposure.

We recommend that the county conduct onsite baseline air quality monitoring ahead of all oil and gas permitting considerations, and should require annual Leak Detection and Repair inspections. The results of these inspections and annual onsite air quality monitoring should be reported to the County.

-- Operators should be required to incorporate best management practices with regard to maintenance activities, "tankless" production techniques, the use of telemetric control and monitoring systems, and control of hydrocarbon and VOC emissions.

-- Given that leaks and spills at oil and gas sites pose a threat to public health, safety and the environment, the County should exercise its right to require that any oil and gas well with an identified leak shall be shut down and not allowed to operate until the operator has provided evidence that the leak has been repaired if an immediate timeline for repair is not identified by the operator. We recommend specific requirements and timelines for reporting leaks and spills, and believe the county should make information regarding leaks and spills be available to the public

-- Detailed noise mitigation is an imperative component in the development of oil and gas regulations that are truly intended to protect public health, safety, welfare, the environment, and wildlife resources. We recommend that baseline daytime and nighttime noise levels be measured in Residential, Agricultural or Rural and Commercially zoned areas and no equipment operated in a manner so as to create noise which causes noise levels to exceed ambient noise by 3-10 decibels, depending on time of day and location.

-- We further recommend that the County create a complaint hotline for the purposes of health and nuisance complaints, including noise, odors, or other non-compliance concerns. Exposure to odors from oil and gas development can often be an initial sign of chemical exposure with acute impacts to public health. We find that the County regulations regarding odor, allow for potential unmitigated exposure and risk public health. We recommend that the County create a public comment portal that will also link with the COGCC.

-- Water bodies are extremely susceptible to impacts from oil and gas operations. Impacts to a variety of water bodies pose serious risk to public health, safety, welfare, and the environment. We recommend in Section 17.3.L a requirement that operators provide a water quality plan to that includes details such as the operator's plans for water quality testing, prevention of illicit or inadvertent discharges, stormwater discharge management, containment of pollutants, and spill notification and response as well as plans concerning downhole construction details and installation practices, including casing and cementing design to protect surface water and aquifers from contamination.

-- In addition to complying with the COGCC's plugging and abandonment requirements (section 17.3.N), we request the inclusion of soil and water assessments and air quality monitoring within 90 days of completion and at least once a year afterwards, and a permanent physical marking at the site of each abandoned well.

-- Flowlines, transfer lines, and gathering lines represent a significant amount of infrastructure mixed in communities and environmental resources. We strongly recommend setbacks and reverse setbacks commensurate with blowout and blast radiuses for new and existing pipelines using the existing scientific formula established by industry, a current and comprehensive mapping system, regular inspections and pressure tests. We also recommend that all pipelines be buried under at least four feet of cover soil and require the use of tracer wire to enable onsite detection.

Q6 Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities?

Protection of public health, safety, welfare and the environment, as required by SB19-181, means that local governments should be clear about their standard of operating and performance regarding oil and gas development. We strongly recommend that the language in Section 17.4 and elsewhere be direct and explicit, avoiding ambiguity or subjectivity. Therefore we ask that the County "require" (not "encourage") tankless production techniques as applicable, use zero emission dehydrators, use pressure suitable separator and vapor recovery units, use no-bleed continuous and intermittent pneumatic devices; the use of electric rigs and Tier 4 engines; use automated tank gauging, and prohibit flaring except during emergencies or upset conditions.

We also recommend that Section 17.4A.2 be moved to Section 17.3.G and language to "encourage" compliance be strengthened.

Q7 Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements?

Please see the detailed recommendations provided to County Staff from the League of Oil Impacted Coloradans (LOGIC) and the Larimer Alliance.

Q8 Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals?

Please see the detailed recommendations provided to County Staff from the League of Oil Impacted Coloradans (LOGIC) and the Larimer Alliance.

Q9 Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections?

Please see the detailed recommendations provided to County Staff from the League of Oil Impacted Coloradans (LOGIC) and the Larimer Alliance.

Q10 Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation?

Please see the detailed recommendations provided to County Staff from the League of Oil Impacted Coloradans (LOGIC) and the Larimer Alliance.

Q11 Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification?

Please see the detailed recommendations provided to County Staff from the League of Oil Impacted Coloradans (LOGIC) and the Larimer Alliance.

Q12 Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions?

Please see the detailed recommendations provided to County Staff from the League of Oil Impacted Coloradans (LOGIC) and the Larimer Alliance.

Q13 Do you have any other suggestions for topics to add?

Please see the detailed recommendations provided to County Staff from the League of Oil Impacted Coloradans (LOGIC) and the Larimer Alliance.

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings?

Name

Tom Rhodes

Email Address

tomrhodes2010@gmail.com

#12

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Saturday, November 30, 2019 7:49:39 PM
Last Modified: Saturday, November 30, 2019 7:53:46 PM
Time Spent: 00:04:07
IP Address: 75.71.65.71

Page 1

- Q1** Are you associated with a group or organization that will be providing comments to this questionnaire? **No**
-
- Q2** Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose? **Respondent skipped this question**
-
- Q3** Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits? **Respondent skipped this question**
-
- Q4** Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities.
- | | |
|--|-------------------|
| General | Dislike |
| Air Quality | Dislike |
| Leak Detection and Repair | Dislike |
| Spills and Releases | Dislike |
| Well Liquids Unloading | Dislike |
| Noise | Dislike |
| Odors | Dislike |
| Dust | Dislike |
| Access | No Comment |
| Chemical Handling | Dislike |
| Recycle, Reuse and Disposal of Fluids | Dislike |
| Water Bodies | Dislike |
| Visual | Dislike |
| Well Plugging and Abandonment | Dislike |
| Flammable Material | Dislike |
| Removal of Equipment | No Comment |
| Maintenance of machinery | No Comment |
| Flow Lines, Transfer Lines and Gathering Lines | Dislike |
| Temporary Water lines | Dislike |
| Financial Assurance | No Comment |
-
- Q5** Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities? **Respondent skipped this question**
-
- Q6** Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities? **Respondent skipped this question**
-
- Q7** Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements? **Respondent skipped this question**
-
- Q8** Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals? **Respondent skipped this question**
-
- Q9** Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections? **Respondent skipped this question**

Q10 Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation?

Respondent skipped this question

Q11 Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification?

Respondent skipped this question

Q12 Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions?

Respondent skipped this question

Q13 Do you have any other suggestions for topics to add?

The minimum setback needs to be 2500ft and greater for vulnerable populations. Also, the cities whose roads are being used by the rigs in the county need to receive a percentage of a tax to maintain those roads.

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings?

Respondent skipped this question

#13

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Saturday, November 30, 2019 9:58:17 PM
Last Modified: Saturday, November 30, 2019 11:20:01 PM
Time Spent: 01:21:43
IP Address: 76.25.159.173

Page 1

Q1 Are you associated with a group or organization that will be providing comments to this questionnaire? **No**

Q2 Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose?

I wish to see the County addressing and regulating all stages, including exploration and seismic testing

Q3 Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits?

Are public meetings and notification part of the process? I think the public and businesses within minimum 2,000 feet should be made aware and able to attend informational and decision making meetings

Q4 Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities.

General	Dislike
Air Quality	Dislike
Leak Detection and Repair	Dislike
Spills and Releases	Generally Like(Needs Clarification or Improvement)
Well Liquids Unloading	Generally Like(Needs Clarification or Improvement)
Noise	Generally Like(Needs Clarification or Improvement)
Odors	Dislike
Dust	Like Where it is Headed(No Substantive Change)
Access	Generally Like(Needs Clarification or Improvement)
Chemical Handling	Generally Like(Needs Clarification or Improvement)
Recycle, Reuse and Disposal of Fluids	Dislike
Water Bodies	Dislike
Visual	Like Where it is Headed(No Substantive Change)
Well Plugging and Abandonment	Generally Like(Needs Clarification or Improvement)
Flammable Material	Like Where it is Headed(No Substantive Change)
Waste Disposal	Like Where it is Headed(No Substantive Change)
Removal of Equipment	Like Where it is Headed(No Substantive Change)
Maintenance of machinery	Like Where it is Headed(No Substantive Change)
Flow Lines, Transfer Lines and Gathering Lines	Dislike
Temporary Water lines	Generally Like(Needs Clarification or Improvement)
Financial Assurance	Dislike

Q5 Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities?

Protecting our air and water need to be top priority, over profits for O&G. This means requiring the items that say "economically infeasible or impractical." Many other local governments have done it. Please follow their example. Also, close the 90 day loophole for emissions. Our air quality is poor. We must make serious efforts to turn it around and not add to it. The regulations appear to be flexible for the operators benefit. Leak detection should be done by a 3rd party, not the operator self reporting. Under odors, I'm shocked suggestion of keeping windows closed 24/7 or relocating is considered okay. Who's paying for me to temporarily relocate if the odors are bad enough? Is that fee going to be written into the regulations? Please require mapping of flow lines, etc. Please include setbacks from homes, parks, schools and water sources and setbacks from existing oil wells for new development.

Q6 Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities?

Please require these items, not just encourage. These are things that will protect our air and environment

Q7 Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements?

Respondent skipped this question

Q8 Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals?

Respondent skipped this question

Q9 Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections?

I like letter B but would like to see some specifics. The County should hire an inspector for this job

Q10 Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation?

please make sure the total cost for the life of the well is covered in bonding. Also, is the transportation fee set should adequately cover costs to repair damage to roads from all the truck traffic

Q11 Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification?

Respondent skipped this question

Q12 Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions?

Respondent skipped this question

Q13 Do you have any other suggestions for topics to add?

Respondent skipped this question

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings?

Respondent skipped this question

#14

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Sunday, December 01, 2019 7:42:37 PM
Last Modified: Sunday, December 01, 2019 7:44:44 PM
Time Spent: 00:02:07
IP Address: 73.168.211.179

Page 1

- Q1** Are you associated with a group or organization that will be providing comments to this questionnaire? **Yes,**
 If so what is the name of the Organization?:
 King Operating Corp. and Wellington Operating Co.
- Q2** Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose? **Respondent skipped this question**
- Q3** Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits? **Respondent skipped this question**
- Q4** Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities. **Respondent skipped this question**
- Q5** Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities? **Respondent skipped this question**
- Q6** Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities? **Respondent skipped this question**
- Q7** Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements? **Respondent skipped this question**
- Q8** Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals? **Respondent skipped this question**
- Q9** Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections? **Respondent skipped this question**
- Q10** Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation? **Respondent skipped this question**
- Q11** Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification? **Respondent skipped this question**
- Q12** Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions? **Respondent skipped this question**
- Q13** Do you have any other suggestions for topics to add?

King Operating Corporation and Wellington Operating Company are submitting a joint comment letter by email to Matt Lafferty.

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings?

Name

Tom Shaw

Email Address

thshaw@msn.com

November 2019 Oil & Gas Questionnaire Responses

#1

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Thursday, November 14, 2019 10:22:29 AM
Last Modified: Thursday, November 14, 2019 11:35:43 AM
Time Spent: 01:13:13
IP Address: 73.243.83.218

Page 1

Q1 Are you associated with a group or organization that will be providing comments to this questionnaire? **No**

Q2 Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose?

No

Q3 Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits?

Should there be a new zoning in Larimer County for oil/gas wells and well production sites? Future zoning could change, but a record of this zoning must be maintained so that future purchasers would know the history of this land.

Q4 Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities.

General	Generally Like(Needs Clarification or Improvement)
Air Quality	Generally Like(Needs Clarification or Improvement)
Leak Detection and Repair	Generally Like(Needs Clarification or Improvement)
Spills and Releases	Dislike
Well Liquids Unloading	Dislike
Noise	Generally Like(Needs Clarification or Improvement)
Odors	Dislike
Dust	Generally Like(Needs Clarification or Improvement)
Access	Dislike
Chemical Handling	Generally Like(Needs Clarification or Improvement)
Recycle, Reuse and Disposal of Fluids	Generally Like(Needs Clarification or Improvement)
Water Bodies	Dislike
Visual	Generally Like(Needs Clarification or Improvement)
Well Plugging and Abandonment	Dislike
Flammable Material	Like Where it is Headed(No Substantive Change)
Waste Disposal	Generally Like(Needs Clarification or Improvement)
Removal of Equipment	Like Where it is Headed(No Substantive Change)
Maintenance of machinery	Generally Like(Needs Clarification or Improvement)
Flow Lines, Transfer Lines and Gathering Lines	Dislike
Temporary Water lines	Generally Like(Needs Clarification or Improvement)
Financial Assurance	Dislike

Q5 Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities?

Not only the applicant, but all successors or assignees must follow these same standards.

Air quality standards must be met starting at day 1 and continuing for the life of the site.

Not just the surface must be restored, but underground to an appropriate distance, perhaps 20 feet.

Even if cleanup is deferred the applicant is still responsible and must respond immediately to initiate cleanup.

Even if technically infeasible to fix, the leak must be stopped immediately.

Technically or operationally infeasible is an ill defined term and means different levels of competence to different operators. Depending upon where this term is used, subsequent action halting the detriment to health or the environment must be defined when the operator makes that claim.

All emissions during well unloading must be captured.

Construction noise must be contained if it exceeds noise levels for zoning in the adjacent properties.

Odor must be continually monitored. The goal is to respond and correct before a complaint can be registered.

The access must be monitored at least daily to ensure that no trackout exists on public roads, sidewalks or right of way. Any trackout must be swept up as soon as it is observed.

All operating equipment must be properly balanced so that ground transmission of noise from drilling and operations is minimized.

If Drilling, completion flowback and produced fluids are not recycled they must be transported to a hazardous waste facility approved for handling that waste.

Proper documentation needs to be used to show that no waste is lost enroute.

Ground water monitoring wells should be encouraged. Any operational water wells located within 1000 feet of the operation must be sampled, beginning one week before start of activity, on a weekly basis to ensure that no change in water quality is observed.

It is the responsibility of all on site employees to maintain the trash and debris free site.

Maintenance involving any fluid (oil, ATF, brake, hydraulic, ...) must be performed over an impervious surface. Any fluid spills from maintenance must be cleaned immediately. Appropriate cleanup material must be available on site if maintenance or fueling is performed.

Applicant must maintain environmental insurance in perpetuity for failure to follow all standards when operating or closing down operations.

Q6 Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities?

Drilling fluids should reference the same list of prohibited chemicals noted in Section 17.3 for fracturing fluid.

Q7 Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements?

A trackout plan should also be required.

Q8 Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals?

Respondent skipped this question

Q9 Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections?

Property inspection is allowed 24 hours per day on any day.

Following a spill, air quality or water quality violation the property must pass inspection before being allowed to restart operation.

Q10 Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation?

Respondent skipped this question

Q11 Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification?

Respondent skipped this question

Q12 Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions?

Respondent skipped this question

Q13 Do you have any other suggestions for topics to add?

Respondent skipped this question

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings?

Name

Marc Brown

Email Address

marcbrown@comcast.net

#2

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Thursday, November 14, 2019 9:05:09 PM
Last Modified: Thursday, November 14, 2019 9:44:03 PM
Time Spent: 00:38:53
IP Address: 71.205.251.231

Page 1

Q1 Are you associated with a group or organization that will be providing comments to this questionnaire? **No,**
 If so what is the name of the Organization?:
 Ms.

Q2 Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose?

no

Q3 Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits?

no

Q4 Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities.

General	Generally Like(Needs Clarification or Improvement)
Air Quality	Dislike
Leak Detection and Repair	Dislike
Spills and Releases	Like Where it is Headed(No Substantive Change)
Well Liquids Unloading	Like Where it is Headed(No Substantive Change)
Noise	Like Where it is Headed(No Substantive Change)
Odors	Dislike
Dust	Dislike
Access	Like Where it is Headed(No Substantive Change)
Chemical Handling	Like Where it is Headed(No Substantive Change)
Recycle, Reuse and Disposal of Fluids	Dislike
Water Bodies	Dislike
Visual	Like Where it is Headed(No Substantive Change)
Well Plugging and Abandonment	Like Where it is Headed(No Substantive Change)
Flammable Material	Like Where it is Headed(No Substantive Change)
Waste Disposal	Like Where it is Headed(No Substantive Change)
Removal of Equipment	Like Where it is Headed(No Substantive Change)
Maintenance of machinery	Like Where it is Headed(No Substantive Change)
Flow Lines, Transfer Lines and Gathering Lines	Like Where it is Headed(No Substantive Change)
Temporary Water lines	Dislike
Financial Assurance	Dislike

Q5 Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities?

Many sections are too vague using language such as ..."unless ...economically infeasible or impractical"(B.3, 4, and 5); "unless technically or operationally infeasible" (C.3); "Best management practices" (E and H.1) "to the extent reasonably possible" (G.2),"unless technically infeasible"(K.1, T.1) ; "We encourage.." (G.4) Language should be specific allowing for no interpretation or room for debate. If it is not feasible, the facility should not be operating. What exactly are "best management practices"? "strongly encouraged...should be changed to require definite practices not open to interpretation.

Q6 Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities?

Guidelines for O and G development applications are "strongly encouraged to incorporate..." These best practices should be spelled out and required. phrases such as "...unless technically infeasible" should not be part of these regulations. If it isn't technically feasible, the facility should not exist.

Q7 Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements?

The phrase "when relevant" should be part of these regulations. This allows too much interpretation.

Q8 Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals?

no

Q9 Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections?

no

Q10 Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation?

no

Q11 Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification?

no

Q12 Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions?

no

Q13 Do you have any other suggestions for topics to add?

COGG setbacks are not adequate. I would like to see setback distances of 2000 feet from any "outside activity areas" or any buildings. This is a minimum safety setback.

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings?

Name	Marion Cox
Email Address	cox.mari@gmail.com

#3

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Sunday, November 17, 2019 9:03:09 PM
Last Modified: Sunday, November 17, 2019 9:27:56 PM
Time Spent: 00:24:47
IP Address: 76.76.91.66

Page 1

Q1 Are you associated with a group or organization that will be providing comments to this questionnaire? **No**

Q2 Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose?

no

Q3 Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits?

yes, B. ii. add and present and future welfare of people, animals and the environment.

Q4 Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities.

General	Like Where it is Headed(No Substantive Change)
Air Quality	Dislike
Leak Detection and Repair	Dislike
Spills and Releases	No Comment
Well Liquids Unloading	No Comment
Noise	Dislike
Odors	Dislike
Dust	Dislike
Access	No Comment
Chemical Handling	Dislike
Recycle, Reuse and Disposal of Fluids	Dislike
Water Bodies	Generally Like(Needs Clarification or Improvement)
Visual	Generally Like(Needs Clarification or Improvement)
Well Plugging and Abandonment	Dislike
Flammable Material	No Comment
Waste Disposal	No Comment
Removal of Equipment	Dislike
Maintenance of machinery	No Comment
Flow Lines, Transfer Lines and Gathering Lines	No Comment
Temporary Water lines	No Comment
Financial Assurance	No Comment

Q5 Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities?

B.4. control by flare is hazardous to air quality and lights up the night sky
 G. 3. Odor complaints are serious, but the response system is too vague
 Where is the policy about concerns of ground vibrations, water disturbances and quakes?
 J. 2.If drilling is continued on an infrequent basis there should be a completion date set. How will the land be reclaimed? Specifically, plants and contours.
 N.1. Disclosure of abandoned well sites and flow lines needs to be public knowledge. How will people be informed in the future?

Q6 Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities?

no

Q7 Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements?

no

Q8 Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals?

no

Q9 Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections?

no

Q10 Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation?

no

Q11 Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification?

no

Q12 Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions?

no

Q13 Do you have any other suggestions for topics to add?

What exactly is the method of notifying the public about new wells, leaks, mitigation, hazards, etc. ?

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings?

Name	Teresa Jones
Email Address	teresajones@usa.net

#4

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Monday, November 18, 2019 12:20:23 PM
Last Modified: Monday, November 18, 2019 12:39:53 PM
Time Spent: 00:19:29
IP Address: 129.82.253.186

Page 1

Q1 Are you associated with a group or organization that will be providing comments to this questionnaire? **No**

Q2 Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose? **Respondent skipped this question**

Q3 Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits? **Respondent skipped this question**

Q4 Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities.

General	Dislike
Air Quality	Dislike
Leak Detection and Repair	Dislike
Spills and Releases	Dislike
Well Liquids Unloading	Dislike
Noise	Dislike
Odors	No Comment
Dust	No Comment
Access	No Comment
Chemical Handling	Dislike

Q5 Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities?

- 17.3 A2-Oil and gas facilities need to be located to minimize impacts on residential neighborhoods and schools.
- 17.3 General comment on all sections--get rid of the language about "unless it is economically infeasible or impractical". Economics don't rule over health, environment and public safety.
- 17.3C Leak detection and repair needs to be more than semi annual--continuous monitoring should be required.
- 17.3D Why would remediation of spills/releases be deferred to COGCC?
- 17.3E How are emissions monitored during well liquid unloading?
- 17.3F Permissible noise level should take into account surrounding land use, especially if that is residential.
- 17.3J What is the process to verify chemical composition?

Q6 Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities? **Respondent skipped this question**

Q7 Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements? **Respondent skipped this question**

Q8 Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals? **Respondent skipped this question**

Q9 Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections? **Respondent skipped this question**

Q10 Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation?

Respondent skipped this question

Q11 Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification?

Respondent skipped this question

Q12 Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions?

Respondent skipped this question

Q13 Do you have any other suggestions for topics to add?

Have you looked at the Adams county regulations for guidance. I believe they are quite good.

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings?

Name

Shelly Carroll

Email Address

shellycarroll@msn.com

#5

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Monday, November 18, 2019 7:27:02 PM
Last Modified: Monday, November 18, 2019 7:31:05 PM
Time Spent: 00:04:03
IP Address: 66.109.209.160

Page 1

Q1 Are you associated with a group or organization that will be providing comments to this questionnaire? **No**

Q2 Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose?

It seems to me that Larimer County should encourage reuse of water to save fresh water sources. In this regard, Larimer County should encourage use of produced water as a fracking fluid. The way I read the proposed regs it looks like only fresh water can be used as a fracking fluid.

Q3 Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits?

no

Q4 Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities.

General	Generally Like(Needs Clarification or Improvement)
Air Quality	Generally Like(Needs Clarification or Improvement)
Leak Detection and Repair	Generally Like(Needs Clarification or Improvement)
Spills and Releases	Generally Like(Needs Clarification or Improvement)
Well Liquids Unloading	Generally Like(Needs Clarification or Improvement)
Noise	Generally Like(Needs Clarification or Improvement)
Odors	Generally Like(Needs Clarification or Improvement)
Dust	Generally Like(Needs Clarification or Improvement)
Access	Generally Like(Needs Clarification or Improvement)
Chemical Handling	Generally Like(Needs Clarification or Improvement)
Recycle, Reuse and Disposal of Fluids	Dislike
Water Bodies	Dislike
Visual	Dislike

Q5 Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities? **Respondent skipped this question**

Q6 Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities? **Respondent skipped this question**

Q7 Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements? **Respondent skipped this question**

Q8 Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals? **Respondent skipped this question**

Q9 Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections? **Respondent skipped this question**

Q10 Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation? **Respondent skipped this question**

Q11 Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification?

Respondent skipped this question

Q12 Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions?

Respondent skipped this question

Q13 Do you have any other suggestions for topics to add?

Respondent skipped this question

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings?

Name

Tommy Raye

Email Address

tommy@watersupplyllc.com

#6

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Tuesday, November 26, 2019 11:25:05 AM
Last Modified: Tuesday, November 26, 2019 12:29:06 PM
Time Spent: 01:04:01
IP Address: 165.127.8.254

Page 1

Q1 Are you associated with a group or organization that will be providing comments to this questionnaire? **Yes,**
 If so what is the name of the Organization?:
 Colorado Department of Public Health and Environment

Q2 Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose?
 Does the County just intend to establish regulations for drilling and production, or would the County also like to regulate hydraulic fracturing and flowback? If so, consider adding those terms to Section 17.1.

Q3 Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits? **Respondent skipped this question**

Q4 Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities. **Respondent skipped this question**

Q5 Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities?

Consider revising Section 17.3.A.2 to read "Oil and Gas facilities should be located to minimize impacts on public health, safety, welfare the environment and agricultural operations."

Consider revising Section 17.3.A.2 to fully spell out and abbreviate Colorado Department of Public Health and Environment (CDPHE) Air Pollution Control Division (APCD). Also, the word "for" should be added to the following excerpt "and the rules and regulations promulgated by the AQCC [for] all applicable emission sources."

Consider revising Section 17.3.A.4 to read "98% destruction [or] removal efficiency." Manufacturer data is typically based on "destruction efficiency". It's best to be consistent with Air Quality Control Commission regulations and require operators to have the device meet 98% destruction or removal efficiency.

17.3.E- What do you mean by "at least 90% emissions when utilizing combustion to control venting shall be employed at all facilities"? Do you mean 90% emissions reduction, 90% destruction or removal efficiency? Why 90% and not 98%?

17.3.G- consider abbreviating CDPHE and AQCC because those terms should have already been spelled out fully in previous provisions.

Consider revising 17.3.H.4 to read "Unless otherwise approved by the County Health and Engineering Department, only water will be used for dust suppression activities within 300 feet of the ordinary high-water mark of any body of water."

17.3.M.4.- 4. It appears "be installed" or some similar phrase is missing from this section "Fencing shall [be installed] for all the phases of an Oil and Gas facility development to ensure the security and visual aesthetics of the use."

Q6 Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities?

Consider revising 17.4.2.d. to read "Wipe down drill pipes as they exit the wellbore". "Each time drilling operation 'trips' out of hole" is worded somewhat confusingly.

Consider revising 17.4.2.d. to read "manufacturer's recommended specifications" because "specifications" is more encompassing than "levels"

Q7 Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements?

Respondent skipped this question

Q8 Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals?

Respondent skipped this question

Q9 Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections?

Respondent skipped this question

Q10 Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation?

Respondent skipped this question

Q11 Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification?

Respondent skipped this question

Q12 Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions?

Respondent skipped this question

Q13 Do you have any other suggestions for topics to add?

Respondent skipped this question

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings?

Name

Sean Hackett

Email Address

sean.hackett@state.co.us

#7

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Friday, November 29, 2019 6:40:00 AM
Last Modified: Friday, November 29, 2019 6:54:55 AM
Time Spent: 00:14:55
IP Address: 108.18.193.125

Page 1

Q1 Are you associated with a group or organization that will be providing comments to this questionnaire? **No**

Q2 Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose?

Yes, in Section A, the language "and reasonable" should be removed. The intent is health & safety first, regardless of the qualifier word "reasonable". Further "to the extent practical" should also be removed. This is also a qualifier and vague phrase that does not belong based on prioritizing health & safety as being the required outcome.

Q3 Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits?

Yes, "Reasonable and necessary mitigation steps have been taken" is again "light" language that reduces the goal of producing public health. This should state "REQUIRED mitigation steps have been taken..."

Q4 Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities.

General	No Comment
Air Quality	Dislike
Leak Detection and Repair	Dislike
Spills and Releases	Dislike
Well Liquids Unloading	Dislike
Noise	Dislike
Odors	Dislike
Dust	Dislike
Access	Dislike
Chemical Handling	Dislike
Recycle, Reuse and Disposal of Fluids	Dislike
Water Bodies	Dislike
Visual	Dislike
Well Plugging and Abandonment	Dislike
Flammable Material	Dislike
Waste Disposal	Dislike
Removal of Equipment	Dislike
Maintenance of machinery	Dislike
Flow Lines, Transfer Lines and Gathering Lines	Dislike
Temporary Water lines	Dislike
Financial Assurance	Dislike

Q5 Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities?

All sub-sections that contain language such as "unless the application demonstrates that it is economically infeasible or impractical to utilize such a system.", "unless it is demonstrated by the application materials the utilization of such equipment is not economically feasible or practical.", "unless technically or operationally infeasible.", "unless technically infeasible." should be revised. Again, SB181 makes it clear that health & safety should be prioritized first. It is not appropriate, nor in line with this objective, to provide such easy "outs" as it is possible to say anything is economically practical. This in its current state is not acceptable. Spills should be reported immediately instead of waiting 24 hours.

Q6 Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities?

Again, there should be no such language as "unless it is technically infeasible." Anything could be framed as "technically infeasible". The requirement is human health & safety, environment first.

Q7 Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements?

The reclamation plan should include a bond amount to ensure the land within the county is in fact restored regardless of the state of the opportunity at the time that this is required.

Q8 Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals?

Respondent skipped this question

Q9 Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections?

Respondent skipped this question

Q10 Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation?

Respondent skipped this question

Q11 Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification?

Respondent skipped this question

Q12 Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions?

Respondent skipped this question

Q13 Do you have any other suggestions for topics to add?

Respondent skipped this question

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings?

Name

Kevin Krause

Email Address

kevkrause@gmail.com

#8

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Friday, November 29, 2019 2:19:41 PM
Last Modified: Friday, November 29, 2019 4:43:39 PM
Time Spent: 02:23:57
IP Address: 72.19.141.120

Page 1

Q1 Are you associated with a group or organization that will be providing comments to this questionnaire?

No,
 If so what is the name of the Organization?:
 I am submitting these comments independently.

Q2 Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose?

- A. Delete: "To the extent practicable" - not necessary and weaken the language
- B.4. Add: "and wildlife habitat"
- B.5. Delete: "as appropriate" - not necessary, as the rest of the phrase makes appropriateness obvious
- B.6. Rewrite or delete - is vague and unenforceable

Q3 Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits?

Why does this section not follow the same format as previous section? (17.1. A. then 1.; whereas 17.2 A. then a.)

Please put oil and gas activities in a dedicated Special Review section!

It makes a lot more sense to create a dedicated Special Review section for oil and gas activities, and would make compliance and enforcement more straightforward than the suggested referencing to other Code sections.

But, if this proposed language is kept then please INCLUDE:

- * more public participation opportunities
- * do not leave decision responsibility only to the planning director
- * clarify the actual title of the referenced planning director

And

B.a.ii. Rephrase/clarify: "Reasonable and necessary mitigation" - if the County does not clearly define this statement it will be unenforceable, and potentially the subject of legal challenge

Q4 Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities.

General	Generally Like(Needs Clarification or Improvement)
Air Quality	Generally Like(Needs Clarification or Improvement)
Leak Detection and Repair	Generally Like(Needs Clarification or Improvement)
Spills and Releases	Generally Like(Needs Clarification or Improvement)
Noise	Generally Like(Needs Clarification or Improvement)
Odors	Generally Like(Needs Clarification or Improvement)
Dust	Generally Like(Needs Clarification or Improvement)
Access	Generally Like(Needs Clarification or Improvement)
Chemical Handling	Generally Like(Needs Clarification or Improvement)
Recycle, Reuse and Disposal of Fluids	Generally Like(Needs Clarification or Improvement)
Water Bodies	Generally Like(Needs Clarification or Improvement)
Visual	Generally Like(Needs Clarification or Improvement)
Well Plugging and Abandonment	Generally Like(Needs Clarification or Improvement)
Flammable Material	Generally Like(Needs Clarification or Improvement)
Waste Disposal	Generally Like(Needs Clarification or Improvement)
Removal of Equipment	Generally Like(Needs Clarification or Improvement)
Maintenance of machinery	Generally Like(Needs Clarification or Improvement)
Flow Lines, Transfer Lines and Gathering Lines	Generally Like(Needs Clarification or Improvement)
Temporary Water lines	Generally Like(Needs Clarification or Improvement)
Financial Assurance	Generally Like(Needs Clarification or Improvement)

Q5 Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities?

A.1. Add "all" before applicable federal . . .

B.1. Change "The use?" to: "All facilities and operations"

B.1. Add "emissions" before "emission sources" - because they could be different

B.1. Add, at the end, and State and County health departments.

B.3. Delete: from "unless" to the end of the sentence - too vague and County has such authority under other sections

B.4. Delete: "or"

B.4. Delete from "unless" to end of sentence - vague and unenforceable. And, how would the County make sure determination other than the unsupported word of the operator?

B.4. Regarding flaring: The oil and gas industry has admitted that flaring is NOT necessary, except in limited emergency situations. Larimer County needs to clearly and definitively state that flaring is prohibited except in limited emergency situations AND define specifically what those emergency situations are.

B.5. Delete from "unless" to end of sentence - vague and unenforceable. This is another instance of allowing the industry to define its own standards - and I don't think that's what the residents of Larimer County have in mind

B.7. Change "should" to "shall" - "Should" is a nonenforceable term

B.7.d. Add clarification of when "delay" shall occur (as opposed to "suspension" by adding: "if suspension would create unsafe conditions," and define difference between "suspend" and "delay"

B.7.e. Change "or" or "and"

B.7.f. Delete "will" and change "would" to "could"

C.1. Change or delete: "modern leak detection technologies and equipment" - vague and unenforceable, as well as being industry defined

C.2. & 3. Regarding "verified": Who verifies? How? Self-reporting is not adequate.

E.1. Regarding "best management practices": As defined by whom? Currently this term is generally defined by the API in industry-friendly terms, and in many cases does not serve or benefit the health and safety of the general public or the environment. I do not believe the residents of Larimer County are eager to have the industry continue to define what keeps the rest of use safe!

F.1. Should the included weekend day be further defined as a day with operations are occurring in order for such analyses to accurately reflect the noise levels?

G.4. Delete "We encourage" and change to "The operator SHALL communicate . . ."

H.1. See above regarding "best management practices."

H.3. Add that SDS shall be made available to the public, in a timely manner (please define what is timely), along with requiring written justification why the use of such is necessary, practical, and without less toxic alternative

I.1.c. Why is the County requiring the use of Magnesium Chloride when there are more environmentally-friendly methods of treatment?

I. Add new subsection 2. to cover operations occurring with in road GID/taxing district and requiring a. notice to all households within the GID and b. permitting the GID to request that Magnesium Chloride not be used

J. Add new subsection 4. reserving to the County the right to add to the list in subsection 3. at any time as the County deems necessary to protect the health, safety, and welfare of the citizens and environment

K.1. How shall the fluids be "recycled"?

K.1. & 3. "unless technically infeasible" is vague, unenforceable and allows interpretation to be industry-driven, rather than by the County

L.2. Delete "that are typically" - language without this qualifier does what the intent is AND allows the County to request unusual tests that could be critical

M.3. After "off-site" add "and upwards"

M.5. Change from "6 months" to "3 months, seasonal weather permitting"

N.1.d. Change "any" to "all" and "gathering or flow lines" to "gathering, flowlines, and pipelines"

Q.2. Sentence is repetitive

R.2. Add "contained" before "impervious" and define "storm events"

S.1. Change "of" to "or" and include "wildlife habitat in the list

S.2. This statement is confusing

S.3. "shall be provided" by whom? to whom? by when?

U.1. Change from "must demonstrate the financial capability" to "must provide proof of bonding, naming the County as the beneficiary sufficient to reclaim . . ." and define "disturbed areas" - what constitutes a disturbed area, does such include the length of drill lines and pipelines?

Q6 Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities?

A. This entire section encourages non-compliance by all the uses of encouragement; needs to firmly and definitively set forth the powers and authority that SB-181 has permitted local government, i.e., the County, instead of being so darn flaky!

A. Change "strongly encouraged to" to "shall" and delete "Where reasonably necessary"

A.1. Change "are encouraged" to "may be required to"

A.1.f. Elimination of flaring MUST be a REQUIREMENT in ALL cases, except in specifically defined emergencies

A.2. Change "are encouraged" to "may be required"

A.2.g. Define "'green frac' methods"

A.3. Change "are encouraged" to "may be required" and delete "unless technically infeasible"

Q7 Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements?

Why does this list omit most of the plans recommended in section 5 of the September 25, 2019 handouts to the task force?

A. Regulations needs to set forth standards as to when these are relevant or language that gives the County specific authority to determine when they are relevant

A. Does this list of submittals include plans that protect the environment and environmental resources, e.g., protection of natural lands and wildlife habitat?

Q8 Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals?

Did not have the opportunity to review Code section 22, but request that appeals to oil and gas applications include more public input than typical appeals.

Q9 Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections?

A. Change "may" in second sentence to "shall"

Q10 Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation?

Standards in this section must include bonding (held by or naming the County as the sole beneficiary) sufficient to cover potential costs related to the ENTIRE operation - not just the pad - and ALL RISKS to the soil, air, water, and wildlife impacted or related thereto

Q11 Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification?

Respondent skipped this question

Q12 Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions?

Respondent skipped this question

Q13 Do you have any other suggestions for topics to add?

1. Applicants should be required to cover all costs, including of 1) the County review process, 2) all reports/consultations required by the County, and 3) security or bonding sufficient to cover all potential reclamation / remediation / abandonment costs from well pad to end of drilling lines and all associated pipelines from soil, air, water, wildlife, and human destruction
2. Should be an oil and gas-specific Special Review process, and that O&G SR should include:
 - (1) Applicant requirement to engage with community prior to initiating SR requirements with the County
 - (2) Surface agreements shall not be finalized until the applicant has completed SR
 - (3) Applicants should be required to report all instances of non-compliance within the previous 10 years (and pending complaints) to staff during pre-application conference and to make such available to the public during the initial community engagement
 - (4) Pre-application conference shall be required prior to initiation of application and SR process - to review expectations of applicant and mitigate any possibility of mis-communication; should also include County/applicant discussion of location, impacts, etc., and how such might be mitigated as part of application/SR
 - (5) public engagement of prior notification of at least w weeks of all adjacent landowners and residents and businesses within one-half mile
 - (a) after pre-application conference and prior to application and
 - (b) during SR process in timely manner to allow County and applicant to make community-friendly amendments to application
3. Current SR process does not cover oil and gas specific issues that must be addressed to meet the standards and take full advantage of the powers granted local governments by SB-181. Examples include:
 - (1) alternative sites
 - (2) surface and groundwater protection / quality
 - (3) open / natural lands, including:
 - a. habitat and migration corridors
 - b. natural and historical landmarks
 - c. rare plants
 - d. floodplains and riparian corridors
 - e. wetlands
 - (4) agricultural lands
 - (5) impact on surrounding land uses
 - (6) pipeline mapping, and public disclosure of such
 - (7) 24-hours emergency contact information of at least 2 individuals with 24/7 decision-making authority
 - (8) proof of utility agreements
 - (9) traffic plan/assessment
 - (10) cost to GID road district residents
 - (11) setback requirements
 - (12) time frame requirements for
 - a. process
 - b. inactive well, before reclamation is required

In conclusion,

Thank you for the opportunity to express my concerns.

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings?

Name	Sherri Valentine
Email Address	sher@skybeam.com

#9

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Saturday, November 30, 2019 2:47:55 PM
Last Modified: Saturday, November 30, 2019 3:36:35 PM
Time Spent: 00:48:40
IP Address: 129.19.6.125

Page 1

Q1 Are you associated with a group or organization that will be providing comments to this questionnaire?

Yes,
 If so what is the name of the Organization?:
 Platte River Power Authority, Fort Collins, Colorado

Q2 Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose?

In general, Platte River Power Authority ("Platte River") recommends that Larimer County include protections intended to minimize the impacts of oil and gas development on sensitive and critical facilities within the County. These would include additional protections for critical infrastructure and facilities that provide essential public services to Larimer County residents, such as power plants and electrical utility infrastructure. At Section 17.3(2), the proposed Oil and Gas Regulations ("Regulations") note the intent is to minimize impacts on agricultural operations. This wording is too narrow. It should include minimizing impacts on critical facilities and infrastructure and residential areas and incorporate the new mandate of the Colorado Oil and Gas Conservation Commission ("COGCC") to protect and minimize adverse impacts to public health, safety and welfare, the environment, and wildlife resources. Further, Platte River believes the tone of the current Regulations is more advisory than regulatory. In many instances, the draft Regulations establish a requirement, but include language that the requirement may be avoided if compliance is "economically infeasible or impracticable." In other instances, the Regulations state "we encourage the Operator" to do something. We urge Larimer County to adopt requirements that provide clarity, both for oil and gas operators and the community, as to the exact standards required under the proposed Regulations. If applications for oil and gas facilities are processed through special review, open-ended language exposes the special review process to further attack.

Q3 Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits?

Respondent skipped this question

Q4 Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities.

General	Generally Like(Needs Clarification or Improvement)
Air Quality	Generally Like(Needs Clarification or Improvement)
Leak Detection and Repair	Generally Like(Needs Clarification or Improvement)
Spills and Releases	Generally Like(Needs Clarification or Improvement)
Chemical Handling	Generally Like(Needs Clarification or Improvement)
Water Bodies	Generally Like(Needs Clarification or Improvement)
Flammable Material	Generally Like(Needs Clarification or Improvement)
Flow Lines, Transfer Lines and Gathering Lines	Generally Like(Needs Clarification or Improvement)
Financial Assurance	Generally Like(Needs Clarification or Improvement)

Q5 Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities?

Section 17.3(B) deals with air quality. Subsection 4 provides that all emissions shall be routed to and controlled by a flare or combustor operated with at least 98% destruction removal efficiency. Instead of referencing "all emissions" to be controlled, there should be a specific reference to "hydrocarbons." Subsection 7 requires site operations to be modified on air quality action days posted by the Colorado Department of Public Health and Environment. Once these notices are posted they are effective until 4 p.m. the following day. Given the short timeframe to respond to a notice, operators potentially should be required to subscribe to air quality alerts via email. Additionally, the Regulations should define a process or require proper documentation to verify that operators responded to the air quality alerts. The Regulations should also clarify if the requirement to respond to air quality alerts applies countywide or only in the portion of the County located in the Denver Metro/North Front Range ozone nonattainment area.

Section 17.3(D) deals with spills and releases. Platte River believes that any application for an oil and gas facility should include a written plan for spill prevention, control, and countermeasures that would comply with local, state, and federal regulatory requirements.

Regulation 17.3(J)(2) requires that drilling and completion chemicals be removed within 60 days. Platte River encourages Larimer County to require these chemicals be removed within 30 days of drilling completion.

At Section 17.3(L)(1), we propose the language be changed to include the following: "The applicant shall provide documentation to the County, as required by the COGCC, demonstrating how the COGCC water quality protection standards are being complied with, including both surface and groundwater protections."

Section 17.3(S)(3) requires that operators provide the coordinates of all flow lines, gathering lines, and transfer lines, but does not specify when the operator must supply these coordinates. At Section 17.3(N)(1)(d), it states an operator must only supply these coordinates with the notice of completion of well abandonment for any decommissioned wells. We believe these coordinates should be provided within 30 days of completion of any flow lines, transfer lines, or gathering lines. Moreover, given the extreme hazards associated with flow lines, we encourage Larimer County to proactively regulate flow lines and advocate against waiting to see what standards the COGCC will adopt.

Q6 Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities?

Respondent skipped this question

Q7 Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements?

Platte River further encourages Larimer County to adopt a requirement that operators negotiate and obtain surface use agreements for any proposed facilities, and that all applications for oil and gas facilities must include a surface use agreement. At a minimum, Larimer County should mandate that operators obtain a surface use agreement if they intend to locate oil and gas operations near sensitive or critical facilities, including but not limited to power generation or energy utility infrastructure. Given the nature of energy delivery and the threat to public health and safety if it were disrupted, we believe requiring a surface use agreement for lands owned by or used for energy generation and delivery is essential to protect community welfare.

Q8 Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals?

Respondent skipped this question

Q9 Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections?

Respondent skipped this question

Q10 Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation?

Respondent skipped this question

Q11 Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification?

Respondent skipped this question

Q12 Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions?

Respondent skipped this question

Q13 Do you have any other suggestions for topics to add?

Platte River recommends that Larimer County adopt specific setback requirements and advocates against waiting to see what standards the COGCC adopts. At a minimum, we believe the 1,000-foot setback requirement for schools should be adopted for all occupied structures. The COGCC Director's Objective Criteria for the rule-making process subjects any proposed oil and gas well locations within 2,000 feet of an occupied structure to additional analysis. Platte River urges Larimer County to adopt a setback requirement in line with the 2,000 feet used in the Director's Objective Criteria. Additionally, Platte River recommends a setback requirement of 2,500 feet from sensitive and critical facilities, including electric generation facilities and substations.

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings?

Name **Caroline Schmiedt, Deputy General Counsel**
Email Address **schmiedtc@prpa.org**

#10

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Saturday, November 30, 2019 4:50:54 PM
Last Modified: Saturday, November 30, 2019 4:58:49 PM
Time Spent: 00:07:55
IP Address: 24.9.136.3

Page 1

- Q1** Are you associated with a group or organization that will be providing comments to this questionnaire? **No**
- Q2** Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose? **Respondent skipped this question**
- Q3** Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits? **Respondent skipped this question**
- Q4** Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities.
- | | |
|---------------------------------------|--|
| General | Like Where it is Headed(No Substantive Change) |
| Air Quality | Like Where it is Headed(No Substantive Change) |
| Leak Detection and Repair | Like Where it is Headed(No Substantive Change) |
| Spills and Releases | Like Where it is Headed(No Substantive Change) |
| Well Liquids Unloading | Like Where it is Headed(No Substantive Change) |
| Chemical Handling | Like Where it is Headed(No Substantive Change) |
| Recycle, Reuse and Disposal of Fluids | Like Where it is Headed(No Substantive Change) |
| Water Bodies | Like Where it is Headed(No Substantive Change) |
| Waste Disposal | Like Where it is Headed(No Substantive Change) |
- Q5** Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities? **Respondent skipped this question**
- Q6** Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities? **Respondent skipped this question**
- Q7** Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements? **Respondent skipped this question**
- Q8** Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals? **Respondent skipped this question**
- Q9** Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections? **Respondent skipped this question**
- Q10** Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation? **Respondent skipped this question**
- Q11** Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification? **Respondent skipped this question**
- Q12** Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions? **Respondent skipped this question**

Q13 Do you have any other suggestions for topics to add?

I am concerned with air quality and water conservation in Larimer County and Colorado, therefore I strongly support fair and equitable regulation of the oil and gas industry.

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings?

Name	Kevin Woodward
Email Address	kwoodward@yahoo.com

#11

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Saturday, November 30, 2019 5:31:43 PM
Last Modified: Saturday, November 30, 2019 5:40:29 PM
Time Spent: 00:08:45
IP Address: 67.174.104.39

Page 1

Q1 Are you associated with a group or organization that will be providing comments to this questionnaire?

Yes,
 If so what is the name of the Organization?:
 Larimer Alliance for Health, Safety & the Environment

Q2 Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose?

We strongly recommend the limitation of all uses of phrases that allow loopholes with regard to protection of public health, safety, and the environment. SB19-181 eliminated "economic feasibility" considerations from the state's oil and gas regulatory decisions, the COGCC Mission Change White Paper dated Nov. 1, 2019 affirmed this decision, and we encourage Larimer County to take a similar approach and eliminate loophole language such as "to the maximum extent practicable" and "where feasible."

Q3 Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits?

We find that the minimalist "Special Review and Minor Special Review requirements, as well as the "Supplemental Review" criteria referenced in 17.2.B neglect to include public notice or process regarding new oil and gas proposals and are void of an array of materials required by a number of other Colorado county governments that would allow the County to fully review and vet an oil and gas site proposal.

We recommend, at minimum:

- The development of a separate land use process and special use review process that is specific to new and existing oil and gas development and infrastructure.
- The development of a public process for each new oil and gas facility that includes a 60 days-notice of the permit application to all residents, landowners, and parents of school children attending a school within 1 mile of a proposed oil and gas site, public disclosure of all required documents submitted to the County by the Operator, and an independent environmental, financial, and risk analysis to be prepared and presented to the County, and public hearings before the County Planning Commission and Larimer County Commissioners.
- A detailed process for the submission of required materials by the operator to the county. We finally that a detailed list of required application materials, (as described in Section 17.5) be moved to Section 17.2.C. Furthermore, this section should clearly define the required planning documentation. This documentation should further ensure that the operator has a sense of the County's standards regarding protections of public health, safety, the environment and wildlife resources.

Q4 Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities. **Respondent skipped this question**

Q5 Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities?

-- We strongly recommend that the opening paragraph 17.3.A.2 include a required 2,000 foot setback from all residential or high occupancy buildings, outdoor parks, water bodies or other environmentally sensitive areas.

Southern Larimer County falls within Colorado's 8-hour ozone non-attainment area for Air Quality. Oil and gas development is one of the top contributors to greenhouse gas emissions. We believe that Larimer County residents deserve innovative local regulatory measures that require compliance without "feasibility and practicability" loopholes. The County should be clear about what it requires to protect the health and safety of its citizens and the environment.

-- We believe that the county should require certification of compliance with COGCC, CDHPE, AQCC and EPA air quality emission standards, as well as compliance with all OSHA work practice requirements regarding benzene exposure.

We recommend that the county conduct onsite baseline air quality monitoring ahead of all oil and gas permitting considerations, and should require annual Leak Detection and Repair inspections. The results of these inspections and annual onsite air quality monitoring should be reported to the County.

-- Operators should be required to incorporate best management practices with regard to maintenance activities, "tankless" production techniques, the use of telemetric control and monitoring systems, and control of hydrocarbon and VOC emissions.

-- Given that leaks and spills at oil and gas sites pose a threat to public health, safety and the environment, the County should exercise its right to require that any oil and gas well with an identified leak shall be shut down and not allowed to operate until the operator has provided evidence that the leak has been repaired if an immediate timeline for repair is not identified by the operator. We recommend specific requirements and timelines for reporting leaks and spills, and believe the county should make information regarding leaks and spills be available to the public

-- Detailed noise mitigation is an imperative component in the development of oil and gas regulations that are truly intended to protect public health, safety, welfare, the environment, and wildlife resources. We recommend that baseline daytime and nighttime noise levels be measured in Residential, Agricultural or Rural and Commercially zoned areas and no equipment operated in a manner so as to create noise which causes noise levels to exceed ambient noise by 3-10 decibels, depending on time of day and location.

-- We further recommend that the County create a complaint hotline for the purposes of health and nuisance complaints, including noise, odors, or other non-compliance concerns. Exposure to odors from oil and gas development can often be an initial sign of chemical exposure with acute impacts to public health. We find that the County regulations regarding odor, allow for potential unmitigated exposure and risk public health. We recommend that the County create a public comment portal that will also link with the COGCC.

-- Water bodies are extremely susceptible to impacts from oil and gas operations. Impacts to a variety of water bodies pose serious risk to public health, safety, welfare, and the environment. We recommend in Section 17.3.L a requirement that operators provide a water quality plan to that includes details such as the operator's plans for water quality testing, prevention of illicit or inadvertent discharges, stormwater discharge management, containment of pollutants, and spill notification and response as well as plans concerning downhole construction details and installation practices, including casing and cementing design to protect surface water and aquifers from contamination.

-- In addition to complying with the COGCC's plugging and abandonment requirements (section 17.3.N), we request the inclusion of soil and water assessments and air quality monitoring within 90 days of completion and at least once a year afterwards, and a permanent physical marking at the site of each abandoned well.

-- Flowlines, transfer lines, and gathering lines represent a significant amount of infrastructure mixed in communities and environmental resources. We strongly recommend setbacks and reverse setbacks commensurate with blowout and blast radiuses for new and existing pipelines using the existing scientific formula established by industry, a current and comprehensive mapping system, regular inspections and pressure tests. We also recommend that all pipelines be buried under at least four feet of cover soil and require the use of tracer wire to enable onsite detection.

Q6 Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities?

Protection of public health, safety, welfare and the environment, as required by SB19-181, means that local governments should be clear about their standard of operating and performance regarding oil and gas development. We strongly recommend that the language in Section 17.4 and elsewhere be direct and explicit, avoiding ambiguity or subjectivity. Therefore we ask that the County "require" (not "encourage") tankless production techniques as applicable, use zero emission dehydrators, use pressure suitable separator and vapor recovery units, use no-bleed continuous and intermittent pneumatic devices; the use of electric rigs and Tier 4 engines; use automated tank gauging, and prohibit flaring except during emergencies or upset conditions.

We also recommend that Section 17.4A.2 be moved to Section 17.3.G and language to "encourage" compliance be strengthened.

Q7 Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements?

Please see the detailed recommendations provided to County Staff from the League of Oil Impacted Coloradans (LOGIC) and the Larimer Alliance.

Q8 Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals?

Please see the detailed recommendations provided to County Staff from the League of Oil Impacted Coloradans (LOGIC) and the Larimer Alliance.

Q9 Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections?

Please see the detailed recommendations provided to County Staff from the League of Oil Impacted Coloradans (LOGIC) and the Larimer Alliance.

Q10 Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation?

Please see the detailed recommendations provided to County Staff from the League of Oil Impacted Coloradans (LOGIC) and the Larimer Alliance.

Q11 Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification?

Please see the detailed recommendations provided to County Staff from the League of Oil Impacted Coloradans (LOGIC) and the Larimer Alliance.

Q12 Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions?

Please see the detailed recommendations provided to County Staff from the League of Oil Impacted Coloradans (LOGIC) and the Larimer Alliance.

Q13 Do you have any other suggestions for topics to add?

Please see the detailed recommendations provided to County Staff from the League of Oil Impacted Coloradans (LOGIC) and the Larimer Alliance.

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings?

Name

Tom Rhodes

Email Address

tomrhodes2010@gmail.com

#12

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Saturday, November 30, 2019 7:49:39 PM
Last Modified: Saturday, November 30, 2019 7:53:46 PM
Time Spent: 00:04:07
IP Address: 75.71.65.71

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Q1 Are you associated with a group or organization that will be providing comments to this questionnaire?	No
Q2 Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose?	Respondent skipped this question
Q3 Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits?	Respondent skipped this question
Q4 Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities.	
General	Dislike
Air Quality	Dislike
Leak Detection and Repair	Dislike
Spills and Releases	Dislike
Well Liquids Unloading	Dislike
Noise	Dislike
Odors	Dislike
Dust	Dislike
Access	No Comment
Chemical Handling	Dislike
Recycle, Reuse and Disposal of Fluids	Dislike
Water Bodies	Dislike
Visual	Dislike
Well Plugging and Abandonment	Dislike
Flammable Material	Dislike
Removal of Equipment	No Comment
Maintenance of machinery	No Comment
Flow Lines, Transfer Lines and Gathering Lines	Dislike
Temporary Water lines	Dislike
Financial Assurance	No Comment
Q5 Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities?	Respondent skipped this question
Q6 Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities?	Respondent skipped this question
Q7 Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements?	Respondent skipped this question
Q8 Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals?	Respondent skipped this question
Q9 Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections?	Respondent skipped this question

Q10 Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation?

Respondent skipped this question

Q11 Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification?

Respondent skipped this question

Q12 Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions?

Respondent skipped this question

Q13 Do you have any other suggestions for topics to add?

The minimum setback needs to be 2500ft and greater for vulnerable populations. Also, the cities whose roads are being used by the rigs in the county need to receive a percentage of a tax to maintain those roads.

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings?

Respondent skipped this question

#13

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Saturday, November 30, 2019 9:58:17 PM
Last Modified: Saturday, November 30, 2019 11:20:01 PM
Time Spent: 01:21:43
IP Address: 76.25.159.173

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Q1 Are you associated with a group or organization that will be providing comments to this questionnaire? **No**

Q2 Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose?

I wish to see the County addressing and regulating all stages, including exploration and seismic testing

Q3 Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits?

Are public meetings and notification part of the process? I think the public and businesses within minimum 2,000 feet should be made aware and able to attend informational and decision making meetings

Q4 Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities.

General	Dislike
Air Quality	Dislike
Leak Detection and Repair	Dislike
Spills and Releases	Generally Like(Needs Clarification or Improvement)
Well Liquids Unloading	Generally Like(Needs Clarification or Improvement)
Noise	Generally Like(Needs Clarification or Improvement)
Odors	Dislike
Dust	Like Where it is Headed(No Substantive Change)
Access	Generally Like(Needs Clarification or Improvement)
Chemical Handling	Generally Like(Needs Clarification or Improvement)
Recycle, Reuse and Disposal of Fluids	Dislike
Water Bodies	Dislike
Visual	Like Where it is Headed(No Substantive Change)
Well Plugging and Abandonment	Generally Like(Needs Clarification or Improvement)
Flammable Material	Like Where it is Headed(No Substantive Change)
Waste Disposal	Like Where it is Headed(No Substantive Change)
Removal of Equipment	Like Where it is Headed(No Substantive Change)
Maintenance of machinery	Like Where it is Headed(No Substantive Change)
Flow Lines, Transfer Lines and Gathering Lines	Dislike
Temporary Water lines	Generally Like(Needs Clarification or Improvement)
Financial Assurance	Dislike

Q5 Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities?

Protecting our air and water need to be top priority, over profits for O&G. This means requiring the items that say "economically infeasible or impractical." Many other local governments have done it. Please follow their example. Also, close the 90 day loophole for emissions. Our air quality is poor. We must make serious efforts to turn it around and not add to it. The regulations appear to be flexible for the operators benefit. Leak detection should be done by a 3rd party, not the operator self reporting. Under odors, I'm shocked suggestion of keeping windows closed 24/7 or relocating is considered okay. Who's paying for me to temporarily relocate if the odors are bad enough? Is that fee going to be written into the regulations? Please require mapping of flow lines, etc. Please include setbacks from homes, parks, schools and water sources and setbacks from existing oil wells for new development.

Q6 Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities?

Please require these items, not just encourage. These are things that will protect our air and environment

Q7 Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements? **Respondent skipped this question**

Q8 Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals? **Respondent skipped this question**

Q9 Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections?

I like letter B but would like to see some specifics. The County should hire an inspector for this job

Q10 Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation?

please make sure the total cost for the life of the well is covered in bonding. Also, is the transportation fee set should adequately cover costs to repair damage to roads from all the truck traffic

Q11 Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification? **Respondent skipped this question**

Q12 Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions? **Respondent skipped this question**

Q13 Do you have any other suggestions for topics to add? **Respondent skipped this question**

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings? **Respondent skipped this question**

#14

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Sunday, December 01, 2019 7:42:37 PM
Last Modified: Sunday, December 01, 2019 7:44:44 PM
Time Spent: 00:02:07
IP Address: 73.168.211.179

Page 1

- Q1** Are you associated with a group or organization that will be providing comments to this questionnaire? **Yes,**
 If so what is the name of the Organization?:
 King Operating Corp. and Wellington Operating Co.
- Q2** Do you have detailed suggestions to add, remove or modify anything in Section 17. 1. - Intent and Purpose? **Respondent skipped this question**
- Q3** Do you have detailed suggestions to add, remove or modify anything in Section 17.2. - Required Process and Permits? **Respondent skipped this question**
- Q4** Please share your opinion on 17.3. - Standards Required for all Oil and Gas Facilities. **Respondent skipped this question**
- Q5** Do you have detailed suggestions to add, remove or modify anything in Section 17.3. - Standards Required for all Oil and Gas Facilities? **Respondent skipped this question**
- Q6** Do you have detailed suggestions to add, remove or modify anything in Section 17.4. - Guidelines for Oil and Gas Facilities? **Respondent skipped this question**
- Q7** Do you have detailed suggestions to add, remove or modify anything in Section 17.5. - Application Requirements? **Respondent skipped this question**
- Q8** Do you have detailed suggestions to add, remove or modify anything in Section 17.6. - Appeals? **Respondent skipped this question**
- Q9** Do you have detailed suggestions to add, remove or modify anything in Section 17.7. - Enforcement and Inspections? **Respondent skipped this question**
- Q10** Do you have detailed suggestions to add, remove or modify anything in Section 17.8. - Fees and Security for Reclamation? **Respondent skipped this question**
- Q11** Do you have detailed suggestions to add, remove or modify anything in Section 17.9. - Termination of Use or Modification? **Respondent skipped this question**
- Q12** Do you have detailed suggestions to add, remove or modify anything in Section 17.10. - Definitions? **Respondent skipped this question**
- Q13** Do you have any other suggestions for topics to add?

King Operating Corporation and Wellington Operating Company are submitting a joint comment letter by email to Matt Lafferty.

Q14 Please provide us with your contact information (optional) if you would like us to keep you informed about upcoming drafts, events and hearings?

Name

Tom Shaw

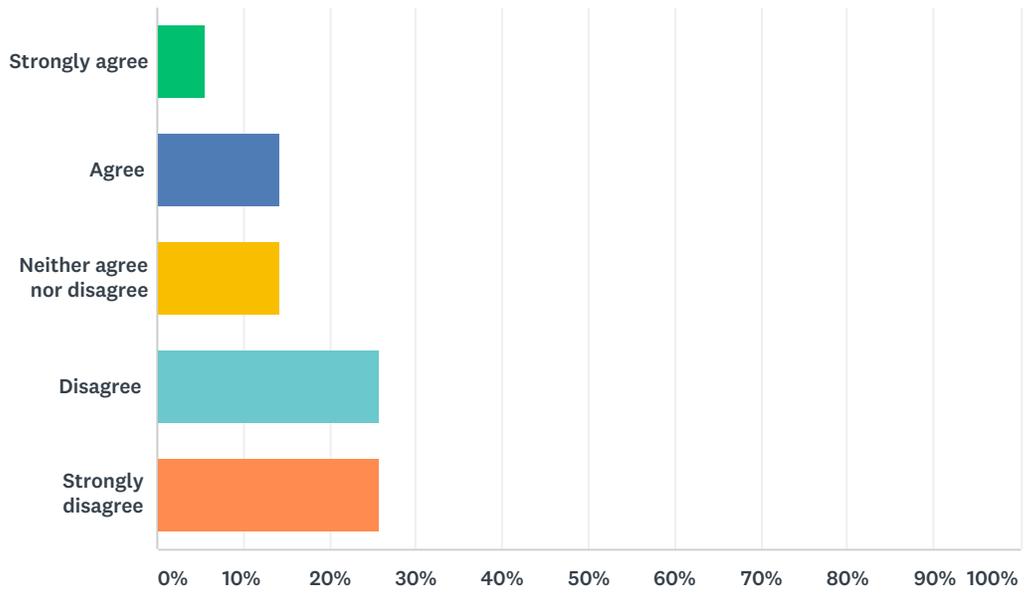
Email Address

thshaw@msn.com

September 2019 Oil & Gas Questionnaire Responses

Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)?
 (See Poster 2 for more information)

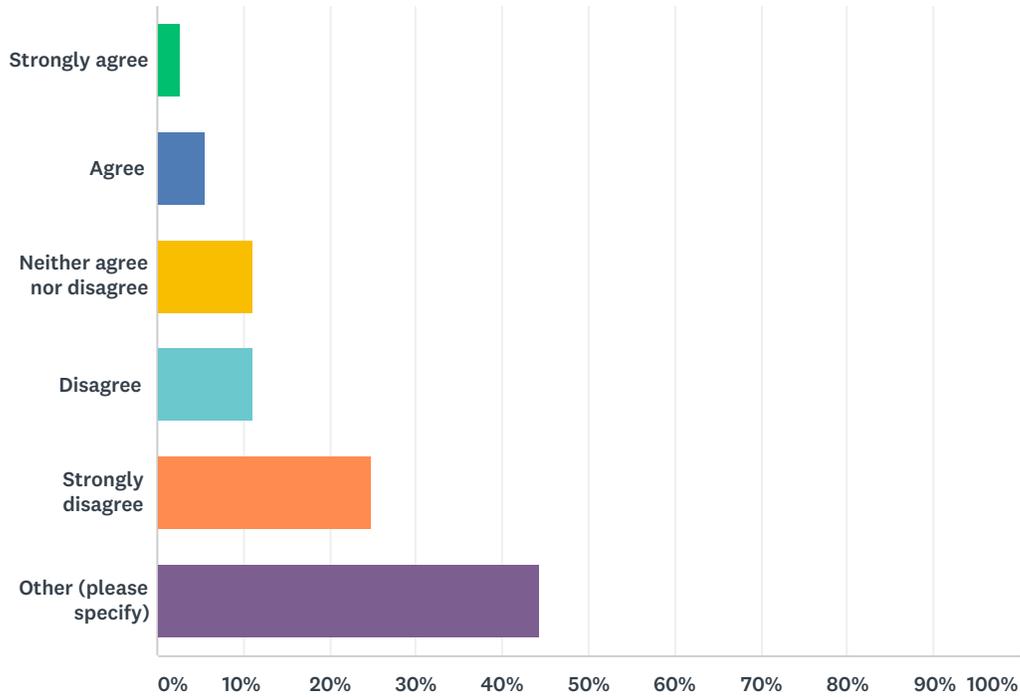
Answered: 35 Skipped: 2



ANSWER CHOICES	RESPONSES	
Strongly agree	5.71%	2
Agree	14.29%	5
Neither agree nor disagree	14.29%	5
Disagree	25.71%	9
Strongly disagree	25.71%	9
TOTAL		35

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information)

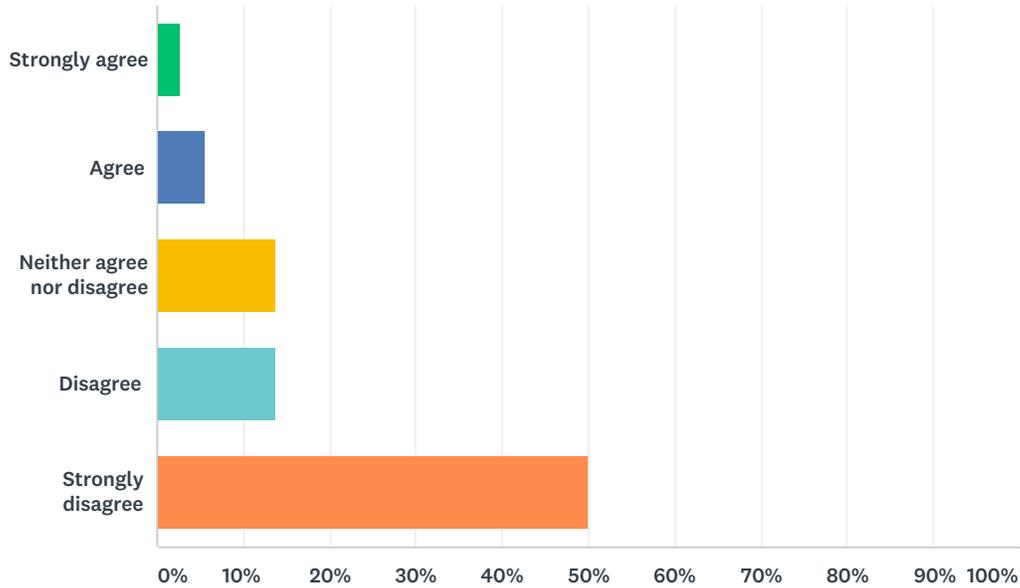
Answered: 36 Skipped: 1



ANSWER CHOICES	RESPONSES	
Strongly agree	2.78%	1
Agree	5.56%	2
Neither agree nor disagree	11.11%	4
Disagree	11.11%	4
Strongly disagree	25.00%	9
Other (please specify)	44.44%	16
TOTAL		36

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information)

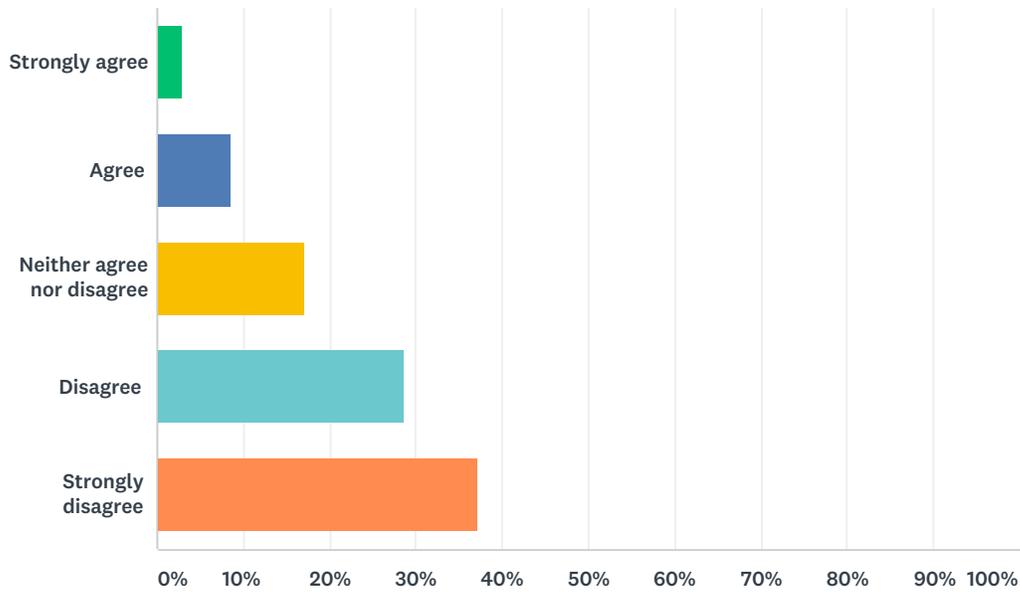
Answered: 36 Skipped: 1



ANSWER CHOICES	RESPONSES
Strongly agree	2.78% 1
Agree	5.56% 2
Neither agree nor disagree	13.89% 5
Disagree	13.89% 5
Strongly disagree	50.00% 18
TOTAL	36

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information)

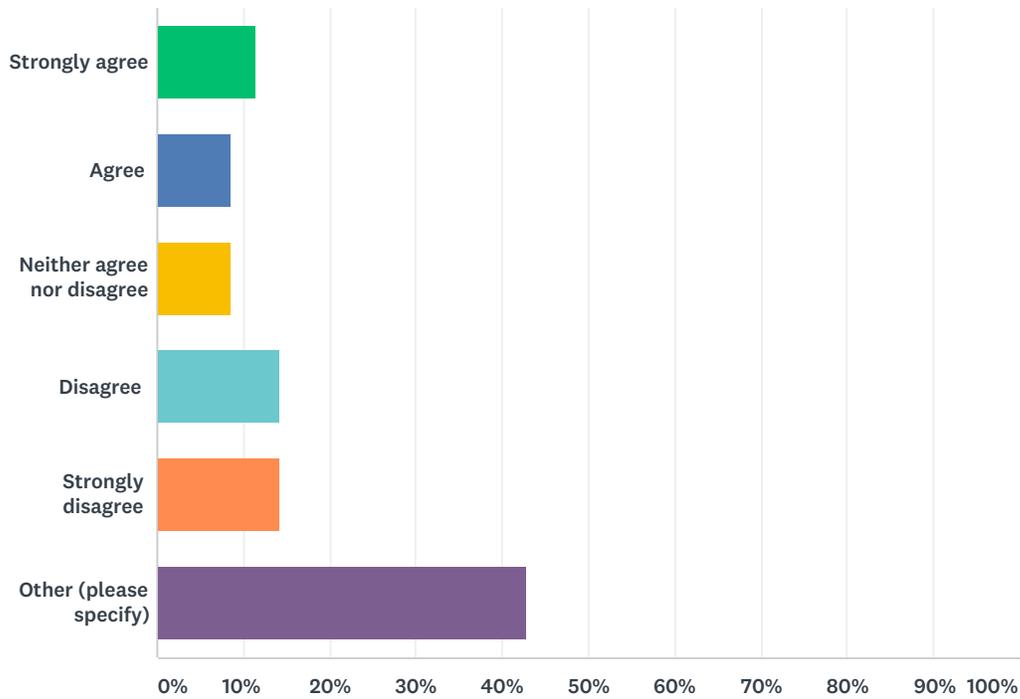
Answered: 35 Skipped: 2



ANSWER CHOICES	RESPONSES	
Strongly agree	2.86%	1
Agree	8.57%	3
Neither agree nor disagree	17.14%	6
Disagree	28.57%	10
Strongly disagree	37.14%	13
TOTAL		35

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information)

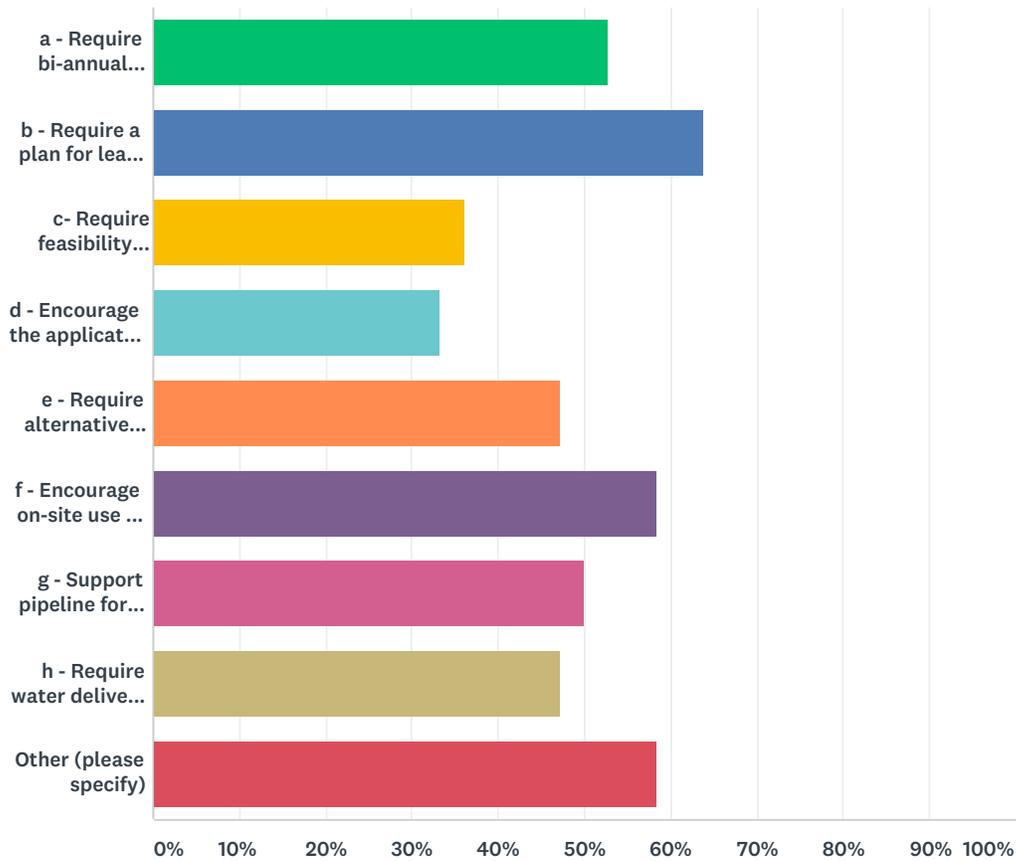
Answered: 35 Skipped: 2



ANSWER CHOICES	RESPONSES	
Strongly agree	11.43%	4
Agree	8.57%	3
Neither agree nor disagree	8.57%	3
Disagree	14.29%	5
Strongly disagree	14.29%	5
Other (please specify)	42.86%	15
TOTAL		35

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

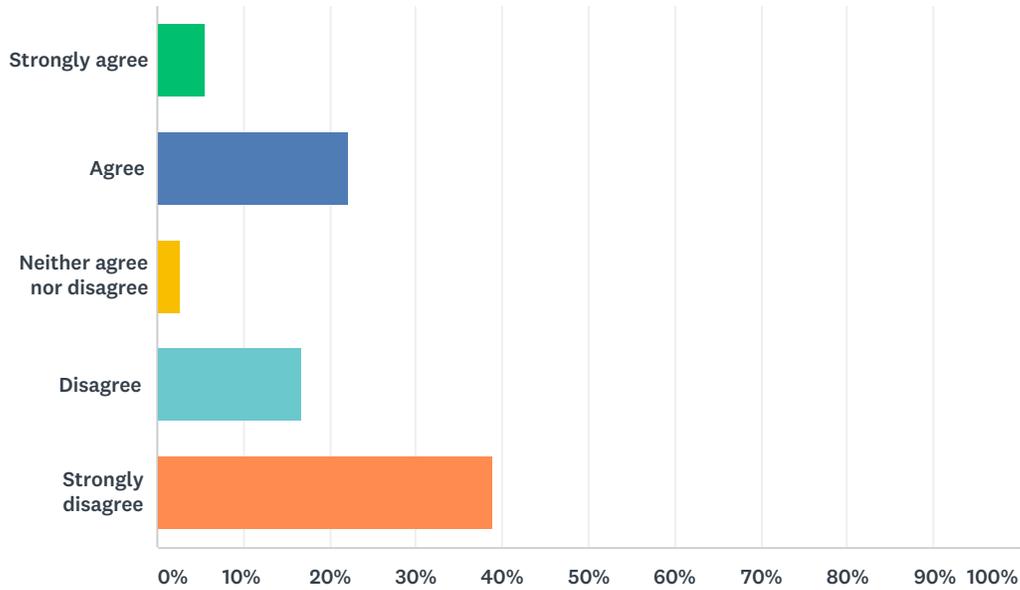
Answered: 36 Skipped: 1



ANSWER CHOICES	RESPONSES	
a - Require bi-annual third-party air quality monitoring (paid by oil and gas facility owner/operator)	52.78%	19
b - Require a plan for leak detection, reporting and repair	63.89%	23
c- Require feasibility analysis for the electrification of all permanent operation equipment including engines/motors	36.11%	13
d - Encourage the application of tankless production techniques	33.33%	12
e - Require alternative disposal of VOC's to eliminate flaring	47.22%	17
f - Encourage on-site use of captured natural gas	58.33%	21
g - Support pipeline for transportation of resoruces to limit truck traffic to and from site	50.00%	18
h - Require water delivery to the site to discourage water hauling	47.22%	17
Other (please specify)	58.33%	21
Total Respondents: 36		

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

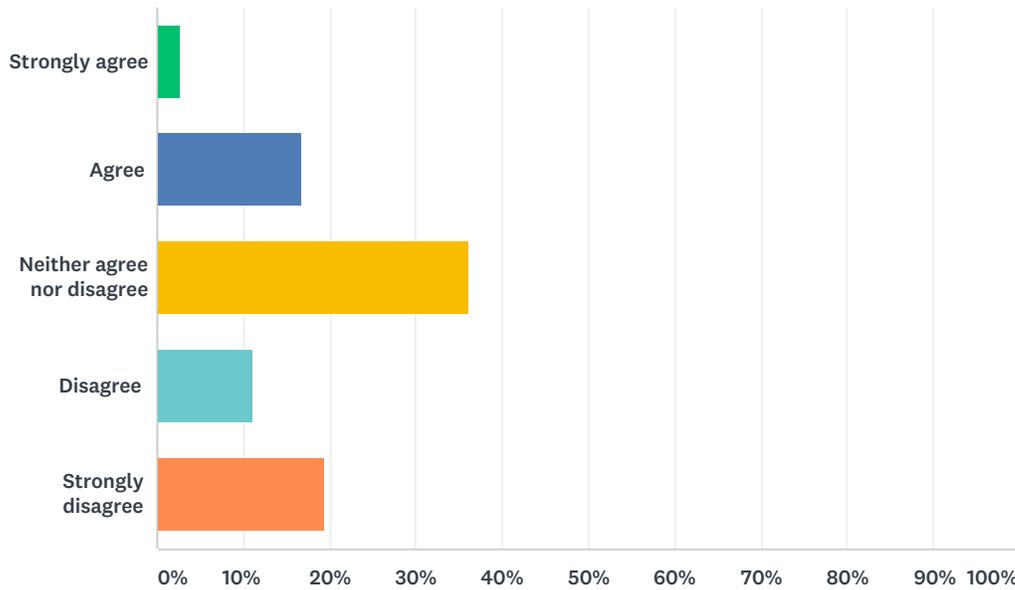
Answered: 36 Skipped: 1



ANSWER CHOICES	RESPONSES	
Strongly agree	5.56%	2
Agree	22.22%	8
Neither agree nor disagree	2.78%	1
Disagree	16.67%	6
Strongly disagree	38.89%	14
TOTAL		36

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

Answered: 36 Skipped: 1



ANSWER CHOICES	RESPONSES	
Strongly agree	2.78%	1
Agree	16.67%	6
Neither agree nor disagree	36.11%	13
Disagree	11.11%	4
Strongly disagree	19.44%	7
TOTAL		36

Q9 Do you have any other suggestions related to possible oil and gas regulations?

Answered: 24 Skipped: 13

#1

COMPLETE

Collector: Online responses (Web Link)
Started: Friday, September 13, 2019 1:20:09 PM
Last Modified: Friday, September 13, 2019 1:29:24 PM
Time Spent: 00:09:15
IP Address: 198.49.6.225

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information) **Disagree**

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information) **Neither agree nor disagree**

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information) **Neither agree nor disagree**

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information) **Disagree**

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information) **Disagree**

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

a - Require bi-annual third-party air quality monitoring (paid by oil and gas facility owner/operator)

,

b - Require a plan for leak detection, reporting and repair

,

e - Require alternative disposal of VOC's to eliminate flaring

,

f - Encourage on-site use of captured natural gas

g - Support pipeline for transportation of resources to limit truck traffic to and from site

,

h - Require water delivery to the site to discourage water hauling

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

Disagree

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

Disagree

Q9 Do you have any other suggestions related to possible oil and gas regulations?

My concerns after attending the open house were:

1) Application requirements were plans with no meaningful commitment to responsibility. Plans will be boiler plate.

2) Third party monitoring subject to non-reporting and influence by oil and gas companies.

3) Limited county staffing for oversight.

Finally, while county staff were accessible and friendly at open house and at task force meetings they frequently respond to questions in a condescending manner. Effective facilitators should not interact in a perfunctory way with the public.

#2

COMPLETE

Collector: Online responses (Web Link)
Started: Saturday, September 14, 2019 5:53:33 AM
Last Modified: Saturday, September 14, 2019 6:02:21 AM
Time Spent: 00:08:47
IP Address: 67.164.174.211

Page 1

Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information)

Agree,
 Other (please specify):
 Climate change should be included explicitly in "environment." The IPCC has said we need to reduce TOTAL greenhouse gas emissions by 50% by 2030, which is a conservative projection. Public policy - including Larimer County policy - needs to start taking climate change into account immediately.

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information)

Neither agree nor disagree

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information)

Strongly disagree,
 Other (please specify):
 Setbacks from places people occupy and other sensitive areas should be at least 2,500 feet, for all the reasons called for in the statewide ballot initiative in 2018.

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information)

Neither agree nor disagree

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information)

Neither agree nor disagree

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

- a - Require bi-annual third-party air quality monitoring (paid by oil and gas facility owner/operator)
- ,
- b - Require a plan for leak detection, reporting and repair
- ,
- c- Require feasibility analysis for the electrification of all permanent operation equipment including engines/motors
- ,
- d - Encourage the application of tankless production techniques
- ,
- e - Require alternative disposal of VOC's to eliminate flaring
- ,
- f - Encourage on-site use of captured natural gas
- ,
- g - Support pipeline for transportation of resources to limit truck traffic to and from site
- ,
- h - Require water delivery to the site to discourage water hauling

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

Strongly disagree ,
Other (please specify):
I don't support the use of water - much of which permanently is removed from the water cycle - to extract oil and gas. Period.

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

Neither agree nor disagree

Q9 Do you have any other suggestions related to possible oil and gas regulations?

Our society - and Larimer County in particular - needs to move AWAY from oil and natural gas and TOWARD renewable energy as soon as possible, or else we will experience a climate catastrophe in which people and many of the other creatures currently living on earth will likely go extinct. The County's oil and gas policy should reflect this fact.

#3

COMPLETE

Collector: Online responses (Web Link)
Started: Friday, September 13, 2019 4:48:00 PM
Last Modified: Saturday, September 14, 2019 8:48:35 AM
Time Spent: 16:00:35
IP Address: 24.52.22.19

Page 1

Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information)

Neither agree nor disagree

Other (please specify):

While I welcome regulation, so many times with oil and gas 'regulation' seems to equal 'rubber stamp'. I'm in favor of a minimum of 1/2 mile setbacks, as that's the safety zone when there's an incident. I think current Colorado frack wells are far too close to people's homes, schools, and travel corridors.

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information)

Other (please specify):

I'm skeptical of the county government's ability/willingness to stand up to oil and gas money. I agree with a moratorium on any new oil and gas in alignment with the Colorado Standards.

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information)

Strongly disagree

Other (please specify):

While the threshold seems reasonable, I'm afraid of loopholes, I definitely think that a 2640 ft (1/2 mile) setback is necessary for any frack operations. What's happening at Bella Romero school in Greeley, must never happen in Larimer County. I don't want any wells in Larimer County.

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information)

Neither agree nor disagree ,

Other (please specify):

I don't agree with any wells in Larimer County. I remember a Labrador Retriever friend I had once who was not allowed in the living room. As soon as he got his nose in the room it wasn't long before he was on someone's lap.

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information)

Other (please specify):

Look at the list you have. Do we really want to be even discussing this? No wells in Larimer County. The air is bad enough already.

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

Other (please specify):

I don't want wells, I want Larimer County to tell me what they're going to do about the Climate Emergency.

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

Strongly agree,

Other (please specify):

If Strongly Agree means that I want to protect the water. I don't want water being used to frack for natural gas, and I don't want frack water to get into our good water system or to threaten wildlife.

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

Neither agree nor disagree ,

Other (please specify):

I prefer to use county roads to bicycle and drive. Already industry is a threat to my enjoyment in this way. Traffic is already a major problem in Larimer County.

Q9 Do you have any other suggestions related to possible oil and gas regulations?

Please continue to plan on how you're going to hold off the Oil and Gas industry. No slant drilling, 2640 foot setbacks, solid plan to help other pedestrian/bicyclists/motorists/landowners cope with O&G Transportation impacts, and take into consideration the existing Climate Emergency in the World/US/Colorado. Please adhere to the moratorium on any new development in line with Colorado.

#4

COMPLETE

Collector: Online responses (Web Link)
Started: Saturday, September 14, 2019 8:35:32 AM
Last Modified: Saturday, September 14, 2019 9:23:44 AM
Time Spent: 00:48:11
IP Address: 24.52.22.19

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information)

Neither agree nor disagree

Other (please specify):

Standards have not been specified, as far as I know, and therefore I cannot say I agree or disagree. I agree that human, ecosystem, and planetary health should be prioritized, including water, air, land, etc. We know there are already too many greenhouse gases in the atmosphere and we need to stop adding to them as much and as soon as we possibly are able. We know that the safe evacuation distance from a hydraulic fracturing well is 2640' (or 1/2 mile) and therefore this should be the minimum setback for all wells.

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information)

Other (please specify):

I don't know what regulations are going to be set; I agree that the Oil and Gas industry should be regulated, with the understanding that this is not just a "Not In My Back Yard" issue. The health of the whole front range is affected by Weld County--and all-- fracking, including air quality, and the whole planet is affected by what each county does.

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information)

Strongly disagree

Other (please specify):

Since the minimum evacuation distance is 2640' in the event of an explosion at a well, I suggest that this should be the minimum standard for all setbacks.

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information)

Disagree,
Other (please specify):
If the application does not meet the requirements, the application should be denied for non-compliance; no appeals necessary.

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information)

Other (please specify):
All of this land is Indigenous land, stolen by colonizers and some of which is protected under sovereign nation to sovereign nation Treaty. All questions of mineral or surface use should be administered by Tribal Government. Also, there is no mention of Climate Breakdown, which should be the first concern of any project!

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

Other (please specify):
Monitoring air quality requires an independent monitor, not one paid by the industry it is monitoring, and it should be constant. None of this is safe, if one takes the climate crisis seriously. This is a waste of water, also.

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

Strongly disagree,
Other (please specify):
We cannot afford to contaminate any of our water, which can never be "mitigated" back to its original state. We cannot afford to waste any water, and keeping it separate from streams, creeks, etc. is not possible. The Earth is a system, ecosystems work together, and no new fossil fuels can be safely generated.

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

Neither agree nor disagree,
Other (please specify):
Of course I am in favor of sufficient and effective regulations for health, safety, and infrastructure protection. But I feel that any special construction of access roads and infrastructure to support the development of oil and gas in Larimer County (and anywhere in the world, for that matter) is only exacerbating the problem of climate breakdown, and keeping us distracted from actually solving our energy use and how it affects the Earth.

Q9 Do you have any other suggestions related to possible oil and gas regulations?

At this point in the history of our planet, the minimal and best practice is to place a moratorium on any future fossil fuel development. We must learn to be more energy efficient and conservative with the resources we have and take under serious consideration how our present actions will affect our children's lives and beyond. Thank You!

#5

COMPLETE

Collector: Online responses (Web Link)
Started: Saturday, September 14, 2019 7:43:37 PM
Last Modified: Saturday, September 14, 2019 8:04:11 PM
Time Spent: 00:20:33
IP Address: 73.229.138.127

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information)

Strongly disagree

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information)

Neither agree nor disagree

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information)

Strongly disagree

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information)

Strongly disagree

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information)

Other (please specify):
 More requirements are needed, there is no mention of VOC monitoring, and mitigation. Also should require plans for people whom develop cancer, asthma and other illnesses by people are working/living/existing 5 mile radius of any drilling/fracking site.

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

- a - Require bi-annual third-party air quality monitoring (paid by oil and gas facility owner/operator)
- ,
- b - Require a plan for leak detection, reporting and repair
- ,
- c- Require feasibility analysis for the electrification of all permanent operation equipment including engines/motors
- ,
- e - Require alternative disposal of VOC's to eliminate flaring
- ,
- g - Support pipeline for transportation of resources to limit truck traffic to and from site
- ,

Other (please specify):
 Require MONTHLY air quality monitoring. Oil and gas are entirely responsible for the lack of ozone in Colorado, and they are entirely responsible for the decrease of air quality.

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

- Strongly disagree** ,
- Other (please specify):
- Not enough!!!!

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

- Strongly disagree** ,
- Other (please specify):
- If oil and gas are going to use resources paid for by the taxpayers, they need to be responsible for up keep on those county, state, and city roads as well. We all know they don't live here and don't pay taxes here, they either to be charged heavy fees for public roads or be charged maintenance or taxed high fees. The tax payer needs to stop footing the bills for these companies to bankrupt local resources for their gain!!!

Q9 Do you have any other suggestions related to possible oil and gas regulations?

Can we get some people who aren't paid for by oil and gas on this task force? Clearly none of you give a fuck about Colorado or Larimer county or the people wildlife in it. You are all in it to put money in your pockets! We see you!

#6

COMPLETE

Collector: Online responses (Web Link)
Started: Saturday, September 14, 2019 5:32:13 PM
Last Modified: Sunday, September 15, 2019 1:45:02 PM
Time Spent: 20:12:49
IP Address: 73.169.38.162

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information)

Agree,

Other (please specify):

Safeguarding air and water quality are particularly important to protecting Larimer County residents' health, safety and welfare. Maintaining and improving air and water quality protects our farm and ranch land and our forests. Set backs and nuisance issue priorities are particularly important to nearby neighborhoods, schools etc.

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information)

Agree

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information)

Neither agree nor disagree

Other (please specify):

The 1000 foot setbacks from homes, schools, sports fields, playgrounds, etc. should be from the property line, not the building. I like the 1000 ft. setback from drinking water sources or facilities (includes wells, reservoirs, lakes and ponds). I would add irrigation ditches because the deleterious effect on farms from possible contamination of ditch water. I like the 1000 ft. setback from floodways, and geological hazard areas. Please increase setbacks to designated outdoor activity (trails), wetlands of sensitive wildlife habitat - this is an especially important setback. 1000 ft. setback from an adjoining municipal boundary is fair to the municipality to decrease likelihood of land use disagreements between the involved governments and their residents. I like and agree with the stated threshold criteria. Regarding the application process - how will the County assure that operators who don't wish to comply with all requirements just chose to go the route of a hearing before the Commissioners instead of complying? Residents may have to go through the approval process with each application that does not comply rather than relying on the developed regulations.

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information)

Neither agree nor disagree

Other (please specify):

What assurance do County residents have that operators won't just chose to go the route of a hearing before the Commissioners rather than comply with the developed regulations?

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information)

Strongly agree

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

a - Require bi-annual third-party air quality monitoring (paid by oil and gas facility owner/operator)

,

b - Require a plan for leak detection, reporting and repair

,

c- Require feasibility analysis for the electrification of all permanent operation equipment including engines/motors

,

d - Encourage the application of tankless production techniques

,

e - Require alternative disposal of VOC's to eliminate flaring

,

f - Encourage on-site use of captured natural gas

g - Support pipeline for transportation of resources to limit truck traffic to and from site

,

h - Require water delivery to the site to discourage water hauling

,

Other (please specify):

Add use of Tier 4 Diesel engines, use of NeoFlo 4633 - less odor and less emissions. Increase frequency of 3rd party air quality to quarterly. Require frequent air emissions monitoring by operator. Require green completions. Consider continuous emissions monitoring.

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

Agree,

Other (please specify):

All means possible should be used to protect water quality for residents, wildlife, farmers and ranchers. Ground water must be protected in addition to surface water features - need frequent leak detection, repair and remediation. Operator must be required to submit spill prevention and clean up plan as part of application. Please include the list of CU's AirWaterGas water quality team regarding chemicals used in fracturing fluid that most likely will contaminate ground water if released and ban the use of these chemicals. Storm water inspections be conducted weekly and immediately after a storm event. Repairs required of operator.

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

Agree,

Other (please specify):

Add access road speed limits to reduce dust. Daytime only travel. Timing of truck travel (deliveries and pumpers) on access roads. Traffic signs. Pad and access road must accommodate multiple emergency vehicles.

Q9 Do you have any other suggestions related to possible oil and gas regulations?

Thanks to County staff and task force for all their efforts.

#7

COMPLETE

Collector: Online responses (Web Link)
Started: Sunday, September 15, 2019 2:40:14 PM
Last Modified: Sunday, September 15, 2019 2:56:32 PM
Time Spent: 00:16:17
IP Address: 73.153.220.199

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information)

Neither agree nor disagree

Other (please specify):

The issue is that the task force is not aligned with the public. The task force works on behalf of the public and the public's priorities should be the task force's priorities. Air quality is #1.

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information)

Strongly disagree

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information)

Strongly disagree

Other (please specify):

Setbacks should based on the science that is now clear in terms of public health. The set backs needs to be much greater to keep Larimer county residents safe

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information)

Strongly disagree

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information)

Disagree

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

a - Require bi-annual third-party air quality monitoring (paid by oil and gas facility owner/operator)

,

b - Require a plan for leak detection, reporting and repair

,

c- Require feasibility analysis for the electrification of all permanent operation equipment including engines/motors

,

d - Encourage the application of tankless production techniques

,

e - Require alternative disposal of VOC's to eliminate flaring

,

f - Encourage on-site use of captured natural gas

g - Support pipeline for transportation of resources to limit truck traffic to and from site

,

h - Require water delivery to the site to discourage water hauling

,

Other (please specify):

There should be specific air quality impact/emissions limits. These existing items do not go far enough and have too light of language. For example a "FEASIBILITY analysis" can always be architected in a way that makes it "not feasible". "ENCOURAGE on-site use of captured natural gas" means it likely won't be done.

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

Strongly disagree

Other (please specify):

Again, this doesn't go far enough based on what Larimer county residents are asking for.

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

Strongly disagree

Other (please specify):

This doesn't go far enough. They should be taxed heavily based on actual impacts to roads and residents from a noise, dust and otherwise standpoint. The roads were not designed for this use. Residents are asking for the task force to do more in all areas, including this one.

Q9 Do you have any other suggestions related to possible oil and gas regulations?

On poster #2 "What we have heard so far" it is evident that the public has provided the task force and county that the priorities they should be operating off of. There is absolutely no reason that the task force's priorities should differ from the public's priorities. We are clearly asking for action based on the notions of and direct capabilities that SB-181 has established...those notions being putting human health, public safety, and environment first. Please act on behalf of Larimer County residents who are clearly asking for change, and on the behalf of operators.

#8

COMPLETE

Collector: Online responses (Web Link)
Started: Monday, September 16, 2019 7:41:16 AM
Last Modified: Monday, September 16, 2019 8:25:20 AM
Time Spent: 00:44:04
IP Address: 65.102.193.217

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information)

Strongly disagree,
 Other (please specify):
 The task force should be suspended until the COGCC has issued their final report and regulations. At that time, the citizens of Larimer County must be allowed to present objection or support of each task force candidate before the Commissioners determine who will staff the task force. No O & G permit applications should be considered until the Larimer Task Force has finalized it's regulations. All current O & G activity should be stopped until Task Force finalization.

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information)

Strongly disagree

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information)

Strongly disagree,
 Other (please specify):
 Most Fire Districts recommend and use a minimum 2,500 foot evacuation zone when there is an industrial explosion, fire, toxic leak. This should be the minimum setback of any fracking site from housing, office buildings, schools, playgrounds, athletic fields, stadiums, stores, malls, waterways, lakes, or any other areas with concentrations of humans. There should never be allowed "conditional" permitting lessening the setback distance.

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information)

Strongly disagree

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information)

Other (please specify):

The application must include language protecting the taxpayers from traumatic events, illness from VOC's, and the cost to plug abandoned holes. It would require a form of bonding, fully paid by the operator to the State of Colorado, which probably should be somewhere close to ten million dollars per bore hole.

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

Other (please specify):

Leak detection should be a constant, independent third party operated function. It must be paid for by the O & G operator. 24 hours allowed to stop any leak, \$50,000 per day fine, including day leak discovered.

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

Strongly disagree ,

Other (please specify):

All independent third party testing. Fully paid by Operator. Weekly testing within two miles of site. Weekly monitoring of any potential potable water within two miles.

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

Strongly disagree ,

Other (please specify):

If the site road empties onto a paved road, 1,000 feet, minimum, of the site road must be paved ending at the paved road, to eliminate "tracking" of dirt and mud onto the paved road.

Q9 Do you have any other suggestions related to possible oil and gas regulations?

No permits approved on any public land.

#9

COMPLETE

Collector: Online responses (Web Link)
Started: Tuesday, September 17, 2019 8:35:22 AM
Last Modified: Tuesday, September 17, 2019 8:39:32 AM
Time Spent: 00:04:09
IP Address: 205.168.109.226

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information)

Strongly disagree,
 Other (please specify):
 Colorado already has the strictest O&G rules and regs.

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information)

Strongly disagree

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information)

Strongly disagree,
 Other (please specify):
 Please quit letting uneducated paranoid people try to change the law. Coloradoans already voted no on 112 for futher setbacks!!!

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information)

Strongly disagree

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information)

Respondent skipped this question

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

Other (please specify):
 no changes necessary

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

Strongly disagree

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information) **Strongly disagree**

Q9 Do you have any other suggestions related to possible oil and gas regulations? **Respondent skipped this question**

#10

COMPLETE

Collector: Online responses (Web Link)
Started: Tuesday, September 17, 2019 11:03:01 AM
Last Modified: Tuesday, September 17, 2019 11:06:05 AM
Time Spent: 00:03:03
IP Address: 76.25.157.164

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information) **Strongly disagree**

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information) **Strongly disagree**

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information) **Neither agree nor disagree**

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information) **Strongly disagree**

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information) **Strongly disagree**

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information) **f - Encourage on-site use of captured natural gas**

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information) **Strongly disagree**

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information) **Neither agree nor disagree**

Q9 Do you have any other suggestions related to possible oil and gas regulations?

No

#11

COMPLETE

Collector: Online responses (Web Link)
Started: Tuesday, September 17, 2019 11:59:25 AM
Last Modified: Tuesday, September 17, 2019 12:04:21 PM
Time Spent: 00:04:56
IP Address: 129.19.1.10

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information)

Agree,
 Other (please specify):
 - Public Health should be number one. - I agree with public priorities strongly. - Land Use is first priority of Task Forcer?
 - Reconsider.

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information)

Other (please specify):
 - Agree - Why are so many people on the O&G Task Force connected to the O&G industry?

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information)

Agree

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information)

Neither agree nor disagree

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information)

Neither agree nor disagree

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

- a - Require bi-annual third-party air quality monitoring (paid by oil and gas facility owner/operator)
- ,
- b - Require a plan for leak detection, reporting and repair
- ,
- c- Require feasibility analysis for the electrification of all permanent operation equipment including engines/motors
- ,
- d - Encourage the application of tankless production techniques
- ,
- e - Require alternative disposal of VOC's to eliminate flaring
- ,
- f - Encourage on-site use of captured natural gas
- ,
- g - Support pipeline for transportation of resources to limit truck traffic to and from site
- ,
- h - Require water delivery to the site to discourage water hauling

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

Agree

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

Neither agree nor disagree

Q9 Do you have any other suggestions related to possible oil and gas regulations?

Respondent skipped this question

#12

COMPLETE

Collector: Online responses (Web Link)
Started: Tuesday, September 17, 2019 12:06:12 PM
Last Modified: Tuesday, September 17, 2019 12:38:00 PM
Time Spent: 00:31:48
IP Address: 23.24.131.45

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information)

Disagree,
Other (please specify):
Set backs are less priority, our community has already voted on and agreed on current set backs. How many times do we have to vote and go over them.

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information)

Other (please specify):
Where is the interests/protection of land owners and mineral owners in all this? Is the county prepared to manage loss of use proceedings?

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information)

Agree,
Other (please specify):
reluctantly agree, as long as set backs do not increase.

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information)

Agree

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information)

Agree

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

b - Require a plan for leak detection, reporting and repair

Other (please specify):

The technology and systems work as they should now, recent studies have shown our air standards locally to have improved dramatically even though our population has increased dramatically.

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

Disagree,

Other (please specify):

Is there factual reasons to increase or ad additional standards? Is something wrong and not working now with these operations? If not, why add more restrictions to an industry that feeds our economy safely. Is adding more restriction just to pacify the out of state extremists?

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

Neither agree nor disagree

Other (please specify):

Do we put other industries through this when they expand using our roads.....Walmart? Scheels? Costco? Is the revenue/economy benefits for our area not worth O&G using our roads?

Q9 Do you have any other suggestions related to possible oil and gas regulations?

Safe Industry, good jobs, huge benefit to our economy, schools, parks, housing prices, common lets use common sense here and make changes only if facts deem necessary. Stop the witch hunt and honor OUR VOTE! No more restrictions. Its already sad we are being forced to swallow 181 AFTER our community voted twice.

#13

COMPLETE

Collector: Online responses (Web Link)
Started: Tuesday, September 17, 2019 1:08:17 PM
Last Modified: Tuesday, September 17, 2019 1:14:03 PM
Time Spent: 00:05:46
IP Address: 129.19.1.10

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information)

Disagree

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information)

Other (please specify):
 Who pays for accidents/spills, health problems, a decrease in any H2O quality and once they deplete it then what?

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information)

Other (please specify):
 New developers should have more than a 350' setback

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information)

Disagree,
 Other (please specify):
 Neighborhood meeting and public hearings should be required for all applications

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information)

Other (please specify):
 Plan for departure- clean up
 etc...

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

a - Require bi-annual third-party air quality monitoring (paid by oil and gas facility owner/operator)

,

b - Require a plan for leak detection, reporting and repair

,

Other (please specify):

More frequent monitoring - 3rd party

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

Strongly disagree ,

Other (please specify):

What happens to the tank containment areas, monitoring H2O quality after they leave?

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

Other (please specify):

What about impact to wildlife in these areas?

Q9 Do you have any other suggestions related to possible oil and gas regulations?

Respondent skipped this question

#14

COMPLETE

Collector: Online responses (Web Link)
Started: Tuesday, September 17, 2019 1:19:16 PM
Last Modified: Tuesday, September 17, 2019 1:30:07 PM
Time Spent: 00:10:50
IP Address: 129.19.1.10

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information)

Other (please specify):
 I strongly AGREE with the public priorities I strongly DISAGREE with the Task Force priorities

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information)

Other (please specify):
 Need more information. *Bonding. If drillers go bankrupt? Let them (O&G) pay for clean-up. It costs \$80-100,000 per well to remediate and plug wells

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information)

Other (please specify):
 See #4

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information)

Disagree,
 Other (please specify):
 2500' minimum setbacks from residential, water sources, hiking trails, natural areas. No drilling in parks or open spaces.

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information)

Other (please specify):
 Strong Disagree - Binding. In case of price of oil drops and driller goes bankrupt

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

a - Require bi-annual third-party air quality monitoring (paid by oil and gas facility owner/operator)

,

b - Require a plan for leak detection, reporting and repair

,

f - Encourage on-site use of captured natural gas

Other (please specify):

* Impose strict air quality standards, then let O&G pay to meet those standards * Impose stiff fines for leaks, spills and explosions, etc.

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

Other (please specify):

*Impose strict fines for spills * Where will water come from?
* Monitor wells for BLOW-OUTS

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

Other (please specify):

With all the drilling activity in our state, why don't we have the best roads in the country? Charge oil and gas industry a fee for using our roads, or raise the taxes they pay.

Q9 Do you have any other suggestions related to possible oil and gas regulations?

Respondent skipped this question

#15

COMPLETE

Collector: Online responses (Web Link)
Started: Tuesday, September 17, 2019 1:19:19 PM
Last Modified: Tuesday, September 17, 2019 1:41:18 PM
Time Spent: 00:21:58
IP Address: 129.19.1.10

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information)

Strongly ,**disagree**

Other (please specify):

What about reverse setback for new urban development next to existing wells? These should be the same as new well by existing development. The task force's top 6 priorities only overlap the public's priorities in one area - environment. The composition of the Task Force is heavily weighted with O&G and real estate interests and are NOT representing the public's priorities. Disband the Task Force and start over with a balanced body and priorities of the public will be represented on the Task Force

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information)

Other (please specify):

NO - the draft purposes speaks to "mitigation of adverse impacts" rather than "prevention of adverse impacts". The draft authority and applicability fails to address post application monitoring of permitted wells, new and existing. Monitoring to include: air quality emission (esp. voc/method) water quality (runoff, spills, flooding) Light and noise impacts to surrounding land uses, as well as traffic

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information)

Strongly ,**disagree**

Other (please specify):

I would like to see the setback for new wells and for new urban development adjacent to the existing wells be determined by scientist data(i.e. blast zone/fire zone spread, emissions fumes, etc. Also, we need to better protect wetland, since there are connected to waters bodies 1000' ft

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information)

Strongly disagree

Other (please specify):

The issues are much greater than just setbacks and should include monitoring plans more frequently than semi-annually. What about transportation and processing requirements in reference to water and waste water! (brine and chemicals).

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information)

Other (please specify):

STRONG DISAGREE - Items #12 - 16 should not just be a "paper plan" but should mandate continuous monitoring and reporting. Again, the plans are for "mitigation" NOT "prevention"

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

- a - Require bi-annual third-party air quality monitoring (paid by oil and gas facility owner/operator)
- ,
- b - Require a plan for leak detection, reporting and repair
- ,
- c- Require feasibility analysis for the electrification of all permanent operation equipment including engines/motors
- ,
- d - Encourage the application of tankless production techniques
- ,
- e - Require alternative disposal of VOC's to eliminate flaring
- ,
- f - Encourage on-site use of captured natural gas
- ,
- g - Support pipeline for transportation of resources to limit truck traffic to and from site
- ,
- h - Require water delivery to the site to discourage water hauling

Other (please specify):

I would encourage the County to require on-site continuous air quality monitoring and reporting. Our area is a non-attainment area and the wells are a major contributor. People are DYING

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

Strongly disagree ,

Other (please specify):

NO oil and gas wells, tank batteries etc., within 500 year flood plain. Adopt all "possible standards for the County to consider"

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

Neither agree nor disagree ,

Other (please specify):

Shared access to multiple wells should be encouraged to reduce numbers of access roads.

Q9 Do you have any other suggestions related to possible oil and gas regulations?

Respondent skipped this question

#16

COMPLETE

Collector: Online responses (Web Link)
Started: Wednesday, September 18, 2019 12:58:09 PM
Last Modified: Wednesday, September 18, 2019 1:15:12 PM
Time Spent: 00:17:03
IP Address: 129.19.1.10

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information)

Neither agree nor disagree

Other (please specify):

Meaning I agree with the public priorities rather than those of the Task Force. We must make air and water quality the most important considerations: we cannot have oil & gas poisoning the air and water and wasting water in its operations. The Task Force placing Natural Resources last on the list is simple inexcusable.

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information)

Other (please specify):

Draft purpose seems OK at a first look. The draft authority and applicability seems vague on public impact and only indirectly (see #4) deals with the health, safety and well being of the public, which should be the #1 priority. With purpose defining "necessary" is problematic. who knows how oil & gas will define that?

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information)

Disagree,

Other (please specify):

setting setbacks do not seem sufficient or consistent. Especially troubling is the wetlands setback of only 500'. Considering the secrecy surrounding fracking chemicals, we simple do not know if 1,000' is sensible.

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information)

Neither agree nor

disagree

Other (please specify):

Initial fees seem pretty low considering profits. Not allowing public participation with approved sites is unacceptable. People used to be involved when risks to their health and safety are evident from oil & gas development.

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information)

Other (please specify):

We definitely need bonding in excess of the current standards. Never should any oil & gas company be allowed to abandon wells and leave the clean-up to tax payers.

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

a - Require bi-annual third-party air quality monitoring (paid by oil and gas facility owner/operator)

,

b - Require a plan for leak detection, reporting and repair

,

e - Require alternative disposal of VOC's to eliminate flaring

,

f - Encourage on-site use of captured natural gas

h - Require water delivery to the site to discourage water hauling

,

Other (please specify):

Be sure to establish baselines so that oil & gas cannot cop out saying it is not their fault.

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

Other (please specify):

Yes, again we need a good baseline data on water sources and wetlands. Not enough of a setback in my opinion. Maybe we should monitor the water used by oil & gas in fracking operations- how much is used and wasted, is it possible to reclaim it?

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

Neither agree nor disagree

Other (please specify):

Yeah, fine. But all these roads can be eliminated if we have standards keeping fly-by-night and greedy companies from trying to frack as much of the county as possible. Roads, roads everywhere.

Q9 Do you have any other suggestions related to possible oil and gas regulations?

Respondent skipped this question

#17

COMPLETE

Collector: Online responses (Web Link)
Started: Thursday, September 19, 2019 11:11:18 AM
Last Modified: Thursday, September 19, 2019 11:23:03 AM
Time Spent: 00:11:45
IP Address: 199.102.122.4

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information)

Other (please specify):
 There should be a moratorium on fracking until the state regs come out. I had to move from Weld county to Larimer because of health impacts from fracking!

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information)

Other (please specify):
 There should be a moratorium on fracking until the state regs come out. I had to move from Weld county to Larimer because of health impacts from fracking!

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information)

Other (please specify):
 There should be a moratorium on fracking until the state regs come out. I had to move from Weld county to Larimer because of health impacts from fracking!

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information)

Respondent skipped this question

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information)

Other (please specify):
 There should be a moratorium on fracking until the state regs come out. I had to move from Weld county to Larimer because of health impacts from fracking!

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

Other (please specify):
 There should be a moratorium on fracking until the state regs come out. I had to move from Weld county to Larimer because of health impacts from fracking!

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

Other (please specify):

There should be a moratorium on fracking until the state regs come out. I had to move from Weld county to Larimer because of health impacts from fracking!

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

Other (please specify):

There should be a moratorium on fracking until the state regs come out. I had to move from Weld county to Larimer because of health impacts from fracking!

Q9 Do you have any other suggestions related to possible oil and gas regulations?

I worked extremely hard with the operator and COGCC to ensure that the fracking site next to my home had "state of the art" equipment and monitoring. It was considered the "poster child" of excellence in 2014. Nevertheless, I had to move to Larimer for health reasons in 2015. An incident at that site later caused a football game at the high school to be evacuated and the wells are now shut down. I served on the Governor's Oil and Gas Task Force and worked with the industry to improve things for Coloradoans. They basically stonewalled, renege on promises and worked to protect their bottom line--not people's health, worker's safety or the environment. Do not be naive. Do the will of the people not the industry. You have an opportunity to protect Larimer County. Please do so.

#18

COMPLETE

Collector: Online responses (Web Link)
Started: Thursday, September 19, 2019 10:03:37 PM
Last Modified: Thursday, September 19, 2019 10:38:40 PM
Time Spent: 00:35:02
IP Address: 73.169.90.162

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information)

Strongly ,**disagree**

Other (please specify):

I don't think fracking should even be an option for Larimer County given the 100s of documented scientific studies in peer reviewed journals that show the negative effects on the environment and human health. Many, many locations in the US and around the world have said NO to fracking. We should too. Why should Larimer County be an experimental lab for oil and gas profiteers? The costs are way way too high for now and the future.

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information)

Strongly**disagree**

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information)

Strongly ,**disagree**

Other (please specify):

1,000 foot setbacks does not even begin to provide enough protection for the volatile organic compounds leaked at fracking sites. Get real. Have some compassion for pregnant women whose fetuses can be harmed with one exposure of fracking related VOCs. Have some compassion for people with asthma, and the elderly. Read the data, PLEASE.

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information)

Neither agree nor disagree

Other (please specify):

My first choice is a moratorium on all fossil fuel extraction and investment in renewable sources of energy. If fracking is allowed, all applications should meet to more stringent set of criteria. Well publicized neighborhood meetings are a must. The fees should include clean up costs up front for capping wells, and jail terms for persons responsible for leaving abandoned wells to leak dangerous chemicals.

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information)

Other (please specify):

All 29 steps are necessary. Neighborhood groups should be able to review the plans. Also, let's replace the term "odor" with what it is----chemical exposure. Mitigation will never make the land whole again. Fracking is a lose-lose proposition. We don't need it in the 21st century.

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

a - Require bi-annual third-party air quality monitoring (paid by oil and gas facility owner/operator)

,

b - Require a plan for leak detection, reporting and repair

,

c- Require feasibility analysis for the electrification of all permanent operation equipment including engines/motors

,

d - Encourage the application of tankless production techniques

,

e - Require alternative disposal of VOC's to eliminate flaring

,

f - Encourage on-site use of captured natural gas

h - Require water delivery to the site to discourage water hauling

,

Other (please specify):

Continuous 24/7 air and water monitoring by a competent non industry organization is absolutely essential. Bi-annual is not adequate. Again, we do not have to allow fracking at all. Investing in renewable energy is the way to go.

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

Neither agree nor disagree

Other (please specify):

Keep fracking away from water sources as far as possible. Test water 24/7. People in TX have had to leave their homes due to the pollution caused by fracking. Is this what we really want?

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

Neither agree nor disagree

Other (please specify):

Taxpayer dollars should no be used for road repair caused by fracking vehicles.

Q9 Do you have any other suggestions related to possible oil and gas regulations?

MORATORIUM on oil and gas, and joining the 21st century by developing and incentivizing renewable energy sources.

#19

COMPLETE

Collector: Online responses (Web Link)
Started: Friday, September 20, 2019 10:16:56 AM
Last Modified: Friday, September 20, 2019 10:23:24 AM
Time Spent: 00:06:28
IP Address: 74.205.153.124

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information) **Respondent skipped this question**

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information) **Respondent skipped this question**

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information) **Respondent skipped this question**

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information) **Respondent skipped this question**

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information) **Respondent skipped this question**

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information) **Respondent skipped this question**

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information) **Respondent skipped this question**

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information) **Respondent skipped this question**

Q9 Do you have any other suggestions related to possible oil and gas regulations?

Larimer County will have few applications for oil and gas operations compared to its neighbor to the east, Weld County. I suggest, as a former legislator who represented parts of Larimer that have some oil and gas and as a former Weld County Commissioner, that Larimer either completely mimic Weld's already adopted regulations or seek an IGA with Weld and pay Weld to process applications within Larimer. It would be way cheaper than to have all the expertise required to process so few applications.

#20

COMPLETE

Collector: Online responses (Web Link)
Started: Sunday, September 22, 2019 7:58:39 PM
Last Modified: Sunday, September 22, 2019 8:00:12 PM
Time Spent: 00:01:32
IP Address: 71.33.186.126

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information) **Strongly agree**

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information) **Strongly agree**

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information) **Strongly agree**

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information) **Strongly agree**

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information) **Strongly agree**

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

- a - Require bi-annual third-party air quality monitoring (paid by oil and gas facility owner/operator)
- ,
- b - Require a plan for leak detection, reporting and repair
- ,
- c- Require feasibility analysis for the electrification of all permanent operation equipment including engines/motors
- ,
- d - Encourage the application of tankless production techniques
- ,
- e - Require alternative disposal of VOC's to eliminate flaring
- ,
- f - Encourage on-site use of captured natural gas
- ,
- g - Support pipeline for transportation of resources to limit truck traffic to and from site
- ,
- h - Require water delivery to the site to discourage water hauling

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

Strongly agree

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

Strongly agree

Q9 Do you have any other suggestions related to possible oil and gas regulations?

Respondent skipped this question

#21

COMPLETE

Collector: Online responses (Web Link)
Started: Monday, September 23, 2019 10:25:35 AM
Last Modified: Monday, September 23, 2019 10:59:41 AM
Time Spent: 00:34:05
IP Address: 96.66.76.17

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information)

Agree,
 Other (please specify):
 I agree with what the Task Force has put as top regulation priorities. As for the public results, I think more education is needed in these areas. CDPHE is revamping its regulations now to deal with air quality and will establish more inspections and reporting requirements than what is required currently. Having the County add to it may just be a paperwork exercise rather than achieving any actual benefit.

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information)

Agree

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information)

Neither agree nor disagree,
 Other (please specify):
 The planning process should be similar regardless of setback requirements. Operators should have the option of working with landowners on set-backs if they are seeking less than the proposed set-back requirements.

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information)

Disagree,
 Other (please specify):
 The review process should first look to see if the issues can be resolved or worked out with landowner rather than go straight to Special Review or public hearing process.

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information)

Other (please specify):

I agree that an air quality plan is needed, but requiring base air quality readings for the proposed site is a little far fetched at this point. Trying to decide what type of monitoring and equipment to be used at this point is subjective. When does the study begin? What pollutants would you be looking for? What part of the year? How about other industries in the area are they going to be required to conduct similar studies or be a part of current studies? What is an acceptable level of emissions? No criteria has been set.

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

c- Require feasibility analysis for the electrification of all permanent operation equipment including engines/motors

,

d - Encourage the application of tankless production techniques

,

f - Encourage on-site use of captured natural gas

g - Support pipeline for transportation of resources to limit truck traffic to and from site

,

h - Require water delivery to the site to discourage water hauling

,

Other (please specify):

We need to leave the air quality monitoring and plans for leak detection and repair up to the CDPHE as they are working on revamping current regulations. Air quality monitoring on a bi-annual basis is not going to provide information that will be useful for compliance purposes. It is a snapshot in time and does not take into consideration other construction or development that may occur around the subject site. Again, is the County going to require other industries to conduct air monitoring of their activities at the same frequency? I'm not sure what is meant by alternative disposal of VOC's to eliminate flaring. You do not dispose of VOCs. This would be covered under f. - Encourage on-site use of captured natural gas. You can encourage on-site use of storage tank vapors.

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

Agree,
Other (please specify):
Need to show caution on water quality plan that includes baseline testing of lakes, ponds, etc. Are other industries required to do this? Construction industry with its runoff have chance to impact water ways. Having proper secondary containment and stormwater controls in place should suffice and sampling only conducted if contaminants have potentially reached bodies of water.

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

Agree

Q9 Do you have any other suggestions related to possible oil and gas regulations?

Respondent skipped this question

#22

COMPLETE

Collector: Online responses (Web Link)
Started: Monday, September 23, 2019 12:56:44 PM
Last Modified: Monday, September 23, 2019 12:59:20 PM
Time Spent: 00:02:35
IP Address: 69.85.139.10

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information) **Disagree**

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information) **Disagree**

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information) **Disagree**

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information) **Disagree**

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information) **Disagree**

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information) **f - Encourage on-site use of captured natural gas**

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information) **Disagree**

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information) **Disagree**

Q9 Do you have any other suggestions related to possible oil and gas regulations?

Respondent skipped this question

#23

COMPLETE

Collector: Online responses (Web Link)
Started: Monday, September 23, 2019 2:16:03 PM
Last Modified: Monday, September 23, 2019 2:54:06 PM
Time Spent: 00:38:03
IP Address: 73.3.250.182

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information)

Agree,
 Other (please specify):
 Nuisance issues tend to be temporary and therefore should be ranked lower than impacts that are more long-lasting and pervasive.

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information)

Other (please specify):
 "Minimal impact" is too subjective. There should be clear standards. If they can't be met--no permit.

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information)

Strongly disagree,
 Other (please specify):
 Proposed set-backs are not sufficient. Scientific research indicates that significant negative health impacts are associated with living within a 2 mi. radius of wells. Anything closer than 2,000' is ludicrous! The numbers on the chart seem arbitrary or at best based on out-dated regulations.

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information)

Disagree,
 Other (please specify):
 If the proposal doesn't meet requirements, why should it be considered via a special review process?!

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information)

Other (please specify):

The devil is in the details. There are very few details here! To state that an operator must have "a plan" for waste mitigation or emergency planning, or whatever, doesn't say anything about what those plans must include. What criteria will be applied to distinguish a good plan from a bad plan? In addition we need to include requirements for 24/7 methane monitoring; sufficient bonding to cover costs of sealing (and eventually resealing in perpetuity) all wells and for removing abandoned pipeline; agreement to cease operations on high ozone days; procedures for notifying the public of leaks, explosions, etc. immediately upon discovery; set-back regulations for all pipelines.

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

a - Require bi-annual third-party air quality monitoring (paid by oil and gas facility owner/operator)

,

b - Require a plan for leak detection, reporting and repair

,

c- Require feasibility analysis for the electrification of all permanent operation equipment including engines/motors

,

d - Encourage the application of tankless production techniques

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e - Require alternative disposal of VOC's to eliminate flaring

,

f - Encourage on-site use of captured natural gas

,

g - Support pipeline for transportation of resources to limit truck traffic to and from site

,

h - Require water delivery to the site to discourage water hauling

,

Other (please specify):

This is the best poster yet!! It includes details! Kudos to whoever prepared this.

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

Disagree,

Other (please specify):

Too weak. We need to look at what companies are being charged for water that has to be taken out of the water cycle. How will quantities be regulated?

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

Neither agree nor disagree

Other (please specify):

Didn't have time to look at this one. (It was kind of hidden.)

Q9 Do you have any other suggestions related to possible oil and gas regulations?

Bottom line: According to a just released state report the oil and gas industry has never had a profitable quarter in Colorado. They are staying afloat by racking up debt. We need to stop evaluating every regulation on the basis of whether or not it is financially viable for this failing industry. They need to absorb all the costs associated with their operations, including the negative externalities that have been foisted upon the public in terms of degraded air quality, safety issues, water contamination, hazardous waste--not to mention global warming--or close up shop. According to SB181 regulations should give priority to public health and safety and the environment. This is what the citizens of Larimer County are expecting and deserve.

#24

COMPLETE

Collector: Online responses (Web Link)
Started: Tuesday, September 24, 2019 7:34:14 AM
Last Modified: Tuesday, September 24, 2019 7:36:43 AM
Time Spent: 00:02:28
IP Address: 69.85.139.10

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information) **Strongly disagree**

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information) **Strongly disagree**

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information) **Strongly disagree**

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information) **Strongly disagree**

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information) **Strongly disagree**

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information) **f - Encourage on-site use of captured natural gas**

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information) **Strongly disagree**

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information) **Strongly disagree**

Q9 Do you have any other suggestions related to possible oil and gas regulations?

Respondent skipped this question

#25

COMPLETE

Collector: Online responses (Web Link)
Started: Tuesday, September 24, 2019 9:23:02 AM
Last Modified: Tuesday, September 24, 2019 9:27:06 AM
Time Spent: 00:04:04
IP Address: 69.85.139.10

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information) **Strongly disagree**

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information) **Strongly disagree**

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information) **Strongly disagree**

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information) **Strongly disagree**

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information) **Strongly disagree**

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information) **f - Encourage on-site use of captured natural gas**

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information) **Strongly disagree**

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information) **Neither agree nor disagree**

Q9 Do you have any other suggestions related to possible oil and gas regulations?

I feel that our economy needs a strong oil and gas program. Weld County is an example of how a strong oil and gas program helps a state.

#26

COMPLETE

Collector: Online responses (Web Link)
Started: Tuesday, September 24, 2019 12:25:22 PM
Last Modified: Tuesday, September 24, 2019 12:34:56 PM
Time Spent: 00:09:33
IP Address: 69.85.139.10

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information) **Disagree**

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information) **Disagree**

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information) **Disagree**

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information) **Disagree**

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information) **Disagree**

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

b - Require a plan for leak detection, reporting and repair
f - Encourage on-site use of captured natural gas
g - Support pipeline for transportation of resources to limit truck traffic to and from site

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information) **Disagree**

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information) **Disagree**

Q9 Do you have any other suggestions related to possible oil and gas regulations? **Respondent skipped this question**

#27

COMPLETE

Collector: Online responses (Web Link)
Started: Wednesday, September 25, 2019 2:25:33 PM
Last Modified: Wednesday, September 25, 2019 2:42:02 PM
Time Spent: 00:16:29
IP Address: 72.19.141.120

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information)

Strongly agree

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information)

Other (please specify):
 Mostly agree, but are not stringent and specific enough

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information)

Other (please specify):
 The distances identified are too close to residential and sensitive communities (e.g., school and health care facilities), and to environmentally sensitive areas. There should be NO operations on open space/natural lands.

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information)

Other (please specify):
 The first tier appears to be at risk of becoming industry-driven rather than by the desires and expectations of county citizens. The administrative process as proposed needs MUCH more public notification and input and to be more responsive to and protective of health and the environment. Also, one person having sign-off is NOT a good idea, gives industry too much opportunity for influence - influence that the public would be blind to.

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information)

Other (please specify):
 Good list to begin with. Now, please include other areas of concern, including requirements for enforcement, penalties, and regular neutral, 3rd-party monitoring.

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

a - Require bi-annual third-party air quality monitoring (paid by oil and gas facility owner/operator)

,

b - Require a plan for leak detection, reporting and repair

,

c- Require feasibility analysis for the electrification of all permanent operation equipment including engines/motors

,

d - Encourage the application of tankless production techniques

,

e - Require alternative disposal of VOC's to eliminate flaring

,

f - Encourage on-site use of captured natural gas

g - Support pipeline for transportation of resources to limit truck traffic to and from site

,

h - Require water delivery to the site to discourage water hauling

,

Other (please specify):

Change "encourage" to require and remove the flexibility for non-compliance.

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

Other (please specify):

Omits standards that should be included. This section should be much stronger in protection of the county's limited water supplies. Will the county ignore the demands on fresh water by households and agriculture? How will the county replace all the millions (billions?) of gallons of water drilling operations will require?

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

Other (please specify):

Much too superficial!

Q9 Do you have any other suggestions related to possible oil and gas regulations?

No flaring. Period.

No open pits. Period.

No operations on open space or natural lands.

And, how does the county plan to compensate for all the VOC's our citizens are exposed to due to Weld County operations? Or does the county plan just to add to it and pretend short-term high paying jobs that cause long-term damage to our health and the environment are more important than long-term, healthy local food production and the health and safety of our citizens and our environment??

Thanks for all your hard work. Please do it with long-term goals in mind.

#28

COMPLETE

Collector: Online responses (Web Link)
Started: Monday, September 30, 2019 9:46:29 AM
Last Modified: Monday, September 30, 2019 9:48:27 AM
Time Spent: 00:01:57
IP Address: 69.85.139.10

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information)

Neither agree nor disagree

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information)

Neither agree nor disagree

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information)

Neither agree nor disagree

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information)

Agree

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information)

Agree

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

h - Require water delivery to the site to discourage water hauling

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

Agree

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

Agree

Q9 Do you have any other suggestions related to possible oil and gas regulations?

no

#29

COMPLETE

Collector: Online responses (Web Link)
Started: Monday, September 30, 2019 3:01:45 PM
Last Modified: Monday, September 30, 2019 3:03:02 PM
Time Spent: 00:01:16
IP Address: 69.85.139.10

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information)

Respondent skipped this question

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information)

Strongly disagree

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information)

Strongly disagree

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information)

Strongly disagree

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information)

Strongly disagree

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

h - Require water delivery to the site to discourage water hauling

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

Strongly disagree

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

Strongly disagree

Q9 Do you have any other suggestions related to possible oil and gas regulations?

Respondent skipped this question

#30

COMPLETE

Collector: Online responses (Web Link)
Started: Monday, September 30, 2019 2:12:16 PM
Last Modified: Monday, September 30, 2019 3:06:47 PM
Time Spent: 00:54:31
IP Address: 216.160.179.148

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information)

Other (please specify):
 While I agree in general with the items and order given in the public comments, I strongly disagree with the order of priority in the task force column.

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information)

Other (please specify):
 While I do agree with the Purpose, Authority and Applicability of SB 181 as it pertains to Larimer County, I believe the activities of the task force are premature. The state will be setting certain minimum standards that Larimer will need to abide by. At the last Task Force meeting, lower standards for set backs than those likely to come from the state were receiving serious discussion.

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information)

Other (please specify):
 Unless I am strongly mistaken, a recent article in the Denver Post indicated that current interim setback standards for approval of state well drilling permits are at least twice what is listed in poster 4. Again we should be waiting to see what the state does first before Larimer does anything. In the interim, there should be a moratorium on new permits until both new state and county regulations are in place.

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information)

Strongly disagree ,
 Other (please specify):
 I believe all well permit applications should follow the Special Review Process.

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information)

Strongly agree

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

a - Require bi-annual third-party air quality monitoring (paid by oil and gas facility owner/operator)

,

b - Require a plan for leak detection, reporting and repair

,

e - Require alternative disposal of VOC's to eliminate flaring

,

g - Support pipeline for transportation of resources to limit truck traffic to and from site

,

h - Require water delivery to the site to discourage water hauling

,

Other (please specify):

Items d and f should be required not just encouraged. As far as item c goes if an analysis shows this is feasible, it should also be mandatory. If natural gas generated on the site can not be used, it should be mandatory to capture and use elsewhere instead of flaring it off. I believe there should be no uncaptured VOC emissions.

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

Agree,

Other (please specify):

I believe bullet four under water quality should read, Bermed containment areas..... The possible standards for consideration should be mandatory standards.

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

Agree,

Other (please specify):

While I agree with the general statements on Poster 8, I also believe the Permittee should be required to post a bond to cover any work needed to repair long term damage to roads and/or subgrade by well and tank site truck usage. The bond to be released only upon restoration of the site after the site is no longer functional.

Q9 Do you have any other suggestions related to possible oil and gas regulations?

My final comment is that every new oil or gas well drilled is a denial of the impacts that burning fossil fuels has on global warming. Oil and gas use and production needs to be reduced as soon as possible.

#31

COMPLETE

Collector: Online responses (Web Link)
Started: Monday, September 30, 2019 2:12:37 PM
Last Modified: Monday, September 30, 2019 3:10:55 PM
Time Spent: 00:58:17
IP Address: 216.160.179.148

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information)

Other (please specify):
 I am in general agreement with the regulation priorities from the public and strongly disagree with the priorities identified by the Task Force especially when it comes to air and water quality.

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information)

Other (please specify):
 I feel the county is rushing thru this process and am not clear as to why it is not in the interest of our community to wait until the regulations have been promulgated as a result of Senate Bill 181 and then address the needs of our community as it relates to oil and gas regulations.

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information)

Strongly disagree ,
 Other (please specify):
 There should be a moratorium on new permits until both new state and county regs are in place.

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information)

Strongly disagree ,
 Other (please specify):
 All well permit applications should follow the Special Review Process.

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information)

Strongly agree

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

a - Require bi-annual third-party air quality monitoring (paid by oil and gas facility owner/operator)

,

b - Require a plan for leak detection, reporting and repair

,

e - Require alternative disposal of VOC's to eliminate flaring

,

g - Support pipeline for transportation of resources to limit truck traffic to and from site

,

h - Require water delivery to the site to discourage water hauling

,

Other (please specify):

Items d & f should be required. Regarding item c - If analysis shows it is feasible to be electrified then it should be mandatory.

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

Agree,

Other (please specify):

The 'possible standards' listed for the County to consider should be required.

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

Agree,

Other (please specify):

I am concerned with long term damage and who will bear the costs of repairs.

Q9 Do you have any other suggestions related to possible oil and gas regulations?

Methane gas is a key contributor to climate change as it traps heat at 84 times the rate of CO2 contributing towards 25% of global warming. Unlike CO2 which reductions can take decades before showing up in reducing climate impacts, reductions in methane have an almost immediate impact. We need all the climate levers we can pull. It would be a criminal regulation to make allowances for any escape of methane from well drilling and storage sites.

#32

COMPLETE

Collector: Online responses (Web Link)
Started: Monday, September 30, 2019 3:27:00 PM
Last Modified: Monday, September 30, 2019 4:09:44 PM
Time Spent: 00:42:44
IP Address: 73.243.190.207

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information)

Other (please specify):
 I agree with the PUBLIC because Air & Water Quality and the environment are the most important factors not land use and setbacks like the task force has identified.

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information)

Other (please specify):
 I would hope that setbacks although not stated fall in one of the categories mentioned. Appropriate setbacks in the realm of 2500 feet from schools, buildings and playgrounds, homes, hospitals and public facilities should be seriously considered! I hope the county will due PROPER DUE DILIGENCE (DD) on all applications including the operator's financial securities, indemnification and insurance.

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information)

Strongly disagree,
 Other (please specify):
 I would hope appropriate setbacks in the realm of 2500 feet from schools, buildings and playgrounds, homes, hospitals and public facilities should be seriously considered and adopted!

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information)

Strongly disagree,
 Other (please specify):
 Meetings with neighbors who fall within 2500 feet, along with Public Hearings should be a requirement of either tier. Application or permits fees are too low as well.

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information)

Other (please specify):

I would add that the operator should have to demonstrate financial capabilities that would be able cover the costs should problems arise such as spills, fires, explosions so the public doesn't have to pay for them or any reclamation if the operator fails to live up to their responsibilities. All of these applications and processes should be considered public with documents open for inspection by the public and copies made upon request.

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

a - Require bi-annual third-party air quality monitoring (paid by oil and gas facility owner/operator)

,

b - Require a plan for leak detection, reporting and repair

,

c- Require feasibility analysis for the electrification of all permanent operation equipment including engines/motors

,

d - Encourage the application of tankless production techniques

,

e - Require alternative disposal of VOC's to eliminate flaring

,

f - Encourage on-site use of captured natural gas

g - Support pipeline for transportation of resources to limit truck traffic to and from site

,

h - Require water delivery to the site to discourage water hauling

,

Other (please specify):

Require Bi-Annual Third-Party Air Quality Monitoring (paid by oil and gas facility owner/operator) but verified by and approved by county staff, BOCC or some other public focused entity.

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

Other (please specify):

Require a water quality plan that includes baseline testing of water drinking wells and lakes with annual third-party monitoring and reporting of drinking water reservoirs and wells. The 3rd party should be approved by county staff, BOCC or some other public focused entity

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

Other (please specify):

I would hope that the fees being considered and paid for by the O&G Operator would be to the damage done to the public roadways by the heavy O&G equipment and vehicles that access them. If this is covered in the Require Capital Transportation Expansion fees then great but if not then it should be.

Q9 Do you have any other suggestions related to possible oil and gas regulations?

I would hope that the entire process including but not limited to permitting, transportation, financial viability, air, water qualities and environmental issues are considered public with the public having access to all of the information upon request. Transparency in this entire process is paramount if the public trust is to be expected or gained!

#33

COMPLETE

Collector: Online responses (Web Link)
Started: Monday, September 30, 2019 4:57:40 PM
Last Modified: Monday, September 30, 2019 5:41:27 PM
Time Spent: 00:43:46
IP Address: 73.153.221.60

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information)

Disagree,
Other (please specify):
Air quality and water quality are in more need of strict regulations to assure water and air quality. I would think that Nuisance and Transportation already have regulations that just need reviewed and enforcement.

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information)

Other (please specify):
Agree, except that date by December 2019.

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information)

Disagree,
Other (please specify):
1/4-1/2 mile for those listed as 1000' on chart #4; 1000+' for Outdoor activities, trails, wetlands.

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information)

Other (please specify):
Neighborhood Meetings and Public Hearings should be required on all Public Site Plans

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information)

Agree

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

- a - Require bi-annual third-party air quality monitoring (paid by oil and gas facility owner/operator)
- ,
- b - Require a plan for leak detection, reporting and repair
- ,
- c- Require feasibility analysis for the electrification of all permanent operation equipment including engines/motors
- ,
- d - Encourage the application of tankless production techniques
- ,
- e - Require alternative disposal of VOC's to eliminate flaring
- ,
- f - Encourage on-site use of captured natural gas

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

Agree

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

Neither agree nor disagree

Other (please specify):

Cost for building access and haul roads should be paid by O&G

Q9 Do you have any other suggestions related to possible oil and gas regulations?

No, but thank you for asking.

#34

COMPLETE

Collector: Online responses (Web Link)
Started: Monday, September 30, 2019 8:38:43 PM
Last Modified: Monday, September 30, 2019 8:41:21 PM
Time Spent: 00:02:37
IP Address: 75.30.249.46

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information) **Strongly disagree**

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information) **Strongly disagree**

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information) **Strongly disagree**

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information) **Strongly disagree**

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information) **Strongly disagree**

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

b - Require a plan for leak detection, reporting and repair ,

f - Encourage on-site use of captured natural gas ,

g - Support pipeline for transportation of resources to limit truck traffic to and from site

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information) **Strongly disagree**

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information) **Strongly disagree**

Q9 Do you have any other suggestions related to possible oil and gas regulations?

In the United States, we only produce 12 million barrels of oil per day and we need over 21 million. We are choked by foreign countries as we need to be able to drill in the U.S.A.

#35

COMPLETE

Collector: Online responses (Web Link)
Started: Monday, September 30, 2019 6:21:11 PM
Last Modified: Monday, September 30, 2019 9:43:30 PM
Time Spent: 03:22:19
IP Address: 76.25.159.173

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information)

Disagree,
 Other (please specify):
 If you choose to allow this, air quality should be top priority, please do something more! The emissions from oil and gas are a major contributor to our ozone and greenhouse gases. Complacency is unacceptable and negatively affects public health. We can't do anything about weld but we need to do something to cut emissions here as much as possible

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information)

Other (please specify):
 I agree that the health and safety and welfare should be protected and promoted. However, I do not see that possible by putting industrial sites within 1,000 feet of homes. How is this promoting our health in this county?

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information)

Strongly disagree,
 Other (please specify):
 Although I agree setbacks need to be increased beyond what they are now, 1,000 ft is not enough. Based on data, I'd say 2,500ft is better but still not enough. Also, I'm confused by the setbacks and procedures. Are these distances not actual setbacks but just used to decide which procedure is used? Definitive setbacks are needed in order to protect public health, safety, and welfare, our wildlife and the environment.

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information)

Disagree,

Other (please specify):

I think most if not all applications should be special review. Administrative review only makes sense in the middle of nowhere, not 1001 ft from a home or school. That's insane.

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information)

Other (please specify):

Agree but I'd add company violations history report for all states not just Colorado and require background checks on all employees

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information)

a - Require bi-annual third-party air quality monitoring (paid by oil and gas facility owner/operator)

,

b - Require a plan for leak detection, reporting and repair

,

e - Require alternative disposal of VOC's to eliminate flaring

,

Other (please specify):

Do "encourage and support" change anything really? Why bother? Put in regulations that actually improve our air. Require a plan and then enforce it.

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information)

Agree,

Other (please specify):

I'd like to see the county not selling our water to this industry. Protect and preserve our water.

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information)

Agree

Q9 Do you have any other suggestions related to possible oil and gas regulations?

A moratorium until the state finishes rule making

#36

COMPLETE

Collector: Online responses (Web Link)
Started: Tuesday, October 01, 2019 9:50:17 AM
Last Modified: Tuesday, October 01, 2019 9:52:08 AM
Time Spent: 00:01:50
IP Address: 192.196.164.22

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information) **Disagree**

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information) **Disagree**

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information) **Strongly disagree**

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information) **Agree**

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information) **Neither agree nor disagree**

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information) **g - Support pipeline for transportation of resources to limit truck traffic to and from site**

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information) **Strongly disagree**

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information) **Neither agree nor disagree**

Q9 Do you have any other suggestions related to possible oil and gas regulations?

Revenue and jobs from oil and gas are good for Colorado

#37

COMPLETE

Collector: Online responses (Web Link)
Started: Friday, October 04, 2019 9:00:51 AM
Last Modified: Friday, October 04, 2019 9:04:06 AM
Time Spent: 00:03:15
IP Address: 73.243.86.233

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Q1 Do you agree with the top regulation priorities identified by the Task Force and public (including land use, air quality, setbacks, water quality, environment, nuisance issues, natural resources, and transportation)? (See Poster 2 for more information) **Disagree**

Q2 Do you agree with the draft purpose, authority and applicability statements? (See Poster 3 for more information) **Disagree**

Q3 What is your opinion of the possible siting setbacks and threshold criteria for deciding what planning review process to use? (See Poster 4 for more information) **Disagree**

Q4 Do you agree with pursuing a tiered approach to determine what type of planning review process to use? (See Poster 4 for more information) **Disagree**

Q5 What is your opinion of the possible application requirements? (See Poster 5 for more information) **Disagree**

Q6 Do you agree with possible air quality standards to address in County oil and gas applications? Which topics should be addressed? (check all that apply) (See Poster 6 for more information) **b - Require a plan for leak detection, reporting and repair**
g - Support pipeline for transportation of resoruces to limit truck traffic to and from site

Q7 Do you agree with the possible water quality standards to address in County oil and gas applications? (See Poster 7 for more information) **Disagree**

Q8 Do you agree with the possible access and haul road standards to address in County oil and gas applications? (See Poster 8 for more information) **Disagree**

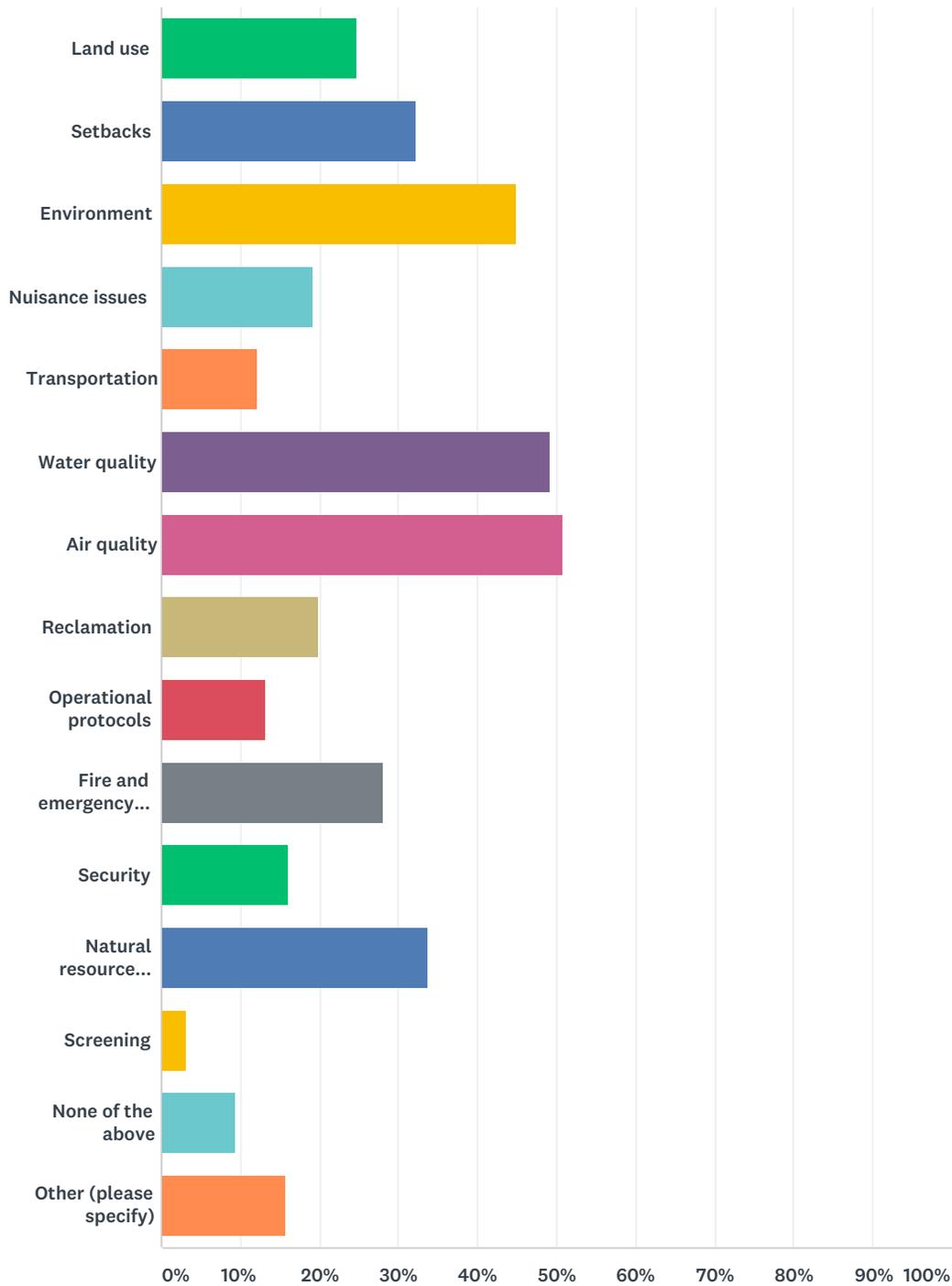
Q9 Do you have any other suggestions related to possible oil and gas regulations?

Respondent skipped this question

August 2019 Oil & Gas Questionnaire Responses

Q1 What's most important to regulate at the local level when it comes to oil and gas facilities? (select up to 5)

Answered: 815 Skipped: 1



ANSWER CHOICES	RESPONSES
Land use	24.79% 202
Setbacks	32.27% 263

Environment	44.91%	366
Nuisance issues	19.26%	157
Transportation	12.15%	99
Water quality	49.08%	400
Air quality	50.80%	414
Reclamation	19.88%	162
Operational protocols	13.25%	108
Fire and emergency response	27.98%	228
Security	16.07%	131
Natural resource protection	33.62%	274
Screening	3.19%	26
None of the above	9.45%	77
Other (please specify)	15.71%	128
Total Respondents: 815		

Q2 What other input regarding regulations would you like to share with county staff and the Oil and Gas Regulations Task Force?

Answered: 684 Skipped: 132

#	RESPONSES	DATE
1	Know the truth on drilling and not the naratives	8/29/2019 7:34 AM
2	Keep government as far away as possible. The fuel companies know how to do their job. They are interested in doing a great job because they want to maximize profit, efficiency, and quality.	8/28/2019 3:58 PM
3	Newly recognized idea that citizen health should come before company profit!	8/27/2019 3:40 PM
4	Fracking emissions are very harmful and should not be allowed in neighborhoods.	8/27/2019 1:09 PM
5	No Fracking	8/27/2019 11:12 AM
6	Public safety, the health of residents in Larimer County, and environmental protection, especially air and water quality, must be the top priorities when regulations on any oil and gas development are considered. Scientific research by professionals on the impacts of fracking and other petroleum development cannot be ignored by county staff and the task force. The profits of oil companies and their exploitation of land in our county are not justified by current market conditions or by the reality of climate change in our country and our world.	8/27/2019 10:30 AM
7	I would like county staff and the Task Force to consider the need for impact studies. I am extremely concerned that allowing multi-well oil and gas development into the County to a greater extent than we currently have will cost more than the County will recoup. The County is proposing a sales tax increase but I think we need to look first at how much are we going to be putting forth as taxpayers to fund this industry in Larimer County. Please consider the need for financial impact studies PRIOR to allowing this development to move forward. As a tax-payer, I want to know what the potential revenue generated is compared to the anticipated cost for road repairs/expansion due to O&G traffic, healthcare costs related to on the job injuries for O&G contract workers who may not be insured and increased respiratory issues for general public with degrading our air quality further, decreased property values, local O&G inspector salary(which I would hope the County would have at least one), County staffing to handle permitting and public inquiry/complaints/concerns, emergency preparedness training and staffing costs, the number of jobs that will be provided to local tax-paying Larimer County residents by allowing sites in Larimer County to move forward. Please do a full economic impact analysis before allowing any of these sites to be permitted. I would also like impact studies done for anticipated air quality and water quality and quantity impacts on a per well basis. We need to know exactly what we are sacrificing to allow this here. Please, get this data before moving forward. I am also concerned the County is trying to implement regulations before COGCC, CDPHE and AQCC have completed their rule makings. It is in the public's best interest to put a hold on any pending and new applications to allow the state to complete their work. Then, the County should look at what the state has done and decide what they would like to do in addition. This only makes sense if we are actually prioritizing public health, safety, welfare, the environment and wildlife resources. Please don't waste time trying to duplicate this process for which we do not have adequate resources. This is an industrial operation with industrial risks and nuisances. The future processing of these applications needs full County staff, BOCC and public involvement, just as the County does for gravel mining operations. To fast-track these applications as Weld County does will only prioritize O&G over the local community. And lastly, may it be known I do not see O&G operations and all associated activities as something that can be done safely while prioritizing public health, safety, welfare, the environment and wildlife. There will be detriment to all these things, perhaps we can "mitigate" some impacts, but our community will suffer if oil and gas operations, pipelines and all associated activities and infrastructure are allowed. We will contribute further to degrading our environment and worsening the climate crisis. Please be a leader in this area, Larimer County. Step up and do the right thing for our future!	8/27/2019 10:19 AM
8	Pause county permitting for pending and new applications until state rulemaking is complete	8/27/2019 5:12 AM
9	Oil and Gas production and protection of citizens and the environment can co-exist. There just needs to be education and common sense put into the discussions and rule making	8/27/2019 2:22 AM

10	Please protect the health of children. Their exposures might put them at risks unlike those for adults	8/26/2019 9:16 AM
11	The oil and gas industry is well regulated and enforced now. No more strangulating rules please!	8/26/2019 7:34 AM
12	Protecting wildlife habitat	8/26/2019 2:32 AM
13	If I had any hope that you would be able to enact a moratorium or ban on oil and gas production of which the effects are decimating the earth and its inhabitants, I wouldn't have to be looking at a safer place to move, away from Colorado. I thought I'd be spending the rest of my life here. My dream has been shattered, and I beg you to act with compassion for those of us who live, work, go to school and play here in Northern Colorado.	8/25/2019 5:50 AM
14	More local control over drilling moratoriums	8/24/2019 8:48 AM
15	The only way humanity will survive the next century is if we leave the remaining hydrocarbons in the ground. We shouldn't be debating the health impacts of drilling or not, we should be looking at shutting down the current wells and transitioning to green energy.	8/24/2019 8:46 AM
16	If Fracking is not regulated in this community to combat poor air quality issues, I cannot retire in Fort Collins due to asthma which is exacerbated by poor air quality.	8/24/2019 6:24 AM
17	An immediate suspension of drilling permits must be initiated until SB 181 is implemented by the state. All activities of this task force must be transparent. I'm very disappointed in the LCC for the way they chose people for this committee. Why are so many members of the force from industry? Why were Weld County citizens invited to serve? Why was the team formed before local interests knew about it?	8/23/2019 5:01 PM
18	Measurable means of oversight for leaks, especially around aquifers!	8/23/2019 2:39 PM
19	ozone is affecting the health of our citizens. Oil and Gas regulations need to consider the health of citizens affected by drilling operations that lead to higher ozone, including methane leaks.	8/23/2019 10:29 AM
20	Let the COGCC do their job and do not inhibit industry activity	8/23/2019 9:06 AM
21	I'm not determined that these concerns be regulated at a local level as long as they are being addressed, regulated, and enforced. I would also be open to regulations on a state or country level. However if the state and the country drop the ball and fail to adequately regulate the Industry, then the local government should step up and protect where the other governments have failed	8/21/2019 7:21 PM
22	Air pollution from oil and gas is affecting the health of all residents along the front range. Plus the amount of water used for this industry will affect the supply for the residents of this area. Plus contamination of our underground water supply should be considered when evaluating whether fracking is really an economic asset or a threat to our vital resource- WATER.	8/21/2019 12:05 PM
23	The effects of fracking air pollution on children are devastating. Therefore we need a large setback requirement to keep the wells far from our houses and schools.	8/21/2019 9:15 AM
24	Residential property owners should have more say in what goes on in and around their communities. Just a few months ago, my neighborhood (Thompson River Ranch) was inundated with announcements that drilling would be take place under our homes. We had no notification it was being planned, just informed that it was happening. Some of us received royalty agreements from energy companies, with threats of being force pooled whether we signed or not. Then, to top it all off, many of us had those royalty agreements rescinded, because the developer -- in this case Oakwood Homes -- retained mineral rights. Combined, these events left us home owners feeling very powerless. We saved all our lives to buy this house, only to find out that we have no say in whether or not dangerous fracking and drilling will happen under our feet. Not only that, but we get no compensation and have no legal recourse if something goes wrong, though our families and properties bear all the risk. Colorado can and should do better for its families. Our health and safety should come first.	8/21/2019 8:50 AM
25	We need continuous monitoring of all drilling sites. Yes, it adds expense but presently the lack of monitoring is at the public's expense. Flaring should not be allowed. Every time a tank is gradually filled with oil, it is displacing fumes that are in the empty tank. That needs to be contained . All spills, releases of gases and accidents need to be reported to local, regional and COGCC authorities. Yes, the industry may not required to report by law but it should.	8/21/2019 6:50 AM
26	Why is fracking fluid buried other places, contaminating groundwater not once but twice with toxic chemicals and carcinogenic compounds	8/21/2019 6:38 AM

27	I do not want oil & gas development near agricultural areas where food is grown and produced, and not near residential areas where people live, and especially not near schools. I want at least a 10 mile buffer zone between the aforementioned areas and any oil & gas activity.	8/21/2019 6:35 AM
28	Our air quality is already a hazard to our health, and I fear our water, what little we have, is next. I'm not asking to end fracking, but we need to hold companies responsible for where and how much...also, hold them accountable for damage done.	8/21/2019 6:21 AM
29	Weld County will destroy our air so we MUST NOT add to their disrespect of our health	8/21/2019 6:21 AM
30	Fracking should not be allowed in Colorado	8/21/2019 6:20 AM
31	No fracking	8/21/2019 6:00 AM
32	There need to be higher taxes, severance, emergency funds, whatever you want to call it, for now and in the future; citizens are having to pay for wells abandoned long ago. And down the road, we'll be paying again because the companies never take responsibility for the damage they do.	8/20/2019 12:27 PM
33	It is important for many citizen voices from a wide variety of perspectives be heard and represented on task forces including representatives from the medical community, environmental and scientific experts, local citizens who are most impacted by oil and gas development. It appears that there is an over-abundance of input from those who profit from oil and gas development and who falsely promise long-term job growth. We need honest and balanced consideration given to ALL aspects of what oil and gas development means for Colorado.	8/19/2019 11:22 AM
34	Set backs for developers	8/19/2019 2:17 AM
35	none	8/19/2019 12:19 AM
36	We know self monitoring doesn't work. Oil and Gas must pay for adequate monitoring.	8/18/2019 9:06 AM
37	none	8/18/2019 8:04 AM
38	There needs to be more representation on the task force from environmental scientists and physicians. The Task force needs to draft very strong recommendations for strict and comprehensive control of wells, with the health and safety of the environment and citizens foremost.	8/17/2019 1:48 PM
39	Requiring electric powered drill rigs, closed loop systems, class 4 powered engines for fracking, to reduce emissions, alternative site analysis, prohibit hydrocarbon-based drilling mud, noise limitations, prohibit the most hazardous fracking additives, etc.	8/16/2019 10:15 AM
40	I have two articles: Neurodevelopmental and Neurological Effects of Chemicals Associated with Unconventional Oil and Natural Gas Operations and Their Potential Effects on Infants and Children (a composite of 209 articles by experts (Ellen Webb, et al).: and another by Robinson Meyer which is: New, Major Evidence That Fracking Harms Human Health. Both come to the conclusion that fracking is likely to give birth to a less healthy child with a low birth weight. It affects the growth of the brain, causing health problems throughout the person's life. These people do less well in school and in adult life. Articles I have read deal with the health of the fetus and children--from birth into teenage years. The result is that DRILLING NEEDS TO BE AT LEAST 1 MILE FROM ANY DEVELOPMENT AND 2 MILES IS BETTER. Further, in talking with a pediatrician who has taught in a large U.S. medical school, she states that the fetus absorbs everything from the mother's blood, including fracking chemicals. THEREFORE, THE CONCLUSION IS THAT DRILLING NEEDS TO BE DONE AWAY FROM DEVELOPMENT BY AT LEAST 1 MILE, FOR THE SAFETY OF CITIZENS. AND, LONGMONT AND FT. COLLINS HAVE A POLICY OF HAVING DEVELOPMENT AT LEAST 500 FEET FROM ABANDONED WELLS SO THAT EQUIPMENT CAN GET INTO THE AREA IN CASE OF A FIRE OR OTHER PROBLEM. Also, gases need to be collected immediately during the drilling stage and beyond. There must be no grace period of 90 days. And, the reuse of water in drilling is a necessity for the future of our world. No more single uses.	8/16/2019 8:19 AM
41	Community Relations: i.e. Accurate, up to date, stakeholder information sharing including: Accurate drawings for surface sites and below ground wells, adjacent property owner rights and interactions (should the well pads be considered for approval of conditional use), requirements and controls of construction emissions (noise, dust, light), requirements and research supporting long term effects (air emissions, frac'ing impacts [both geological and chemical), detailed county regulations so authority and enforcement can occur if not operator is not within guidelines.	8/16/2019 1:49 AM
42	Having Oil and Gas expertise during the creation of the goals is imperative.	8/16/2019 12:57 AM

43	In general I question the need for more oil and gas facilities and would prefer that we put more thought and action toward alternative energy- Sun, wind and etc. I also would like communities and general public to have greater input in the decision making process. Locating these facilities near schools, neighborhoods and natural areas is dangerous for many reasons.	8/15/2019 10:17 AM
44	Self regulation	8/15/2019 9:56 AM
45	Stop targeting people that don't live in Larimer county.	8/15/2019 9:44 AM
46	Make sure regulations are common sense and not put in place for the sole purpose of stopping operations.	8/15/2019 8:46 AM
47	More research on affects on new born babies.	8/15/2019 8:38 AM
48	Our family would like to see setbacks from residential dwellings as well as more control over the regulation emissions resulting in poor air quality and global warming.	8/15/2019 7:57 AM
49	No regulation. Voters spoke leave the industry alone	8/15/2019 6:55 AM
50	Oil company trucks track dirt and rocks into the paved roadways. Resulting in broken windshields and headlights.	8/15/2019 6:49 AM
51	Please take into account public health issues, particularly impacts on pregnant women and their unborn children, and the release of carcinogens.	8/15/2019 5:53 AM
52	Human health must come first, second other species protections	8/15/2019 5:32 AM
53	Please prioritize the health, safety, and welfare of the residents!	8/15/2019 5:01 AM
54	Are lobbyists writing our laws?	8/15/2019 4:56 AM
55	Latest technology used in drilling, fracking and completing the wells.	8/15/2019 4:53 AM
56	Many of the areas above are thoroughly covered under existing COGCC rules and guidelines. Larimer county should enact regulations that assure a seat at the table in O&G decisions. However, enacting regulation that is needlessly more stringent than existing COGCC rules lessens the COGCC's impact and creates a complicated mosaic of rules for oil and gas companies to try and navigate. Adoption of rules similar or identical to COGCC rules but with the security blanket of a "local" team looking over them would provide a good local check while also lessening some of the burden on an already resource strapped COGCC.	8/15/2019 4:47 AM
57	Allow them to drill in larimer county	8/15/2019 4:38 AM
58	I believe there are enough regulations. The more regulations that get instituted that are not needed it could drive Oil and Gas Operations out of the State to produce somewhere else which will take away many jobs and other jobs that rely on the energy sector and the tax revenue that it provides our communities and the State	8/15/2019 4:36 AM
59	County should not be wasting time or money on this. The state already has regulations.	8/15/2019 4:02 AM
60	I'd only ask we enforce regulation based on the best scientific evidence available and not based on fear of change. Long terms goals are more important to me than short term impacts	8/15/2019 3:50 AM
61	I would love to see more communication with the general public. I think a lot of residents could benefit from outreach and education.	8/15/2019 3:42 AM
62	Health issues	8/15/2019 1:46 AM
63	Oil and gas is properly regulated at the state level.	8/15/2019 12:47 AM
64	Stop putting these in so close to existing housing. Makes the residents question their safety and makes them unsafe and undesirable. Properties were there first why their backyard?	8/15/2019 12:26 AM
65	A balanced regulatory approach should be taken. Not overly burdensome but not too loose either	8/15/2019 12:21 AM
66	I don't want houses to start exploding	8/14/2019 11:57 PM
67	There it too much regulation now. I want to see less.	8/14/2019 11:52 PM
68	Let oil and gas companies continue to operate without any additional hurdles.	8/14/2019 11:21 PM
69	Find more alternatives to prevent smog and drilling. Keep a good balance.	8/14/2019 5:30 PM
70	I would like regulations that are based in sound scientific data and not based on the emotional responses of the activists that speak the loudest.	8/14/2019 4:55 PM

71	They make profits at the expense of life on this planet. We are becoming extinct at our own hands...and for what? Their shallow short-sighted addiction, greed.	8/14/2019 4:16 PM
72	Keep rigs away from homes businesses churches and schools	8/14/2019 3:19 PM
73	Leave it alone	8/14/2019 3:05 PM
74	Regulations must be based off of Proven Facts not emotions.	8/14/2019 2:56 PM
75	Gas and oil make our economy stronger do not let leftist Polis take over our local control	8/14/2019 2:35 PM
76	None	8/14/2019 2:08 PM
77	There's more than enough regulations at this time. Until there are reliable alternative energy sources available, we need to keep oil and gas in America.	8/14/2019 2:05 PM
78	Make reasonable rules and regs	8/14/2019 1:55 PM
79	Do not shut down the life blood of the economy	8/14/2019 1:50 PM
80	No other regulations should be added it would kill the industry in our county	8/14/2019 1:38 PM
81	Follow the lead of Weld County	8/14/2019 1:30 PM
82	In the light of SB19-181, it would be prudent to exercise a 2 year moratorium on ANY new development or expansion of existing oil and gas sites or infrastructure.	8/14/2019 1:28 PM
83	Needs to be fair on both sides of things. Also landowner rights should be a legitimate concern in the process and that they get fairly compensated	8/14/2019 1:23 PM
84	Employee safety needs to be number one. Always. We don't need to be in a hurry. Oil has been in the ground for millions of years. Another few days to do it SAFELY will not make a difference.	8/14/2019 1:11 PM
85	Protect wild life and nature areas, keep air and water safe. And convert to green energy	8/14/2019 12:04 PM
86	The oil & gas industry is already the most regulated industry in Colorado. Not a single person would be living the lives they are today without oil & gas.	8/14/2019 11:37 AM
87	After drilling, the locations continue to burn off gas. Thousands of these are burning continuously affecting our climate in the area	8/14/2019 11:24 AM
88	A few more safe guards wouldn't hurt. Because it's not if it's when an accident happens you need to be able to contain it as soon and as safely as possible.	8/14/2019 10:58 AM
89	Regulations hurt those working in the field who have to work to support their families. Consideration of economic effects need to be addressed as well. Are these regulations going to increase gas prices in Larimer county? Is our local economy going to hurt because all of the jobs are sent away to Weld County and neighboring states? If any major changes are coming, these need to be placed on a ballot so all Larimer county citizens have a say in changes that effect them.	8/14/2019 10:58 AM
90	Colorado is already regulated enough. By far the most regulated oil/gas play in America.	8/14/2019 10:48 AM
91	Tremendous job creation	8/14/2019 10:46 AM
92	Please use the applicable laws as they are currently written. Allowing impassioned special interest groups who are ignorant or grossly misinformed to dictate what they feel the laws should be is poor policy. Please allow the land owners and mineral owners the opportunity to continue to develop their assets as they see fit within the appropriate and applicable law without outside interference of those who don't even live nearby or would otherwise have a direct interest.	8/14/2019 4:10 AM
93	I think the current cogcc rules are good	8/14/2019 4:07 AM
94	Please take time to review current COGCC and CDPHE regulations to understand the starting point. Also, please pay attention to COGCC and CDPHE rulemakings so as not to create duplicative or contradictory local regulations.	8/14/2019 4:04 AM
95	The industry has been operating safely to protect our environment and communities. The general public needs to be brought up to speed in which how production companies are operating.	8/14/2019 3:02 AM
96	industry well regulated now	8/14/2019 1:27 AM
97	I understand that Oil & Gas needs to be regulated but you cannot just blindly pass regulations that harm people just trying to make a living. These need to be fact based regulations not just off of your dislike of the Oil & Gas business.	8/13/2019 10:58 PM

98	People should have the right to clean air and water. Oil and gas companies are putting profit before people and why are we allowing that?	8/13/2019 1:36 PM
99	I believe the oil and gas industry has enough oversight by the established commissions that are already in place and that further regulation and oversight would only hinder the continued development of our natural resources.	8/13/2019 10:57 AM
100	Regulations should be developed by subject matter experts who understand how the regulations will be defined and how regulations can be complied with and not by a political or emotional plea.	8/13/2019 9:39 AM
101	You need to keep people of the oil and gas locations that don't have business there.	8/13/2019 9:04 AM
102	Please work together with industry leaders, like Occidental Petroleum (formerly Anadarko).	8/13/2019 7:12 AM
103	Oil & Gas Operations too close schools and residential neighborhoods. The air quality of these operations. Increased air quality monitoring near oil and gas operation fencelines.	8/13/2019 7:03 AM
104	We need oil and gas represented in this task force to provide information on how we conduct our work safely.	8/13/2019 6:15 AM
105	Oil and Gas brings in jobs and working in the oil and gas field it improves the community not only in the jobs market but also the environment	8/13/2019 4:21 AM
106	Reciprocal setbacks for developers	8/13/2019 4:02 AM
107	I believe it is important to take input and heed facts about the industry and the safety measures in place from all parties before making decisions. Personally, I believe that some regulation may be necessary, but not so much as to prevent the production of the resource that sustains our current way of life as we know it and causes the loss of jobs from many in our community	8/13/2019 3:46 AM
108	A little more information to people who will listen could go a long way. There is a happy medium that can be found for prudent and safe extraction of hydrocarbons.	8/13/2019 2:59 AM
109	If you put in regulations for oil and gas like setbacks they need to be for building new subdivisions too.	8/13/2019 2:41 AM
110	Regulating is allowing our poisoning. The earth is dying. Ban fracking now!	8/13/2019 2:13 AM
111	the Oil & Gas community is here to provide local resources to the people of Colorado and Larimer County; passing the buck to another municipality/state/country just ensures that everyone loses because we have no say on how things are done while we continue to use these basic building blocks for both energy/electricity and as the raw material for our basic necessities - tires, clothing, vehicle/other lubricants, etc.; please ensure that we are fair with everyone on this - everyone plays a part in ensuring that there is proper separation between O&G and the public so as to not impact each other	8/13/2019 2:10 AM
112	use your head and not your heart when looking at situations	8/13/2019 1:45 AM
113	Good regulations that add value and make sense are welcomed.	8/12/2019 11:21 PM
114	There is no good reason to jump the gun and produce county regulations while the Colorado Oil and Gas Commission (COGCC) is working on state regulations that may invalidate the Task Force's product. When we moved to Northern Colorado from Washington DC in 2017, we deliberately avoided Weld County because of the O&G problems and specifically the risks of out-of-control fracking enterprises in that area. It is disheartening to contemplate Larimer County going in the same direction as Weld.	8/12/2019 3:57 PM
115	Regulations for monitoring and enforcing high standards for air & water quality, environment protection, and wildlife must be established that are measurable and accountable.	8/12/2019 1:27 PM
116	A 'cap' or moratorium on the amount of oil & gas fracking permitted.	8/12/2019 11:47 AM
117	Regulations should be aligned with the state.	8/12/2019 10:21 AM
118	keep it reasonable, working for both parties	8/12/2019 9:46 AM
119	Any thoughts of regulations based on environment impact should be reframed into impact on human flourishing to include the improvement in the human condition since energy abundance.	8/12/2019 9:46 AM
120	Oil and gas is highly regulated at the state level.	8/12/2019 9:27 AM
121	Colorado 811 laws.	8/12/2019 9:21 AM

122	We currently have some of the strictest regulations on oil and gas as a state. Lean on those regulations and try not to close down an industry that provides so much to local communities.	8/12/2019 9:14 AM
123	The Federal and State have more revenue to fund departments with Industry experts. Local reps are influenced by emotions not facts	8/12/2019 8:58 AM
124	Leave it alone	8/12/2019 8:27 AM
125	Water is scarce in Colorado. Fracking wells use massive amounts of water (on the order of a million gallons per well). Plus these wells sometimes contaminate groundwater. This takes water away from farms and residents in an already water stressed area. Methane, a very potent greenhouse gas, also leaks from fracking wells. We must prevent all methane leaks. All future wells should be banned because we are already significantly above the safe level of 350ppm CO2. If a regulation existed that banned any company from working in the county who had a documented methane leak or groundwater contamination issue, then all the companies would take health, safety, and the environmental precautions much more seriously. Please strengthen health, safety, and environmental regulations for oil and gas projects.	8/12/2019 7:56 AM
126	It is best to end fracking which wastes precious water and pollutes the environment.	8/12/2019 7:54 AM
127	Set Backs, keep developers from building on top of our location.	8/12/2019 7:50 AM
128	Further restriction will only serve to negatively affect the safe and efficient operation of oil and gas production.	8/12/2019 7:20 AM
129	We have enough rules and regulation imposed on the Oil and Gas, it is the most highly regulated industry in the US. How about better setback by encroachment buy builder of home and businesses to the wells and faculties already existing	8/12/2019 7:19 AM
130	Take a holistic approach to how land is developed for O&G activity. Understand the ripple effect certain choices can have on a community. Example: decision to construct landscaping berms around a given well/facility pad. If fill cannot be generated from "cut" on pad, it will need to be trucked in. This can have a huge impact on road traffic, road degradation, potential dust concerns, etc...	8/12/2019 7:16 AM
131	an exhaustive list of regulations are already on the books. The addition of more regulations may overstep those already in place.	8/12/2019 7:05 AM
132	Oil and gas works very hard to provide the energy the state demands (and ever growing demand) while protecting the state. Heated rhetoric and inaccurate science don't actually help acheive the goal of a well regulated, economically beneficial industry.	8/12/2019 6:47 AM
133	It's already regulated enough. Quit messing with a good thing for our economy and school systems.	8/12/2019 6:18 AM
134	n/a	8/12/2019 6:01 AM
135	I am a native of Colorado (born in Fort Collins) and I want to see Oil and Gas working with communities to minimize impacts from operations while at the same time honoring the rights of mineral owners to allow for extraction of minerals/oil and gas in a responsible manner.	8/12/2019 5:46 AM
136	Oil and gas development adds value to our community. Good paying jobs with in the industry fuel other jobs throughout the community. The nation needs the energy until we can transition to renewables and natural gas is the cleanest fossil fuel for generating electricity.	8/12/2019 5:37 AM
137	There are enough regulations already.	8/12/2019 5:34 AM
138	Provide actual research and information to the public based on facts, not by political interest.	8/12/2019 5:28 AM
139	The Oil and Gas in Colorado is regulated very well. Additional regulations that will not make an impact on Safety and Environment is not need	8/12/2019 5:26 AM
140	Please consider the impact on local economy while also considering the proper long term goals.	8/12/2019 5:22 AM
141	Oil & Gas production is a vital part of the Colorado economy and can be done without harming the community, environment, or people. Current regulations are satisfactory.	8/12/2019 5:09 AM
142	oil and gas is good - look to Weld County	8/12/2019 5:08 AM
143	I want oil and gas to operate in Colorado.	8/12/2019 5:04 AM

144	I personally would like to see promotion of a culture that works toward positive solutions to address the needs of an industry that focuses on improving safety and the environment in a manner that allows for growth in jobs, community, state and does not remove the industry completely.	8/12/2019 4:58 AM
145	Keep doing your job in extracting resources that everyone uses daily in every county of the state!	8/12/2019 4:55 AM
146	Constant monitoring of fugitives	8/12/2019 4:52 AM
147	I understand the need for regulations but please don't over regulate the industry out of the state... the same one that has provided a good living to my family and others for generations.	8/12/2019 4:48 AM
148	We have many oil and gas workers who live in this county and we should not regulate in any way that could potentially effect their livelihoods.	8/12/2019 4:48 AM
149	Over regulating only cost more to companies which in return costs jobs.	8/12/2019 4:46 AM
150	Oil and gas production in all Colorado counties with natural resources are vital to the economy. Localized regulations should not hinder the development of these natural resources while, at the same time, protect the environment and citizens of the county.	8/12/2019 4:40 AM
151	Regulations are already in place with a number of State and Federal agencies. EPA, BLM, FERC & COGCC.	8/12/2019 4:37 AM
152	Regulations should be sure to take into account oil and gas company bankruptcies and ensure money is provided upfront to reclaim oil and gas facilities if a company cannot complete the work itself.	8/12/2019 4:34 AM
153	For the ones opposed, to actually experience the work as it's performed to gain a true understanding of the care that is taken while we do our work as opposed to assuming and presuming what their impractical opinions are.	8/12/2019 4:33 AM
154	These regulations should dealt with at the state level.	8/12/2019 4:27 AM
155	i'm an environmental engineer, and from my experience i think it's important to regulate issues that are demonstrated, and not those that are based on propaganda. there are significant issues with O&G, and some are completely unfounded. be smart and stand up to irrational interests on both sides.	8/12/2019 4:26 AM
156	It is important that the public, especially the oposition, know the hard truths and fact based research, not speculation, about how safe the oil and gas industry is and how much we do to protect the areas that we operate in, our own staff as well as the public.	8/12/2019 4:23 AM
157	Hold other businesses to the same strict scrutiny	8/12/2019 4:22 AM
158	Just make sure it's safe.	8/12/2019 4:22 AM
159	I think the oil and gas industry in Colorado does a great job with managing the develop of energy and conserving the Colorado landscape. The current methods are working and we shouldn't mess with it.	8/12/2019 4:22 AM
160	Don't overregulate and please listen to all parties involved.	8/12/2019 4:20 AM
161	I feel that Oil & Gas exploration is extremely important for our communities to continue to thrive. In light of this I do also agree that regulations need to be put in place but they should not stifle the industry as many of these individuals live in our communities. Without this industry the State/Counties will suffer in that there will be a trickle down effect if those working in the industry lose their jobs.	8/12/2019 4:20 AM
162	Collaboration with all stakeholders including oil and gas complies is critical to regulatory success.	8/12/2019 4:16 AM
163	Local control should apply only to issues which affect the locality of the projects. Broader issues such as setbacks and air quality should be defined by the state, as those issues should not change dependent on where the project is.	8/12/2019 4:16 AM
164	none	8/12/2019 4:14 AM
165	Please don't try to re-invent the wheel. The COGCC already has fairly stringent rules and guidelines so collaborating with them would be an ideal starting point.	8/12/2019 4:10 AM

166	There are plenty of regulations that currently can be utilized. If the current regulations are truly enforced and the individuals verifying the regulations are knowledgeable I believe that positive outcomes can be achieved for both sides of the oil and gas issue. If I was going to pick one regulation to focus on it would be the qualifications or competency of a companies operator(s) and the associated procedures. All currently regulated by OSHA and PSM.	8/12/2019 4:09 AM
167	I'd like to have regulations that foster a healthy environment around oil and gas sites, but not so restrictive that they intend to shut down the industry.	8/12/2019 4:08 AM
168	Other regulations that need to be enforced are residential construction impeding onto existing E&P locations.	8/12/2019 4:02 AM
169	select the top operators	8/12/2019 4:01 AM
170	Commercial and housing development setbacks from existing oil and gas facilities are needed.	8/12/2019 4:00 AM
171	Please work with the oil company's to have responsible development. Oil and gas can be produced safely and is an important part of our economy.	8/12/2019 3:59 AM
172	2500 ft setback. Required monitoring of gas leaks (can't see them like liquid). Strict monitoring of all groundwater nearby. Permit money must go toward renewable energy development.	8/12/2019 3:59 AM
173	Regulating set backs for housing development. Set backs should be the same for both new oil and gas development and for new housing developments near existing oil and gas wells.	8/12/2019 3:57 AM
174	the state of Colorado has implemented a great deal of regulations to help protect the areas being impacted	8/12/2019 3:53 AM
175	I believe it's important to find a balance between protecting the environment and residents of the area, without over-regulating in a way that puts an end to industry.	8/12/2019 3:52 AM
176	The COGCC regulates downhole items and local governments should focus on surface related issues and land use.	8/12/2019 3:52 AM
177	Oil and gas is already heavily regulated. I'd ask to get input from the producers to ensure they have a voice as well.	8/12/2019 3:47 AM
178	The overboard tactics of the current Governor and legislature in order to put the energy companies out of business in Colorado are very extreme and will cripple the economy and hamper our children's education where billions of dollars of revenue currently fund the State of Colorado.	8/12/2019 3:47 AM
179	Most companies will work with local municipalities to do what's best for everyone involved. Keeping a open line of communication between all parties usually works best.	8/12/2019 3:47 AM
180	Encourage moderation and the ability to work with operators on a project by project case, instead of blanket moratoriums.	8/12/2019 3:46 AM
181	No moratoriums	8/12/2019 3:43 AM
182	None	8/12/2019 3:42 AM
183	I believe that the people in the oil and gas industry are very respectful to the environment and people living and working in the area of construction. They definitely already go above and beyond.	8/12/2019 3:34 AM
184	the COGCC has authority on all engineering issues. The county should concern itself with the surface uses.	8/12/2019 3:09 AM
185	The oil and gas industry in Colorado can be compared to no other state as they have implemented the safest way to extract with the best results on the environment.	8/12/2019 3:00 AM
186	Oil and gas are important natural resources. The role of regulation is to keep it safe and find a balance.	8/12/2019 2:22 AM
187	Include citizens in developing a vision for the END of fossil fuel and renewal of human/planet ecosystems.	8/12/2019 12:04 AM
188	N/a	8/11/2019 5:06 PM
189	Fort Collins should be in the forefront of sustainable renewable energy, phasing out fossil fuels and energy. Fracking needs to be banned altogether.	8/11/2019 4:32 PM
190	Don't hamstring this economic engine	8/11/2019 3:45 PM
191	No fracking under our water sources and plutonium contaminated land.	8/11/2019 3:43 PM

192	Oil and gas have helped make Colorado what it is today.	8/11/2019 12:58 PM
193	Severance taxes is an important part of the local tax base and oil and gas extraction has been going on in Colorado for over 100 years! The water is polluted, the land isn't fallow...don't become scared now.	8/11/2019 12:13 PM
194	activists should not make decisions for everyone	8/11/2019 10:23 AM
195	Over regulation is counterproductive	8/11/2019 9:40 AM
196	How and what measures will be taken when the land, water, and air quality poison the environment and the health of the population?	8/11/2019 8:24 AM
197	Please stay safe distances away from all housing, agriculture, waterways and public lands	8/11/2019 8:23 AM
198	I moved to Larimer County after a large multi-well fracking operation was built 750 ft. from my home and I no longer wanted to live there due to air quality, health impacts and other nuisances like noise and truck traffic. We also had an incident at 2:00 am which necessitated an emergency response. Despite our warning it was built inappropriately in a neighborhood and next to a school. A year after we moved the whole operation was shut down and moved because of another "incident" which required the evacuation of the High School Football stadium. There is no reason that o&G should be able to ignore land use and zoning requirements. Greeley's zoning requirements would never would have allowed a less dangerous factory to build at this location. Enforce Zoning! In spite of "state of the art" technology, infrared technology revealed an unacceptable amount of methane gas released multiple times a day when the thief hatch was open to allow off-loading. This escape was not counted against their allowances because it was considered an acceptable use exemption. Monitor emissions! No facilities in neighborhoods and near schools and health facilities. Be stringent and protect your citizens or you will end up like Weld County. A mess!	8/11/2019 7:21 AM
199	You see that massive influx of new residents? You see that massive residential building boom going on? What do YOU think fueled that boom? Tourism? Legal marijuana? The oil and gas industry brings in more than TWICE what weed and tourism do, combined.	8/11/2019 5:30 AM
200	Setbacks only make it harder on the oil and gas companies to do their job, which is to be the leader in the Colorado economy.	8/11/2019 3:09 AM
201	None	8/11/2019 3:04 AM
202	Mirror regulations in Weld county since it has more logical rules and provides the county the majority of its growing tax base.	8/11/2019 2:34 AM
203	Work closely with both sides of this very heated topic. Maintaining development is important to all of us. Not just for the jobs it creates or the money they give back to local communities. It helps keep us on the forefront of independent energy development.	8/11/2019 2:32 AM
204	Least amount of regulation is preferred. Safety is key.	8/11/2019 1:34 AM
205	The industry is very heavily regulated by the CDPHE and the COGCC and those regulations are enforced. No need for further regulations.	8/11/2019 1:02 AM
206	Enforce the rules already in place. The ones that are already following them are doing the right thing. It's the minority that is not and needs to be held accountable.	8/11/2019 1:01 AM
207	Let them continue to work! Lots of local jobs will be impacted with any moratorium.	8/10/2019 11:42 PM
208	No setbacks	8/10/2019 8:46 PM
209	Loss of jobs.	8/10/2019 5:47 PM
210	Let the experts make the decision, not the political noise. There are hundreds to thousands of industry employees that live in Larimer County, their input is more valuable than the NIMBY KIITG loud few. Thank you.	8/10/2019 5:02 PM
211	They are a waste of taxpayer money.	8/10/2019 4:34 PM
212	There are plenty of regulations. More regulations are unnecessary	8/10/2019 4:02 PM
213	Colorado's regulations are the most stringent in the nation and used as a model across the country. Even though Colorado leads the nation we continue to improve them to protect our environment and citizens.	8/10/2019 3:58 PM

214	Regulate the real estate developers who build communities so close to well sites...what about them?	8/10/2019 2:49 PM
215	Keep local companies in business...dont allow other states to run our state	8/10/2019 2:49 PM
216	Remember we all utilize these resources everyday and it's cheaper to use local oil and gas	8/10/2019 2:48 PM
217	None	8/10/2019 2:35 PM
218	Ignore false science and hysterical claims surrounding "fracking" - take note, the Colorado Supreme Court has ruled "bans on fracking" are unlawful.	8/10/2019 2:28 PM
219	Noise operations is a nuisance	8/10/2019 2:27 PM
220	Keep them simple and straightforward	8/10/2019 2:16 PM
221	The regulations should not create contradictions to state and federal requirements. Additional the local administration should have a industry knowledgeable resource as a consultant to who is not bias and understands the technical aspects of the industry.	8/10/2019 2:10 PM
222	Let the state do the job. They will be more functional.	8/10/2019 2:04 PM
223	No set back	8/10/2019 1:56 PM
224	We already voted on what we thought so the government shouldnt be going against us	8/10/2019 1:53 PM
225	Excessive regulation is a great way to create economic distress and get yourselves recalled	8/10/2019 10:53 AM
226	Don't listen to the non sense of the far leftists. They have little to no data to back their arguments.	8/10/2019 7:02 AM
227	Setbacks and limited wells are so important. We don't want people killed in explosions and earthquakes	8/10/2019 5:25 AM
228	Save our jobs!	8/9/2019 5:12 PM
229	The staff and task force must abide by their duty with the #1 priority being health and safety of Larimer County residents. This must prioritize air quality and stop new permitting until proving that health & safety requirements are met.	8/9/2019 4:31 PM
230	Don't let the anti-frackers bullies run all over you	8/9/2019 3:36 PM
231	Keep oil and gas safe yet productive	8/9/2019 2:24 PM
232	Drill!	8/9/2019 2:04 PM
233	We should use renewable sources. Keep this out of wildlife habitats!!!!	8/9/2019 12:19 PM
234	If we are going to continue using fossil fuels the drilling must be regulated to strictly control both air and water pollution. There should be a period for public comments, and those comments given full consideration, when drilling and/or storage is permitted anywhere near residential or recreational areas.	8/9/2019 12:06 PM
235	The State already has comprehensive regulations on the industry. Why are you thinking of additional or different regulations?	8/9/2019 11:50 AM
236	Maintaining the economic viability of energy development in Larimer County.	8/9/2019 11:37 AM
237	US produces oil and gas more environmentally friendly then any other country. Instead of criminalizing the industry how about supporting the industry that makes everyday life convenient. Abundant energy has lifted more people out of poverty then any government program ever has.	8/9/2019 11:00 AM
238	Responsible exploitation of natural resources is the foundation of all economy. Without agriculture, oil, gas, mining, logging, etc... there are no iPhones. There are no Teslas. There is no heat or electricity or 3000 sqft homes. Keep in mind that the lavish lifestyles that you all know and love come from an economic exploitation of the earths abundant resources.	8/9/2019 10:51 AM
239	I understand Oil & Gas is an incredibly important industry to our state. However, as the population of the state increases, it is imperative we practice good stewardship of the land surrounding homes and schools.	8/9/2019 10:06 AM

240	Oil and gas is an important industry to Colorado and Larimer County. It is good to regulate, but not remove the presence of oil and gas in Colorado. So many of our community members work in this industry or their businesses are supported in this industry. If regulation occurs it has to be done by those with experience and knowledge in oil and gas, otherwise it would be negligent and hurtful to the community. I encourage working with industry members to understand and work together to find a co-existence for production of resources that each and every one of use every day, even those who are so against it. Thank you for the opportunity to submit a response to this survey.	8/9/2019 9:50 AM
241	Don't over-regulate. Remember, oil & gas is already heavily regulated at the State level. They are ALREADY held accountable for all of the items in question #1.	8/9/2019 8:58 AM
242	Loss of jobs within the industry and beyond – devastating thousands of Colorado families · Loss of revenue critical for schools, parks, road improvements, police and fire departments · Loss of support and funding for local communities including food banks, youth and education programs, and environmental initiatives. · Loss of low-cost, locally produced energy (today, all the natural gas that CO consumes is produced in CO) DO NOT BEND TO THE ANTI FRACKING GROUPS. Larimer and Weld County have effectively managed O&G development for decades. Do not let Denver and Boulder representatives negatively effect this extremely important industry.	8/9/2019 8:24 AM
243	Protect the owners of mineral rights. Many times they receive life-changing money but so make sure their rights/mineral property is not denied.	8/9/2019 6:55 AM
244	Traffic control	8/9/2019 6:34 AM
245	There are currently multiple layers of federal, state, and local regulations in place that govern oil and gas operations, giving Colorado one of the most rigorous regulatory environments for the industry in the nation. Cost effectiveness and technical feasibility are important considerations in developing any new requirements.	8/9/2019 6:05 AM
246	In my experience, the best practices in exploration and production are sufficient to protect public health and safety in a site that is well chosen for land use and for (in)vulnerability of the local environment to damage and infiltration. It is vital that those best practices are followed rigorously and consistently, which often requires local authority and supervision. Small operators sometimes neglect to properly train and indoctrinate their employees, not expecting problems or consequences.	8/9/2019 6:03 AM
247	It's important for county staff to interact with state experts in many areas, but would be more effective and efficient to rely on state expertise, rather than try to duplicate it at a local level. Anyone who thinks COGCC or CDPHE or AQCC agencies are in the pockets of any particular industry is not familiar with those agencies and the work they do.	8/9/2019 5:42 AM
248	With extractive industry, what is done can never be undone. The resource will have more value tomorrow than today so we can always take it later. Take your time and make cautious decisions as they will effect us all forever more.	8/9/2019 5:20 AM
249	The ability to maintain energy independence and develop our resources with the most robust and environmentally sound regulations in the nation and perhaps in the world is paramount.	8/9/2019 5:09 AM
250	Minimizing significant differences in regulations with offsetting communities is helpful in keeping things more simplistic and minimizes the chances of a major issue because too much focus was placed on things that don't matter much.	8/9/2019 3:26 AM
251	Mineral ownership and the right for a party to received royalty payments on those minerals is central to the rule making. You cannot ignore this. HOWEVER, we need to collaborate on how we strike a balance between rights and NIMBY. Yelling and rude behavior at public meetings is not dialogue and discussion. We must sit at "the table" and try to come to common ground for all. Civility seems to have disappeared. We need oil and natural gas for our every day living. Food, electronics including cell phones, medical supplies and equipment, all sorts of products made from oil and natural gas by products...we will not be without oil and natural gas for a long time as long as we need the products we use every day. We do need alternative sources for electricity (heat, a/c, etc.) but oil and natural gas by products make all those daily products we use. So, oil and natural gas is necessary for health and safety.	8/9/2019 2:56 AM
252	Engagement is key.	8/9/2019 2:42 AM
253	Make sure that the people writing these regulations have an expertise and good understanding of the industry	8/9/2019 2:21 AM

254	I would like the people on the regulations task force to be completely honest with themselves in how much they actually use products that come from Oil and Gas and at that point decide if they can go without the means of oil and gas. More importantly look at the research that has been conducted and help support the fact that Fracking does not impact ground water	8/9/2019 2:01 AM
255	Coloradans can collaborate -- protecting our environment and respecting property rights.	8/9/2019 1:53 AM
256	I think it's hypocritical to regulated oil and gas out of business while still consuming natural gas and oil derived products. I don't believe it's oil and gas or safety and environment, I believe they can coexist.	8/9/2019 1:46 AM
257	Any regulations should focus on the goal, not the methodology to achieve it. Technologies are changing and evolving, so focusing on using a FLIR camera for instance is bound to end up with a rule that is obsolete in a short time.	8/9/2019 1:45 AM
258	I urge you to meet in the middle with concerns of citizens and the oil and gas operators to make common sense regulations that allow for the safe and economical use of Colorado's natural resources.	8/9/2019 1:42 AM
259	Colorado's existing state regulations are already the strictest of any state. We should abide by the existing state regulations and take advantage of any additional tax revenues we can generate by fostering oil/ gas development from the resources in Larimer County. We can use the tax revenue to benefit our county, and we can abide by the existing Colorado regulations to ensure safe development and harvesting of our resources. The small, tiny towns in Weld County have some of the nicest schools and fire departments (Galeton, CO's fire department!!!) of anywhere in the state. We can learn a little from Weld County.	8/9/2019 1:16 AM
260	The regulations need to be fair and just and not punitive and impossible to achieve. I have never witnessed such an over regulated industry. Our homes are far more unsafe and pollutant and not environmental friendly than the oil and gas facilities.	8/9/2019 1:09 AM
261	I am a facilities engineer and I work hard to make sure pad facilities are designed to minimize emissions or do anything that would harm the environment. I also want to make sure I keep the people working the pad safe from harm.	8/9/2019 1:06 AM
262	quit making assumptions.	8/9/2019 12:59 AM
263	This is a great industry, contributing to the growth and benefits of the State.	8/9/2019 12:58 AM
264	Oil and gas have the resources to do what ever they want regardless of public sentiment so what does it matter. Selfish and greedy	8/9/2019 12:54 AM
265	N/A	8/9/2019 12:50 AM
266	Regulations should be simple to understand and implement. Technical and financial feasibility should be established.	8/9/2019 12:18 AM
267	Continue to reinforce the current operating protocols that keep the community safe including driving practices and environmental standards that oil companies have been practicing.	8/8/2019 11:20 PM
268	Let industry wise folks regulate this industry!	8/8/2019 11:06 PM
269	I believe we need baseline studies done prior to any permits being issued. We know the hazards to our air and water with fracking, so we need to see what occurs if Larimer County continues to allow fracking. I believe a "timeout" is necessary until the Oil and Gas commission finalizes their rules. The first priority should be public health and safety. Thank you.	8/8/2019 7:19 PM
270	Regulations should be reasonable with regard to cost of operation and environmental requirements. Safe operations must be conducted without unusually strict or costly environmental rules.	8/8/2019 7:09 PM
271	Leave it to the state as is and stop usurping people's private property rights.	8/8/2019 6:25 PM
272	It's important that we balance regulation with the need for oil and gas operations to continue.	8/8/2019 4:42 PM
273	What happens after these wells are abandoned?	8/8/2019 4:35 PM
274	I feel that o&g feel that they should control the state and I think we need to have further distance from all buildings and I fear that fracking is damaging our earth allowing a shift in the plates. Just don't feel we are being told the truth from o&g companies because if we knew the truth they would lose billions.	8/8/2019 3:46 PM
275	Nothing	8/8/2019 2:54 PM

276	Please allow them to do their job. Stay the hell out of this!	8/8/2019 2:46 PM
277	No new drilling	8/8/2019 2:34 PM
278	Safety	8/8/2019 2:12 PM
279	The composition of the Task Force is not balanced. There are far too many people with their hands in the oil and gas business. We need to look at the future of this county and this planet with regards to climate change and reduce as much as possible the removal of oil and gas from the ground. We also need to regulate water use and NONE of it should be pumped back into the ground. Rather it should be reclaimed to the quality at which it was received and then reused. Air quality standards are vital. No exemptions for 90 days at the outset of drilling. No leakage of methane. HEAVY FINES for infractions. This industry regularly leaves a mess behind for the rest of us to clean up. So make sure bonding occurs at the outset.	8/8/2019 1:57 PM
280	I work in oil and gas and live in Loveland. My fulltime job is to work with a team that monitors locations and makes sure that there are no harmful air emissions. I know that Colorado's Reg 7 among the other state and federal regs in place do a great job in protecting our air quality in Colorado. We in the industry work very hard to keep our air, land, water, wildlife and every other aspect of our environment healthy and safe. There's not one of us that doesn't love this state and value our environment as much as any other person, despite what others may say!	8/8/2019 1:53 PM
281	Is Fracking still necessary and safe?	8/8/2019 1:36 PM
282	None	8/8/2019 1:33 PM
283	I am disappointed to see that the Task Force is not balanced, as it was supposed to be. If you can't look at this issue neutrally, we should start over by picking a new Task Force.	8/8/2019 1:01 PM
284	Read the COGCC Rules. There are plenty of them that you need to familiarize yourself with to understand what protections exist already before further rule making is done.	8/8/2019 12:36 PM
285	Don't over regulate. The state should be setting the standards	8/8/2019 12:33 PM
286	Local communities do not have the technical expertise to develop technical oil and gas regulations. Managing local impacts is appropriate.	8/8/2019 11:59 AM
287	That property rights are respected	8/8/2019 11:37 AM
288	Do your research and don't listen to the propoganda from ignorant parties.	8/8/2019 11:12 AM
289	I would suggest not duplicating efforts by the state. They are better prepared and staffed to handle most of these issues. And that makes a complicated a touch simpler for an industry that employs a lot of Larimer county residents directly and has a big economic impact.	8/8/2019 11:01 AM
290	When is Government overreach enough? At what point have they gone to far when they are controlling people income from their own property?	8/8/2019 10:59 AM
291	I hate this so much, it's dangerous and reckless, and killing or planet	8/8/2019 10:57 AM
292	how much of a tax increase for Larimer county residents will be required to support the staff required to monitor and enforce regulations. Where will the tax revenue come from to fund this? will there be a Mill levy increase?	8/8/2019 10:55 AM
293	The regulations already in place in Colorado are some of the most stringent health and safety standards in the country. The current overreach being attempted is just an excuse to push a socialist agenda by the current administration and detracts from factual evidence, and advantageous benefits to all Coloradans. We deserve the prosperity, improved quality of life and environmental protection that the energy industry has thus afforded us without all of the detrimental politics the far left is trying to force on us.	8/8/2019 10:54 AM
294	The Oil and Gas industry is important to Colorado's economy and creates many great job opportunities. Regulations should focus on holding operators accountable for safe and environmentally friendly oil and gas production not stifling the industry. If properly regulated the extraction of these vital resources can be done without adversely effecting the environment while creating more opportunity for Colorado residents. Other states like Pennsylvania can serve as a good example as to how regulations around drilling and production operations can be completed with a minimal impact to the environment. A responsible, accountable and thriving oil and gas industry is a win win for Colorado.	8/8/2019 10:53 AM

295	Oil and gas industry contribution to jobs and tax revenues is critical to a vibrant Colorado economy. Unwarranted and redundant local regulatory hearings will simply result in excess costs and inability to develop oil and gas resources in a timely manner, resulting in job losses, declining tax revenues and negative economic impact on Colorado.	8/8/2019 10:49 AM
296	Consider the resources at the state level and understand local government's limitations when it comes to regulating a highly technical industry. Please focus on science and not rhetoric.	8/8/2019 10:48 AM
297	Colorado has already established itself as the most regulated state; adding on regulations adds cost, burden, redundancy, at no legitimate local benefit.	8/8/2019 10:46 AM
298	The State of Colorado already has the most strict oil and gas regulations of any state in the nation. Creating even further regulations at the local level will do nothing by push E&P companies out of Colorado, eliminating potential tax dollars for Colorado programs and citizens.	8/8/2019 10:46 AM
299	The Oil and Gas Industry utilizes highly sophisticated technology and equipment and has a strong belief that safety is paramount. Workers care that the job is done efficiently and safely, and if any worker spots an issue, 'Stop Work' can be used to halt operations and inspect conditions. There are a lot of behind the scenes employees working to get energy out of the ground and into your home.	8/8/2019 10:38 AM
300	Regulations need to be prudent, reasonable and common sense. Need to promote development and subsequent increased tax revenue.	8/8/2019 10:31 AM
301	I support COGCC and the CDPHE in the regulations, stick with what is already in place	8/8/2019 10:30 AM
302	Help them don't hinder them	8/8/2019 10:22 AM
303	We need to ban fracking period. Our environment and health matters! Colorado needs to lead the way with alternatives not more oil and gas.	8/8/2019 9:42 AM
304	Transparency is essential	8/8/2019 8:27 AM
305	WE NEED TO SERIOUSLY INVEST IN CLEAN RENEWABLE & SUSTAINABLE ENERGY!!!! NOW!!!!!!! STOP FRACKING! STOP DRILLING! STOP DENYING CLIMATE SCIENCE! AAAARRRRGGGGHHHHH	8/8/2019 7:52 AM
306	Earth, water and air should all be regulated because placing value on these resources, not only the profits of oil and gas, will help keep our future on this planet healthy and viable.	8/8/2019 6:26 AM
307	Be reasonable! Respect life.	8/8/2019 5:37 AM
308	Reaching zero CO2 emissions is critical to avoiding catastrophic climate change. Fracking must be banned ASAP for this reason alone (in addition to a variety of other problems).	8/8/2019 5:25 AM
309	Do what you can to help the industry. Not hinder it!	8/8/2019 4:47 AM
310	With science and fact showing increasingly negative outcomes in regard to active and retired oil and gas sites it is clear safety regulation, day to day operation and objective oversight by a non-industry commission needs to be the standard. Inspection and accountability of the industry needs to become not only transparent but paramount and responsibility for the cost and ongoing operational costs needs to rest on the shoulders of the industry not on cities, counties or the State. What this means at the County level is strict regulation for health and safety of the oil and gas industry with a sustainable prioritized plan for the County to move toward renewable energy sources.	8/8/2019 3:49 AM
311	We should be strict on drilling operations as to environmental impacts - spills, leaks, emissions, water table contamination. There is no excuse for them to endanger or negatively impact local populations for their own profitability.	8/8/2019 3:12 AM
312	The exhausted wells must be responsibly capped and the land restored by the OG company. Money should be set aside at the beginning for the clean up at the end. Taxpayers should not be responsible for the cleanup.	8/8/2019 2:48 AM
313	None	8/8/2019 2:29 AM
314	Increase in newborn heart defects near oil and gas wells is a real concern, as is long term exposure to all ages	8/8/2019 2:19 AM
315	I don't see that we need more drilling and fracking but if you're going to do it then it needs to be proven that there won't be a negative effect on residents in any manner	8/8/2019 12:47 AM

316	It's imperative that the county and the industry works closely to form a responsible agenda moving forward.	8/7/2019 7:44 PM
317	Making sure that this resource continues to bless the community.	8/7/2019 4:24 PM
318	Please put the environment, health and safety of your residents at the top of your priority list.	8/7/2019 2:53 PM
319	Don't let either side manipulate data, be logical	8/7/2019 2:33 PM
320	Climate change must be considered above every other factor. Colorado must transition to all-renewable energy as quickly as possible.	8/7/2019 2:19 PM
321	I believe they are over regulated the way it is!	8/7/2019 2:10 PM
322	Allow flexibility for operations not close to housing/schools. It makes no sense to have setbacks out in the middle of nowhere (like between Wellington and Wyoming)	8/7/2019 2:05 PM
323	Making sure the appearance of the facility is not an eyesore. The pad and or facilities need to be barricaded with sound walls and maintained to the highest standard when operational.	8/7/2019 1:31 PM
324	None	8/7/2019 1:12 PM
325	Natural gas and oil are still our country's primary energy resources. Be reasonable with regulations and not restrictive.	8/7/2019 12:38 PM
326	I am extremely concerned with the health, safety and environmental impacts of fracking. SB-181 requires safeguards. I have asthma. Our air quality is strongly impacted by fracking. Many days I cannot go outside. https://www.kunc.org/post/denver-and-fort-collins-among-top-25-worst-cities-ozone-pollution#stream/0 ; https://www.sierraclub.org/rocky-mountain-chapter/how-fracking-poisoning-air-we-breathe The health effects are now overwhelmingly clear: Physicians for Social Responsibility released report on fracking with 1500 scientific studies showing extreme impact. https://www.psr.org/blog/resource/compendium-of-scientific-medical-and-media-findings-demonstrating-risks-and-harms-of-fracking/ WHY would we let Oil & Gas industry threaten our health, safety, the environment-- and BABIES: https://www.cuanschutztoday.org/those-living-near-oil-and-gas-facilities-may-be-at-higher-risk-of-cancer-and-other-diseases/ . We need to protect our people, land, air and water. THAT is is the job of the County and the Task Force. We expect nothing less.	8/7/2019 11:49 AM
327	Fracking is unhealthy for people living near and down wind. The Climate emergency MUST be recognize and immediate actions need to be taken to reduce carbon emissions including oil & gas production	8/7/2019 11:31 AM
328	In regards to any regulations, please be balanced and thoughtful. Regulating for regulation's sake should never be the objective. There are many state rules already on the books, so please understand those regulations thoroughly before drafting anything new.	8/7/2019 11:05 AM
329	Encourage development and discourage environmental activists	8/7/2019 10:27 AM
330	Larimer County needs transparency about locations of all underground fracking sites and uncapped wells. Also, all accidents should be reported to the county sheriff. A county-wide royalty tax should be imposed. An air-quality app should be developed to measure benzene near any drilling site.	8/7/2019 10:12 AM
331	Don't restrict free market business in the oil and gas industry. Don't regulate the environment to the point of losing marketability	8/7/2019 9:37 AM
332	Please consider the health of our families, we need clean water to drink and clean air to breathe along with a healthy clean planet to live on. Without these things human life will change as we know it and likely even end.	8/7/2019 8:57 AM
333	truck traffic and impacts to infrastructure	8/7/2019 7:36 AM
334	A	8/7/2019 7:23 AM
335	I think we're doing a disservice to Larimer County by not exploring and encouraging more oil and gas production in our county. We are in the midst of one of the richest oil/natural gas deposits and it's going largely unexplored in Northern Colorado. This could be a huge economic boon for this area.	8/7/2019 7:16 AM
336	Land owners need to have control over what happens on their own land. Yes, neighbors within a certain distance should have input, it ultimately the land owner should have the say.	8/7/2019 7:13 AM

337	Oil and gas is very important to my family as it puts food on our table and also allows those who are poor to be able to commute to work because we cannot afford a Tesla. If we do not drill here we will just end up drilling in someone else's community in another country and using their land and resources which is unethical so please be considerate of that. We need jobs!	8/7/2019 6:44 AM
338	There needs to be a moratorium on new permits & drilling until regulations are proposed and there is a chance for the public to weigh in on those new regulations. There also needs to be a priority placed on air and water monitoring with a TRANSPARENT public forum for disseminating results from said monitoring.	8/7/2019 6:23 AM
339	Oil and gas is a massive source of revenue to Colorado and Colorados government. Look at the billions of dollars they pay in permitting, regulatuons, and fines.	8/7/2019 6:16 AM
340	The regulations in place now make sense to me. Oil and Gas industry do their best to reduce impact on housing development. It's the real estate people who build too CLOSE TO existing Wells and then cry havoc about the well sites.	8/7/2019 5:48 AM
341	Ban Fracking in Larimer County!	8/7/2019 5:27 AM
342	Human health should be primary. Wildlife & ecosystem health should be primary. Minimizing global warming, elimination fugitive emissions, should be primary.	8/7/2019 5:00 AM
343	I think that our land use codes already limit industrial uses in or near residential areas. Oil and gas operations are definitely an industrial use and should be permitted as such.	8/7/2019 4:35 AM
344	Allow for more oil and gas drilling.	8/7/2019 3:52 AM
345	Stay out of the oil and gas industry you government hacks screw up everything	8/7/2019 3:44 AM
346	Fracking wells and related activities should not be ANYWHERE near homes, playgrounds, places of business, schools, etc. be the forerunner in the state by refusing to place wells, pipelines, or any related activity near people, water sources, or sensitive environmental areas.	8/7/2019 3:20 AM
347	the industry needs consistency and clarity, not a patchwork of wildly disparate county rules. This is the job of the State of Colorado, not Larimer (or any other) county	8/7/2019 2:09 AM
348	A faster approval of thoroughly reviewed permits allows for oil and gas teams to become efficient in planning and scheduling operations in order to help all the parties involved. These parties include the actual landowners, neighbors, communities and the company itself. Too many clogs have hampered operations across the State.	8/7/2019 1:37 AM
349	Please ask landowners to control noxious weeds	8/7/2019 1:35 AM
350	This is counter productive and I'm sad my tax dollars are going to this Task Force!	8/7/2019 1:34 AM
351	Oil and Gas Operations, if productive, may last for many years. Public Health and Public Safety considerations must be among the primary factors.	8/7/2019 12:43 AM
352	Please don't over burden this critical industry through additional regulation.	8/7/2019 12:28 AM
353	Please ensure development is paired with fair regulations. Hours of operation to ensure traffic conflict is minimal is very important to me as our traffic is terrible already. Uphold mineral owner's rights	8/6/2019 11:17 PM
354	Assuring the county issues land use to oil producers, who value the community they are working in.	8/6/2019 10:39 PM
355	Use clean energy to provide energy independence.	8/6/2019 10:21 PM
356	The local economy could benefit greatly from oil and gas production. Larimer county should work toward making itself more attractive to operators in order to expand development and thus revenue for the local economy.	8/6/2019 9:43 PM
357	None	8/6/2019 8:33 PM
358	I would like to say that this only exists due to N partisan politics. There is no evidence that suggests this industry be regulated any further than what it is already. Fair to see that this industry is already the most regulated industry in existence.	8/6/2019 7:58 PM
359	2000 ft setbacks please.	8/6/2019 7:12 PM
360	The task force is biased towards the oil and gas industry. There need to be health advocates and environmentalists on the task force	8/6/2019 6:25 PM

361	Right now I don't feel that oil and gas has affected Loveland or Larimer county that much.	8/6/2019 4:54 PM
362	it is time to cease fossil fuel exploration/production and transition to wind and solar power production.	8/6/2019 4:24 PM
363	We should have higher County taxes on oil extraction. This is a natural resource and should generate funding for the public good. In particular dealing with poverty issues around housing, health services, and education services. We need revenue to help people who are struggling with poverty. We will be judged by how the least among us live.	8/6/2019 3:54 PM
364	The industry doesn't need more regulation but people that do not know about the industry need more education about operations and regulations within the industry. It would resolve a lot of conflict and being able to be educated by industry leaders and people within the task force would be more useful rather than taking opinions about how bad it is for the environment and we need this and that regulation when the truth is it is not what's needed	8/6/2019 3:53 PM
365	Oil and gas is already heavily regulated. Colorado has the strictest policies in the entire world for gas and oil extraction.	8/6/2019 3:47 PM
366	We need to maintain a balance of good stewards of the environment coupled with smart extraction of natural resources. Please keep common sense in the forefront when developing those resources and creating policy	8/6/2019 3:06 PM
367	Read the facts	8/6/2019 2:59 PM
368	Please try to find a balance that allows responsible development.	8/6/2019 2:51 PM
369	The safety and environmental laws and operational practices are good enough as is.	8/6/2019 2:40 PM
370	There is not time or space on this survey to list the hundreds of reasons why fracking should not be permitted. Don't sell out. Research the science. Fracking can NOT be permitted.	8/6/2019 2:39 PM
371	The current methods are working. We need the energy.	8/6/2019 2:37 PM
372	We are tired of the government, local or state, blocking owners' access to what is rightfully ours. Let us produce on our lands! We are sick of you devaluing our property by preventing us from our rights. Under Federal regulation, if you do so, you must compensate with fair market value, and claim eminent domain. Don't let Boulder and Denver rule rural areas.	8/6/2019 2:27 PM
373	Stop listening to leftists from California.	8/6/2019 2:23 PM
374	It needs to be a balance of input	8/6/2019 2:20 PM
375	Oil and gas development is critically important to our community and economy	8/6/2019 1:48 PM
376	The oil industry is over represented on the task force. We need to put our health and especially air quality over money.	8/6/2019 1:37 PM
377	The county staff and the Oil and Gas Regulations Task Force must protect the best interest of the citizens that live in the areas that are impacted by the oil and gas operations. In some cases, that means that that air or water quality from one community may be negatively impacted as a result of activities in another community. If we can't protect the health and safety of our citizens then we can't be expected to have a thriving community, economic system, etc. We MUST put the health and safety of our communities first (including the protection of our natural resources like our water and air quality). For too long, the rules have been dictated by corporate interests and have NOT been in the best interest of our citizens. Please take the necessary steps to protect our livelihoods as in some cases, it is already too late.	8/6/2019 1:34 PM
378	I want strict oversight by Non-Affiliated Scientists & Environmentalists. Non-Affiliated = total interest in the population, communities & environmental aspects.	8/6/2019 1:30 PM
379	No o&g in Larimer County!	8/6/2019 1:16 PM
380	Our business is not associated with oil and gas however indirectly benefits from an industry that seems to be getting an unjust bad rap. Currently oil and gas are essential, for our homes and transport, there are no viable alternatives currently or in the short term	8/6/2019 12:50 PM
381	Stop working for the oil and gas industry and work for the people! The people and wild life and this beautiful land should come absolutely first before destroying Colorado and hurting the people!	8/6/2019 12:46 PM
382	Set backs and permits requiring bonding and money up front to drill. Also need requirements and for site clean up and capping of wells. The fees must apply to each individual well.	8/6/2019 12:45 PM

383	Common sense approach	8/6/2019 12:36 PM
384	Your decision, without SB 181 rulemaking at the COGCC, is illegal and not protective of health and safety. Business as usual doesn't take into consideration cumulative effects at over 8 proposed sites from over 190 wells. Ignoring state law is very risky business for the local government and community in Commerce City, and could leave taxpayers and their representatives on the hook in case the operator suffers a financial or accidental setback. Follow the law! SB 181 is pretty specific.	8/6/2019 12:32 PM
385	No to oil and gas	8/6/2019 12:29 PM
386	Please protect our health. Please stop putting the development of fossil fuels ahead of all other concerns.	8/6/2019 12:15 PM
387	ALL of the above issues should be monitored and regulated.	8/6/2019 12:02 PM
388	Taxes. Example—With all the oil and gas in weld county, and the subsidies that the state gives oil and gas, taxes should be imposed on oil and gas for obvious things like road repairs . The heavy trucks destroy roads and taxpayers foot the bill. Weld county roads suffer because of these trucks, the extra traffic, the damage to roads, and the taxpayers end up paying for it. No more free rides for oil and gas.	8/6/2019 11:31 AM
389	Listen to citizens, not just the oil & gas lobbyists.	8/6/2019 11:23 AM
390	Before you start enforcing laws on a industry get to understand that industry first. Learn their process. Their ways of protecting air quality, water, public safety etc. Dont pass laws that sound good on paper without consulting the companies first. Theres alot of lies and mis conceptions about oil and gas.	8/6/2019 11:23 AM
391	Regulating will heavily impact my life and those around me. We already have the strictest regulations in the country.	8/6/2019 11:21 AM
392	Oil and gas has operated safely and efficiently in Colorado for many decades. Any increased setbacks, moratoriums, or regulations designed to make energy production unfeasible in Larimer county should be based on genuine, reviewed, and factual science. Fearmongering and specious claims from the "keep it in the ground" movement have no place in a discussion that should be based on hard evidence from reputable sources. Regulations must be fair and balanced, and account for the economic and societal costs of any sort of ban or defacto ban.	8/6/2019 11:11 AM
393	Do we sacrifice air, water, environment, human involvement, our land use and beauty - just so some commercial business can make money???	8/6/2019 11:09 AM
394	I believe fracking has no business near homes and schools. Please set good limits on that!	8/6/2019 11:06 AM
395	Use common sense based on science by actual geologists and scientists who work in the oil and gas industry,not some ex nurse pretending to be an expert on environmental health because Governor polis gave her the title when she is really just an anti oil and gas fractavist.	8/6/2019 10:47 AM
396	Operations should "do no harm".	8/6/2019 10:40 AM
397	Weld County has sold out the public's health and the environment for pure greed. Larimer needs to take a lesson from Weld's plunge into destroying health and the environment.	8/6/2019 10:22 AM
398	Protect our health and environment	8/6/2019 10:12 AM
399	With great power comes great responsibility. You're not only regulating extraction of natural resources, but you're also regulating economical development and stability in the Northern region.	8/6/2019 10:08 AM
400	Be careful NOT to shut down a vital part of our economy.	8/6/2019 10:04 AM
401	Please wisely use the gifts our county has to ensure a positive future for our children. A loud voice does not make something right (this goes for both sides of the issue). Please consider ALL of the options and find a way for us to coexist in the same space.	8/6/2019 10:04 AM
402	I worry that technology of fracking is creating earthquakes and also contaminating our groundwater.	8/6/2019 9:56 AM
403	Keep in mind that most citizens don't want to be told what they can and can't do on their property.	8/6/2019 9:55 AM
404	I think your doing a fine job	8/6/2019 9:31 AM

405	Oil and gas may not be the most ideal way to provide energy, but "green" energies may not be as clean as they are portrayed. I would rather see development here for natural gas than wind turbines and solar panels. Wind and solar had large carbon footprints and relatively short lifespans. While they may seem cleaner for the immediate environment, they come at a cost and a lot of it comes from China and other places that don't care about the environment. Ozone testing in Denver has been found to have ozone from various other places like China. I appreciate the economic benefits from local development.	8/6/2019 9:28 AM
406	Alot of marketing effort was put into assuring water quality wouldn't be affected when fracking was first being introduced to Weld county . It turns out, air quality should have been more of a concern , too. As one who lives among and near fracking operations , I must stress that both should be examined closely. While hard at work in the first months of drilling at the wellpad site , enormous volumes of diesel fumes will be emitted. Noone wants to live near that, trust me. At least be sure setbacks are in place at 1000 ft or more	8/6/2019 9:08 AM
407	Oil and gas as an energy source is a thing of the past, time to move forward and identify and develop other safer means of energy.	8/6/2019 9:07 AM
408	Fracking shouldn't be allowed anywhere near homes or schools. Even a 2500' setback isn't enough.	8/6/2019 9:00 AM
409	I'd like to see 24/7 air quality monitoring at well sites reported in real-time to a publicly available website.	8/6/2019 8:43 AM
410	Compelling, science based research that shows the essential importance of siting and setbacks: https://www.sciencedirect.com/science/article/pii/S0160412019315429	8/6/2019 8:38 AM
411	Make sure your using citing facts behind reasons and conferring with actual professionals behind the matters. Statistics and data need to sourced through multiple stakeholders before a conclusion can be drawn.	8/6/2019 8:26 AM
412	The industry has historically become safer and more considerate of the people who live and work close to facilities. We need the production of our minerals to protect the mineral rights owned while regarding the rights of the people who live and work in the county. Who will compensate those who lose the right to develop their property?	8/6/2019 8:20 AM
413	SB 181 requires that all new oil and gas permits consider human health and safety as a fundamental consideration for their approval. Given that the climate crisis is a direct threat to all life on earth, no new wells may legally be approved until they can be proven to not contribute to greenhouse gas emissions.	8/6/2019 8:16 AM
414	All costs associated with oil and gas need to be covered by oil and gas, including clean up and negative health or property affects incurred by residents/owners	8/6/2019 8:06 AM
415	It's a big country. Just go where there are no people. Simple.	8/6/2019 8:00 AM
416	I just want you to know how strongly the people of this city and county want to resist being overtaken by oil & gas and become Weld - what a tragedy. Special interests and corporations and money do not deserve a voice over regular citizens. Most importantly, it's 2019 - fossil fuels have many issues, but none more important than they are NOT SUSTAINABLE - it is time to start kicking butt at NEW TECHNOLOGY, NEW ENERGY, not to protect the dinosaur (literally). Let's be entrepreneurs here, we are an educated, active, concerned community. Listen to the people, not the fossil fuel industry, please!	8/6/2019 7:36 AM
417	First and foremost is location - it should never be acceptable to locate near residential neighborhoods. Second screening so that 85% of the site is non-distinguishable.	8/6/2019 6:31 AM
418	We have solar and wind freely available to us, non-polluting. Keep oil and gas in the ground. Humans have done enough damage!	8/6/2019 6:15 AM
419	Critical to provide local control to protect surface property rights. Recognizing subsurface rights does NOT mean ignoring property rights of surface owners or their representatives!	8/6/2019 5:42 AM
420	We need Oil and Gas. Do not let other people say that this is bad for us. We need it for it will support our schools.	8/6/2019 5:41 AM
421	Please do not ignore the rights of the mineral owners as real property rights owners too. If they cannot get their minerals developed it is a 100% loss of their property value and they are due just compensation.	8/6/2019 5:32 AM

422	We shouldn't be seeing wells near homes, farms, or anywhere that would poison our ground water.	8/6/2019 5:29 AM
423	Regulate O&G industry just like you do all industries. Not harder or softer. Quit politicizing the town/counties role in how they treat industries. The Sierra Club is not your BOSS!	8/6/2019 5:17 AM
424	Facts are the only thing that anyone should consider. Science has proven this industry is operating safely and is not impacting people moving in on the areas of development. Science has disproved all the anecdotal fluff that activists are standing for. We should not govern our lands nor our people out of fear and spite. We need to remain grounded with proven facts and historical evidence in order to keep this State's prosperity and financial success.	8/6/2019 5:11 AM
425	The oil and gas industry is critical to every county in COlorado and the State as a whole. Revenue from oil and gas taxes, as well as fees collected for permitting for example, represent a more than \$1B source of revenue for critical social and infrastructure programs. The money for these programs has to come from somewhere. The majority of environmental and public health complaints are based on constructed data, exaggerated reporting, and designed to support an anti-oil and gas agenda. The radical activists don't want to simply "regulate", they want to "eliminate". Please don't listen to their voices, listen to your county.	8/6/2019 5:04 AM
426	There needs to be a balance that favors the health of people in the area and water and air quality in the area.	8/6/2019 4:42 AM
427	The oil and gas industry in Colorado provides more than oil and gas for the country. It provides high paying jobs, it provides school funding, it provides a myriad of other government services simply because of the taxes and fees that they must pay to the government. The only things we need to look at are how they treat their neighbors, (nuisances, setbacks). We have the strictest regulations of anywhere in the nation yet we continue to ask for more and more from these companies. This is wrong.	8/6/2019 4:33 AM
428	This task force must work for the people not the industry	8/6/2019 4:27 AM
429	I would like to encourage the OGRTF to examine the science of air quality emissions reports in the last decade, the safety records (for employees, public, and their areas of operations) overall of O&G especially when compared with other large industrial operations in other non O&G businesses, the fact that many companies voluntarily exceed imposed regulatory safety standards in all these areas, and especially the economic impact the industry has on State and local economies, with great consideration for the number of families that rely upon O&G employment.	8/6/2019 4:11 AM
430	The use of fossil fuels must end. How are you preparing to make that happen?	8/6/2019 3:43 AM
431	I wish that you could see all of the people losing their jobs and no longer being able to support their families due to all the restrictions put in place. It hurts me to see how we as Coloradans voted no on 112 and we didn't want regulation only to be bypassed behind closed doors with 118. We are people too, we have families to support and we work hard to do that.	8/6/2019 3:36 AM
432	All operations should be repeatedly inspected for integrity of structures, regulation adherence, environmental & staff safety. Big oil is notorious for cutting corners.	8/6/2019 3:30 AM
433	Let them drill or lose all your resources for schools and first responders	8/6/2019 3:25 AM
434	More open non bias information	8/6/2019 3:15 AM
435	Please allow the oil and gas industry to do their jobs and boost the economy.	8/6/2019 3:05 AM
436	Health and safety of residents and the environment should ALWAYS take precedence over oil and gas profits.	8/6/2019 3:04 AM
437	Relax the regulations most oil and gas companies go beyond the standards set by the individuals running the counties	8/6/2019 2:50 AM
438	Monitor VOC seepage from Weld to Larimer.	8/6/2019 2:19 AM
439	Oil and Gas is heavily commissioned as is. Colorado is one of the highest regulated states and continously ranks at the top in safety and environmental impact. Additional regulations are an unnecessary use of local funds. Focusing more on local resources to aid the underemployed, as well as more affordable housing would have the best impact on the community.	8/6/2019 2:17 AM
440	OG regulations need to be state regulated only.	8/6/2019 2:15 AM

441	Oil and gas is the back bone of our great nation being and remaining independent. We need to be able to access the pockets of O&G as efficiently as possible. I firmly believe that the majority of studies completed on the impacts of O&G on health did not look at all the potential impacts that could be attributing to health issues in an area. If one was to study the health of O&G workers, one would find an extremely different conclusion.	8/6/2019 2:01 AM
442	Public health	8/6/2019 2:01 AM
443	Drill baby drill	8/6/2019 1:57 AM
444	Oil and Gas has been here far longer than the growing subdivisions of which those people use things everyday that are a product of Oil and Gas. I have seen 25 years of Development in Wyoming with animals sleeping and grazing with oil and gas production and had lived in a small town of oil and gas and raised two children which are healthy.	8/6/2019 1:52 AM
445	Don't be fear mongers	8/6/2019 1:47 AM
446	Pushing more regulations will put the county on a slippery slope. How does the county plan to pay mineral owners for the minerals they are not allowed to extract?	8/6/2019 1:46 AM
447	None	8/6/2019 1:44 AM
448	I think that the people spoke with SB181. The regulations are where they need to be and making them more strict is unreasonable and will only hurt Colorado.	8/6/2019 1:42 AM
449	Air quality, water quality, and damages to the environment should be regulated and protected at the state level, but in the event that the State is failing to protect those in your jurisdiction, I believe that SB181 gives you the authority to do so.	8/6/2019 1:36 AM
450	The state regulations are fine. I think at the local level is just to deal with traffic regulations (route planning to avoid conflicting with everyday traffic). Operator agreements much like what the city of Aurora and Commerce City have done. Take a middle ground between the environmentalists and oil and gas. No need for an extremist emotional regulations.	8/6/2019 1:36 AM
451	That all decisions be made with putting the health and safety of all your citizens first and foremost.	8/6/2019 1:33 AM
452	Facts over talking points. Education on the actual process and how the pollution and safety numbers are false and askewed	8/6/2019 1:23 AM
453	The composition of the Oil and Gas Regulations Task Force needs to be representative of the broad spectrum of citizens that live and work in Larimer County.	8/6/2019 1:21 AM
454	Follow a set of rules or laws not your personal ideology	8/6/2019 1:13 AM
455	Colorado already has very strict laws that o amd g are required to follow. Its okay to add to those but let o and g keep working while the rules are decided. Also its very important to have stakeholders and activists sit down and have a adult conversation about it. Comprise must be made on both sides. That way and that way only is it going to work and benefit both sides	8/6/2019 1:02 AM
456	Doesn't belong in our backyards.	8/6/2019 12:59 AM
457	Air quality must be MEASURED. And regulations must enforcement.	8/6/2019 12:51 AM
458	Almost every day this summer we have had unsafe/unhealthy air quality. Much of this is due to the impact of fracking along the Front Range. Our property sits adjacent to am abandoned gas well. The neighbors who owned, and profited, from it don't want the responsibility of cleaning out up, so they "orphaned" it. They claim it is safe, but it occasionally emits gas. I called the state Oil and Gas Commission, and they came and looked at it. They told us that tax payers will likely get stuck with the clean up tab. They also said it may take years before they will be able to get to this well because they have 100's of similar orphan wells. I want Larimer county to put the health of their citizens ahead of the profit of many out-of-state well operators.	8/6/2019 12:37 AM
459	Consider All options	8/6/2019 12:31 AM
460	Building on or close to existing oil and gas production.	8/6/2019 12:30 AM
461	Stop taking away people's careers and livelihoods by banning everything before you get facts straight. I support the industry 100%.	8/6/2019 12:24 AM
462	The condition of existing wells. Make sure the are plugged correctly. Make sure they are mapped and shared with the public. Even if its 50 ft from homes.	8/6/2019 12:23 AM

463	Colorado already has the most stringent methane reclamation and safety regulations for oil and gas operations in the country and moreover, the world. If you stop drilling operations in this state, you are helping to contribute to the problem of environmental issues and poor air quality because usage is going to spike for these resources which means they will be pulled out of the ground somewhere else where is less safe and less clean. Shutting down oriole and gas is counterintuitive to your so-called goal. Colorado already has the most stringent methane reclamation and safety regulations for oil and gas operations in the country and moreover, the world. If you stop drilling operations in this state, you are helping to contribute to the problem of environmental issues and poor air quality because usage is going to spike for these resources which means they will be pulled out of the ground somewhere else where it is less safe and less clean. Shutting down oriole and gas is counterintuitive to your so-called goal	8/6/2019 12:12 AM
464	Allow industry to operate with safety measures addressed.	8/6/2019 12:01 AM
465	the safety of the men and women working in the industry should be taken into consideration. Not just the environment a fire breaks out in the forest you don't see protesters protesting the fire. I think the big companies need to look into the safety side of the industry. Set guild lines that every o/g company follows.	8/5/2019 11:52 PM
466	Oil and gas extraction can be a major economic driver, and should be separated from partisan political rhetoric. The industry as a whole is committed to environmental stewardship and responsible exploration, and should not be demonized on it's face. Economic and job market considerations should be a major consideration, as most arguments over gas and oil extraction are purely based in the politics of hate for the industry of fossil fuels.	8/5/2019 10:37 PM
467	We should also address the byproducts and waste materials that occur during exploration, extraction and transport.	8/5/2019 10:04 PM
468	Oil and Gas is an integral part of our industry at the county, and state level. Shutting down oil operations at a local level will cause loss of jobs, an increase in prices and a loss of funding from O&G, all things that need to be considered before more regulations are put into place.	8/5/2019 8:40 PM
469	It's laughable that anti oil peeps think there can be water contamination in water Wells that might be at a depth of 200 feet, when Fracking is typically at 20,000 Feet.	8/5/2019 8:20 PM
470	Private Property rights	8/5/2019 7:29 PM
471	All is good with the way it has been.	8/5/2019 6:20 PM
472	I am convinced that we must view everything connected to this issue through the lens of the terrible climate crisis we all now face.	8/5/2019 5:50 PM
473	There is no such thing as safe Fracing. The planet is heating up we need to conserve our potable water.	8/5/2019 5:49 PM
474	Air quality effects around fracking operations are just beginning to be measured and understood. Therefore the cumulative health impacts for nearby residents and workers are not known. People who live near fracking and/or who breathe the air brought in by winds from drilling in adjacent counties are essentially unwitting subjects in a dangerous science experiment. Some of the available research evidence from sunny dry places like Utah and Colorado suggests there are significant problems with air quality, particularly relating to ozone which oil and gas drilling makes much worse. Already we, in Larimer County, are in an EPA "non attainment" zone based on our bad air quality. Additionally, today's fracking delays an inevitable and much-needed transition to wind, solar, geothermal, and other power sources that produce less harmful pollution. We are at a crucial juncture in terms of deciding what kind of community we want for our children's future. Fracking poses too many dangers at the expense of too many people, while making a few people rich. It is a myth that fracking creates jobs. The truth is that it creates long term problems we are just beginning to grasp.	8/5/2019 5:47 PM
475	Regulation to insure safe extraction of minerals. Allow the use of companies with high safety records and a notion to work with the community	8/5/2019 5:06 PM
476	Keep fracking out of our backyards!	8/5/2019 5:01 PM
477	Admittedly jobs are an economic benefit from oil and gas. However, is there any social or environmental benefit to oil and gas? If so, what might that be?	8/5/2019 4:54 PM
478	Better local transportation throughout Larimer county. Regulate local/county infrastructure before regulating oil/gas jobs.	8/5/2019 4:41 PM

479	I believe that the regulations are fine as is. Colorado is the toughest on regulations and requirements for drilling, pumping, and extraction.	8/5/2019 4:36 PM
480	We can all works together on this! Educate accurate information. Like 75% cleaner air since the 70's. Oil and gas gets a bad wrap.	8/5/2019 4:33 PM
481	Work with the O&G companies to find a solution. Do not mirror other counties trying to put a moratorium on production. Kills jobs and the local economy.	8/5/2019 4:23 PM
482	Stop the fracking!	8/5/2019 4:22 PM
483	We don't want fracking by us at all!	8/5/2019 4:18 PM
484	I'd like to see it go back the way it was before SB-181. I would love for people to be educated about it. So many people don't know how tough the current regulations are as far as environmental standards, safety standards, etc. People need to be educated.	8/5/2019 4:12 PM
485	Be consistent with the terms and the implementation. Regardless of the what the final rules are enforce and support them in the permitting process. They industry will work to comply and if necessary innovate to meet the structure of the guidelines.	8/5/2019 4:04 PM
486	Understanding the need for coordination related to emergency response to incidents related to oil and gas, how to protect the area from environmental damage and help all involved use best practices.	8/5/2019 3:59 PM
487	We must keep the surface and mineral owners in mind. Proper setbacks and mitigation must occur upon drilling and completion of wells such as sound, light, dust, and odor, etc. This also includes proper notice to offset BU owners outlined by the COGCC. These are valuable resources the we need in order to live the life's we live.	8/5/2019 3:53 PM
488	Ensure Task Force has diverse representation from all stakeholders.	8/5/2019 3:51 PM
489	In my 14years of being an oil and gas professional I have also worked on production teams for Vestas. I have seen how things operate on several aspects pertaining to both operations. I come from a Left leaning family and was always shown how to care for the environment. The teams I have worked on, my colleagues, ours families we are all a part of the community from many different backgrounds and views. Yet we all held one thing in common: doing it right. Not once have we ever compromised our tasks or operations for the benefit of a company. We are honest family members of our communities that genuinely care.	8/5/2019 3:48 PM
490	I have developed headaches from the smell of methane that I can't determine if from cattle feed lots or oil and gas drilling. I would like to know what is in our air in Ft. collins. What is toxic to health and where does it come from and how can it be regulated.	8/5/2019 3:41 PM
491	Make regulations that are backed by sound science, not by what one side of the isle or the other wants based off of emotion	8/5/2019 3:35 PM
492	We have amazing regulations already in place. Stop listening to hype & follow SCIENCE!	8/5/2019 3:32 PM
493	In Colorado Oil and Gas is already regulated more than any other state. Do you really want to put even more regulations on it that will essentially starve the industry and its workers? They're already pulling out of Colorado in masses. I think a big part of the mass hysteria is the lack of knowledge. Please be sure to talk to true industry knowledgeable persons.	8/5/2019 3:26 PM
494	I hate how the land looks now with all the wells and other industrial equipment everywhere. I would much rather see wind turbines and solar.	8/5/2019 3:25 PM
495	There are plenty of other options to explore that are sustainable and not finite; I encourage the strictest of regulations on this industry for the future of our planet.	8/5/2019 3:25 PM
496	The Assertion that Fracking as a means and method of extracting oil, gas and other energies can be completed "safely" is patently FALSE. Fracking destroys the land, poisons the air not JUST for the county in which the well is seated but for the entire state, region, country and - given what we now know from space exploration - Our Planet. See, One Strange Rock	8/5/2019 3:18 PM
497	Come take a look at all we do on a day to day basis to keep not only ourselves and fellow citizens safe, but also to eliminate the release of hydrocarbons into the atmosphere.	8/5/2019 3:17 PM
498	I would like to see a longer feedback period for neighborhoods impacted proposed fracking operations once they have been announced, preferably 90 days or more.	8/5/2019 3:16 PM
499	Don't cripple the industry. An eye over all they do will prove that most take our strict regs to heart.	8/5/2019 3:12 PM

500	As someone who works in the field, all day long, you'd think of such health hazards were to present themselves, don't you believe everyone in the field would be limited, to a certain career length?	8/5/2019 3:10 PM
501	Make it easier to drill and produce oil/gas. The community depends on the jobs	8/5/2019 3:10 PM
502	If your going to shut down the industry in your area, you are not entitled to the money that comes from it.	8/5/2019 3:05 PM
503	The people spoke, we don't want a ban or moratorium on drilling. The town, county, and schools need the money.	8/5/2019 3:04 PM
504	Please include technical input from the industry. There are experts that work in the industry that care deeply about responsible energy development. Don't leave their voices out.	8/5/2019 3:03 PM
505	Frac on	8/5/2019 2:59 PM
506	This is people's homes. It is the place where they live and breath and raise children. Safety and peace are priorities. Beyond that the technology exists for a cleaner more sustainable environment. We should be focusing on those alternatives and getting rid of those that are killing people and the environment. Tesla had many many alternatives a century ago.	8/5/2019 2:58 PM
507	Requiring appropriate and thorough screening of all oil and gas projects	8/5/2019 2:45 PM
508	A half mile setback is widely considered by first responders to be the optimal setback distance between O&G operations and other uses. At a minimum, Larimer County should establish this as THE setback distance. Additionally, it's important to recognize that we need to wean ourselves off of fossil fuels over the next 1 - 2 decades in order to preserve a livable climate. Natural gas is not better than other fossil fuels in terms of its climate impact. So we need to be working toward eliminating our reliance on fracked gas and oil entirely in the near future.	8/5/2019 2:39 PM
509	Don't overdo regulations. We can go too far and be counterproductive.	8/5/2019 2:07 PM
510	Public safety has to come first	8/5/2019 1:33 PM
511	Protect water too	8/5/2019 1:03 PM
512	Regulations aren't enough. The science is in -- fracking is not safe and it's ruining our environment. We must have a total ban on fracking.	8/5/2019 12:42 PM
513	There should be a limit on the number of wells allowed and it should be a small number.	8/5/2019 12:07 PM
514	Air on the Front Range is already dangerous and oil and gas operations add to the load of toxic air. Water is essential to life, we all know this fact, you are charged with protecting our health.	8/5/2019 12:06 PM
515	Operators must be responsible for the damage they do, to often taxpayers pay for what the Operator should have been liable for.	8/5/2019 12:04 PM
516	The state is plenty strict	8/5/2019 11:59 AM
517	Require companies to reveal chemicals they use in hydraulic fracturing prior to drilling/fracking operations.	8/5/2019 11:55 AM
518	Local fire should be welcomed to any production site for a general inspection without notice.	8/5/2019 11:53 AM
519	How do we make it easier to get renewables in the mix	8/5/2019 11:49 AM
520	Facking is unhealthy to ALL living things. It should be BANNED.	8/5/2019 11:46 AM
521	The responsible move to protect the public, is to not allow fracking as it operates today. Whist fracking may provide minimal short term financial rewards to share holders. It's long term consequences for the local communities is far to damaging to make the ends justify the means. Especially if there is any kind of water based contamination. We know the state and others happily ignore the air pollution it causes. Telling the public to drive and mow less, when these sites are pumping metric tons of green house gasses and radon into the air. We know the operators get 30 to 90 days of unencumbered pollutant allowances when they start. Giving them just enough time to get in, make a mess, leave. Then return for another round several months or a year later. As it wants now, there isn't a safe way to frack. The greed of the Industry is plain to see on google maps, and the COGCC site. The only one who can stand up for citizens and the community, is our local government. We can't allow private out of state companies to tell us how they can use or land. Or lie to us whilst they pollute our communities.	8/5/2019 11:42 AM

522	Oil and gas operations should not be allowed to operate in or near residential areas at all. 2500 ft setback is not far enough and any and all fracking ROA should be halted.	8/5/2019 11:39 AM
523	We don't need new oil and gas wells. The companies doing the drilling will not be around or held responsible when cleanup is required. They also ignore the massive harmful medical affects on nearby residents.	8/5/2019 11:30 AM
524	CO is already heavily regulated. We do not need anymore Local Government Red tape	8/5/2019 11:19 AM
525	The industry is a bad neighbor. Citizens are required to fight for their rights	8/5/2019 11:18 AM
526	Stop drilling wells in the areas in which we live. It will threaten water quality and create fire dangers.	8/5/2019 11:11 AM
527	No new wells or pipelines, and definitely no pipelines across or near waterways!!	8/5/2019 11:09 AM
528	Oil and gas needs to abide by all zoning regulations. No free pass.	8/5/2019 11:00 AM
529	Put the interests of the community, beyond those who are employed by the gas and oil companies and their sub-contractors, first. Consider the impact to the environment, health issues and the economy.	8/5/2019 10:54 AM
530	It would be very helpful if you would put the health and safety of "people" before your "profits".	8/5/2019 10:39 AM
531	It is paramount to proceed slowly and take the public's concerns about proximity well into account. The setbacks should certainly be increased, which would decrease the number of acceptable oil and gas drilling sites. Any drilling sites need operational protocols that are enforced with fines that make the cost of failure cost prohibitive rather than a mere cost of doing business. Tax the drilling to pay for the proper oversight. Do not be put in the situation of having funds only sufficient to hire one untrained inspector for 500 sites. Let's be responsive and responsible to the public.	8/5/2019 10:31 AM
532	Protecting the environment should always be a priority.	8/5/2019 10:28 AM
533	Ground level methane can travel up to 6 miles. Please consider those citizens with respiratory problems.	8/5/2019 10:26 AM
534	Do not allow oil/gas drilling or fracking within 5 miles of public schools or family farms or homes.	8/5/2019 10:24 AM
535	The environment and safety issues are more important than business and economic issues.	8/5/2019 10:20 AM
536	Distance!!! There should not be multiple pad in operation in and around neighborhoods!	8/5/2019 10:16 AM
537	Put the health and safety of people FIRST!	8/5/2019 10:09 AM
538	Fourth on my list would be setbacks.	8/5/2019 9:50 AM
539	The regulations must abide by the new state law to put health and safety first. I come from a family whose income was dependent on the gas industry. My deceased father would be pleased to know that I am one of the most outspoken for ending our dependence on fossil fuels and moving towards 100% renewable energy. We MUST change now!!	8/5/2019 9:45 AM
540	The task force should disband, no fracking should be allowed in Larimer County, all current fracking stopped, no permits approved until the COGCC has finalized it's approval process and issued it's report and those reg's are in force.	8/5/2019 9:44 AM
541	I have absolutely no interest in any more oil and gas development.	8/5/2019 9:23 AM
542	I would like to regulate the oil and gas business out of the county.	8/5/2019 9:19 AM
543	Don't over-regulate! We still need the resource.	8/5/2019 9:13 AM
544	Renewable energy today is cheaper than dirty fossil fuels. We should ban all fracking now so we can try to return Colorado to a state that cared about clean air. Fracking is so destructive and dangerous it has no business being in Larimer County or near any living beings.	8/5/2019 9:09 AM
545	Utilize SB19-181's new protections to the fullest extent. Local government must protect the people, air, water, land, and wildlife from the catastrophic effects of fracking. Do not permit any new wells in Larimer county. We MUST "keep it in the ground" if we are to avoid the worst effects of climate change. Fracking can NOT be done safely, and SB19-181 requires that safety take precedence over O&G profits. So therefore, no new drilling should be permitted. Do the right thing for the community and for future generations.	8/5/2019 9:08 AM

546	Reasonable setbacks and protections are needed to preclude visual, audible, and odiferous impacts near homes, communities, schools, other public facilities, parks, and preserves. Horizontal and fracking must be limited, controlled, and monitored to minimize adverse impacts on aquifers, geological stability, oil spills and leaks, methane and other green-house gas releases to the atmosphere, and other environmental concerns. Provisions must be in place to restore lands impacted by oil and gas extraction, production, and delivery systems when they are eventually closed down. Finally, the Task Force should focus on responsible regulation of the oil and gas industry and not assume a role of promoting or expanding oil and gas production. Our county, state and country need to switch as rapidly as possible from a fossil-fuel to a renewable, non-carbon based, energy economy to reduce and minimize our climate change impacts.	8/5/2019 9:04 AM
547	I want people's health and the environment to be prioritized above industry growth.	8/5/2019 9:01 AM
548	I am unalterably opposed to further pollution of our planet. Shift to renewable resources and earn your salary.	8/5/2019 8:59 AM
549	I was born in Denver, a child of CO pioneers. I returned to what I remembered as a state with clean air and unsurpassed vistas. Within 3 years I was advised to not walk my dog on "certain mornings" because of my recently identified asthma, influenced by air quality alerts. Oil and gas operations -- at certain stages -- have been identified as public health risks. And as expenses for "host communities" re: road repair, health costs and other tax consequences. The science is clear. We can't afford to continue propping up an industry at the expense of our people and our communities.	8/5/2019 8:51 AM
550	The gas and oil industry is very important to Colorado. This industry already has multiple safeguards in place and is rigorously regulated. The industry promotes community and pours millions of dollars into the state. I don't believe more regulations are needed.	8/5/2019 8:50 AM
551	No fracking in Larimer county	8/5/2019 8:41 AM
552	Limit exposure of homes to toxins and local traffic.	8/5/2019 8:41 AM
553	Safety and environmental protections need to be included in the conversations	8/5/2019 8:36 AM
554	Research has been completed with regard to human health and oil and gas development near homes, schools and parks! Please read the latest health research.	8/5/2019 8:35 AM
555	Given that SOLAR or WIND power, with or without battery storage, and/or BATTERY STORAGE are CHEAPER and perform BETTER than natural gas or coal power and given that the total cost of ownership of ALL-ELECTRIC VEHICLES are CHEAPER, they perform MUCH BETTER, they are MORE CONVENIENT to use and they are MORE SATISFYING to own than fossil fuel vehicles, it is IMMORAL, CORRUPT and UNETHICAL to not do all, or as many as you can, of the things to support the fastest possible acts to, IMMEDIATELY (or as fast as possible) and CONTINUALLY, SWITCH TO using, financing, investing in or insuring ONLY 100% clean energy and ONLY 100% clean transportation.	8/5/2019 8:34 AM
556	Science and experience has or should have taught us that fracking is a dangerous business!	8/5/2019 8:34 AM
557	Please consider the scientific communities data regarding climate change before you sell out the health and safety of Coloradans for the income of a few Colorado oil and Gas employees. Economy is NOT more important than Ecology.	8/5/2019 8:28 AM
558	There should be no fracking of any kind. It is destroying ground water. It is causing earthquakes. Nothing should be done unless people, their well being and their property is protected.	8/5/2019 8:27 AM
559	The global market is going to make oil and gas obsolete. We need to focus on job training programs for many who, in less than 10 years, could be out of a job.	8/5/2019 8:22 AM
560	No more gas wells or oil wells. Go solar, wind power.	8/5/2019 8:22 AM
561	Sufficient # of inspectors and testing equipment to ensure regulations are enforced. Checks on sites should be done more frequently and without notice in order to ascertain real numbers. Fines should be appreciable to get the oil/gas industries to understand they must clean up their acts.	8/5/2019 8:10 AM
562	Regulation staff should be technically qualified (knowledge and experience) and not affiliated with the industry	8/5/2019 8:08 AM
563	Climate Change	8/5/2019 7:52 AM
564	Water is Life.	8/5/2019 7:49 AM

565	We need to be getting away from fossil fuels. Why are you allowing 190 potential new wells when we know they create health and environment problems?	8/5/2019 7:47 AM
566	It's worth noting that much of what O&G creates is left behind for others to address. As a 12 year emergency responder in TX, the waste generated and the lack of transparency by O&G when it comes to cleaning up spills, explosions, and other disasters is unacceptable. Thus far, CO has not created a strong, clear plan that not only meets minimum requirements but also acknowledges our multiple environmental sensitive sites that are unique and irreplaceable. If money were no issue, environmental emergency response strike teams would already be in place. Given the gluttony of O&G and the refusal to be good stewards, it would be smart to consider having them. Not only would money be saved, but experts in emergency response who also carry strong science credentials are invaluable in protecting CO's water, air, soil, wildlife and human inhabitants.	8/5/2019 7:44 AM
567	We should have no new wells. Instead we should be working towards a just transition to renewable energy sources. Train oil and gas employees to work these new fields.	8/5/2019 7:43 AM
568	In Broomfield, they have lost money on drilling and they have been exposed to carcinogenic mud like Gibson D822 and COGCC shut Extraction down for two days until they could obtain Neoflo. Extraction lied about the flash point "dangers" so they could use cheaper drilling mud. Tier 4 engines are a must as well, and piping water in. Cumulative effects with mega pads and hundreds of wells needs to be assessed.	8/5/2019 7:33 AM
569	Oil gas wells will not only take up land but will use land that could be used for more sustainable energy alternatives such as solar or wind power stations.	8/5/2019 7:31 AM
570	Prioritizing the environment, diversity of wildlife (big & small), and a sustainable connection to the Earth's natural systems is of pinnacle importance. Phasing out gas and oil is necessary to do this.	8/5/2019 7:27 AM
571	After reading the Task Force member bios and qualifications, I agree that it's essential that regulations are build with the flexibility to obtain voluntary adherence by industry to environmental quality and/or remediation measures. I would hope that protecting the environment of the Front Range in Larimer County is a primary focus with the adopted regulations, including requirements for ongoing monitoring, evaluation, management, and remediation at the expense of industry. Moreover, these efforts should be the responsibility of either a state government, university, or third-party organization with no direct funding from, or relation to, the oil and gas companies currently operating in Larimer County. Additionally, regulations should mandate a comprehensive environmental and social impact assessment with regulatory "teeth". In other words, unlike NEPA requirements, the assessment process should serve to block oil and gas development proposals found to have negative environmental or social impacts that cannot be fully and comprehensively mitigated. These assessments should be at the expense of, but not the charge of industry. Finally, all assessment processes, monitoring, and evaluation should be build with a requirement for robust and meaningful community engagement which requires that community perspectives and concerns not only be solicited, but integrated into planning and management in a meaningful way.	8/5/2019 7:26 AM
572	Why not solar?	8/5/2019 7:25 AM
573	Drilling for oil screws up the water and air. It screws everything around.	8/5/2019 7:19 AM
574	How is this task force connected to efforts or departments that encourage us to "go green" - for example, what solar/wind options could be used instead to create clean energy.	8/5/2019 7:18 AM
575	People and communities were here first and residents concerned were ignored by the industry and the media ignored local concerns as they were on the side of the industry too.	8/5/2019 7:16 AM
576	Natural Resources Protection in general	8/5/2019 7:15 AM
577	County should be able to determine siting on a case-by-case basis	8/5/2019 7:10 AM
578	Community health and safety can only be protected when all involved agree that comes before profits. So far industry operators don't seem to get it. Therefore, no permits until they do. If that means waiting until all rulemaking is complete then that's the only way to protect health and safety of all Coloradans. We all have STANDING in this because we all breathe the same air and drink water from the same aquifers.	8/5/2019 7:10 AM
579	Colorado's oil and natural gas industry plays an important role in our economy and our nation's national security. It's an industry that needs regulation, but those regulations should be based on the best available science and be reasonable so as to not unfairly discriminate compared to other industries.	8/5/2019 7:05 AM
580	Risks are too high to health of people and planet on all levels.	8/5/2019 7:02 AM

581	How the abandonment of wells is regulated and paid for.....abandoned wells are not properly secured and the cost to governments is WELL ABOVE what the industry is required to contribute.	8/5/2019 6:56 AM
582	I think we should work with oil companies to ensure they are protected.	8/5/2019 6:54 AM
583	Can't be near or under schools ,towns personal homes, parks ,national park and any bodies of water .	8/5/2019 6:52 AM
584	What happens when the operator goes bankrupt and leaves an environmental nightmare for the public to clean up at our expense?	8/5/2019 6:52 AM
585	Some areas are reasonable for oil and gas development, and some are not. That is the great debate. Large scale industrial development does not need to occur anywhere near development.	8/5/2019 6:51 AM
586	I disagree with the number of new holes supposedly needed	8/5/2019 6:51 AM
587	Always community input.	8/5/2019 6:48 AM
588	Listen to the concerns of people who have first hand knowledge and experience with such activities in their areas. They can provide you with useful, and sometimes alarming, information from personal experience, that may not show-up in independent studies by companies.	8/5/2019 6:46 AM
589	Larimer County is in the top 10 counties IN THE COUNTRY when it comes to bad air quality. My wife has asthma - which in part was caused by the horrendous air quality in Fort Collins and Loveland. Since Colorado Springs has one of the BEST air quality ratings in the country, most of our issue stems from Oil and Gas - HELP, PLEASE!	8/5/2019 6:45 AM
590	Please choose health, clean water, clean air and environment over making money!	8/5/2019 6:44 AM
591	How can a business activity can be allowed when all the liabilities in the future for much likely temporary extraction are passed to taxpayers 10-20 years or more down the road ?	8/5/2019 6:43 AM
592	Protecting our water and air quality is of top priority. If that can't be done safely with oil and gas, then we need to be incentivizing the use of alternative forms of energy and training oil and gas workers so they can shift to those other industries.	8/5/2019 6:37 AM
593	Fossil fuel producers should have to pay compensation for the harm they have already done to those exposed to pollution in a given area. Assessments should be made.	8/5/2019 6:28 AM
594	Ask yourself if compromising the health and well being of Larimer County residents is worth bowing to the extraction industry. The answer should be clear.	8/5/2019 6:23 AM
595	I hope this task force closely examines the short and long term impact of fracking on the environment. This includes scrutinizing the process, procedure and (especially) the materials used to extract oil and gas from the earth in Larimer County. As a citizen, I find it hard to believe that this information is being withheld solely for the sake of "trade secrets"; I am concerned that the true damage being done to the earth is being kept from the public.	8/5/2019 6:20 AM
596	Health and safety need to be the top priority, not profits.	8/5/2019 6:14 AM
597	Please do not take an approach like Weld County! Their O&G pollution has already negatively impacted Larimer County. Larimer County is attractive because of the focus on preserving and protecting natural lands, as well as clean air, clean water (surface and subsurface), and healthy soil (especially for farming). O&G operations MUST take this into consideration, else Larimer is at risk of becoming just another dirty, stinky Greeley.	8/5/2019 6:08 AM
598	Fracking needs to be banned. There is no safe fracking and there are no regulations that could make fracking safe. The VOCs and Methane that are emitted from oil and gas facilities are poisoning our air, and the air is not localized to one area. Any city or county that allows fracking is poisoning the air everyone breathes, and therefore is poisoning humans, animals and the environment. This is an infringement on our basic human rights.	8/5/2019 5:49 AM
599	I would like the setbacks from residential and natural areas/wildlife areas to be very significant > 2500 ft.	8/5/2019 5:48 AM
600	Keep your nose out of it	8/5/2019 5:47 AM
601	I feel we need to have adequate representation from non-oil and gas interests on the task force. I'm concerned that's currently not the case.	8/5/2019 5:26 AM
602	please, please help slow down the fracking in this county	8/5/2019 5:25 AM

603	Now that this is a local issue, Larimer County is saddled with the responsibility to protect health and safety of residents. If this cannot be accomplished or is too expensive, the county has no business allowing this use.	8/5/2019 5:22 AM
604	The noise is quite intrusive, we have a fracking rig close to our home and the generator runs at night disturbing the peace.	8/5/2019 5:21 AM
605	Industry should be fully accountable for cleaning up its messes and restoring the land/air/water to its original state (or better) prior to when mineral extraction occurred.	8/5/2019 5:15 AM
606	Stop prioritizing O&G development. "Energy independence" has been achieved, we are selling product overseas.	8/5/2019 5:10 AM
607	1. My understanding is that state law dictates the distances of setback that new wells must meet when located near developed land. I believe that new development does not have mandated set back distances from existing wells. The county should have the same setbacks for new urban development near existing wells as for new wells near existing development. 2. Part of the most recent well problems have been explosions when energy employees are working on sites. This suggests that there isn't sufficient preventative maintenance and operating safety procedures and protocols. These industrial sites need to be regulated tightly for both employee safety and for the safety of nearby residents, especially for air quality and leaking emissions of methane. 3. I would like to see the flaring of excess natural gas be prohibited on all wells. If the gas is too cheap to sell now, it should be stored for future use. Methane is a major contributor to climate change and should be captured for use or left in the ground.	8/5/2019 5:01 AM
608	The O&G industry is a PROVEN safe and reliable industry. Employing many of our families and communities. We must allow progress in a safe manner as always and wrangle the extremist views. Honor the VOTE that our community made to allow O&G to safely move forward !	8/5/2019 4:45 AM
609	Oil and gas drilling is not safe and should be stopped entirely. Renewables will catch up in a hurry. We sent a man to the moon. We retooled the auto shops for ww2. It's not impossible!	8/5/2019 4:43 AM
610	That we must be addressing the reality of our times- that we need to protect the land, water and air above all else, as if our life depended on it because it does. Jobs, business and corporate profit are not what upholds and provides community and life, these should not be such a huge part of your commission representation but it is, and this needs to change.	8/5/2019 4:39 AM
611	Look out for surface land owners right at least equal to the mineral rights owner. Safety first. If there is not conclusive evidence that drilling is safe within 1000 feet, than ban until there is evidence or continue to prohibit. If the setback evidence does not exist indicating it is safe (for pregnant women and children, which have lower tolerances) than expand the ban to 2500 until evidence (scientific) is provided by an independent research group.	8/5/2019 4:38 AM
612	Companies must "bond" their work to ensure they cannot walk away from sites leaving the tax payer to cover correction and reclamation costs. 2000 feet setbacks from all residential, public, office-type commercial buildings - and from open land e.g. Drainage easements, water preservation zones, etc Dishonest or "falsely-angled" advertising must not be allowed.	8/5/2019 4:32 AM
613	The US and the world must move away from burning fossil fuels. Wind, solar, and storage are now cheaper than burning coal or gas https://www.greentechmedia.com/articles/read/nextera-inks-even-bigger-windsolarstorage-deal-with-oklahoma-cooperative#gs.ucxsd3	8/5/2019 4:15 AM
614	Air and water monitoring should be done. Personally I believe no new gas or oil sites should be allowed since we face climate emergency and fossil fuels are a big part of the problem	8/5/2019 4:09 AM
615	Since the research proves the practice of fracking cannot be done in a safe way at this time, prudence would demand a moratorium on this practice until such time as it can be proven safe.	8/5/2019 4:00 AM
616	Earthquake risks	8/5/2019 4:00 AM
617	No fracking anywhere. No horizontal drilling under neighborhoods, schools or public areas and businesses.	8/5/2019 3:59 AM
618	Long-term environment and health concerns are more valuable than short-term monetary and energy gains obtained via fossil fuel extraction.	8/5/2019 3:55 AM
619	Public health, scenic values, the nation's wildlife heritage and recreational activities must not be "compromised" away for the sake of energy resources extraction.	8/5/2019 3:50 AM

620	Water is a precious resource which we do not even have enough of on the front range. Fracking operations typically take water and then after use, pump it into the ground taking it out of the water cycle. Areas that do this have seen an increase in seismic activity. How do we retain water for human use, assure that we don't despoil our ground water, and prevent earthquakes from happening.	8/5/2019 3:48 AM
621	We should use the worst case scenario models as we have consistently seen that health effects and environmental damage are generally underestimated at the onset of projects and the negative results come to light AFTER damage has been done to people's health and the environment.	8/5/2019 3:47 AM
622	Transition to alternative energy is important to get right-- not just for the environment, but also to minimize impact on the workers in Oil and Gas. Not assisting workforce transition only delays an inevitability, leading to unexpected layoffs, and minimal time for workers to transition later. Start moving them now, and we can lead climate crisis initiatives while also not leaving workers unemployed.	8/5/2019 3:46 AM
623	Local control should take precedence over state control.	8/5/2019 3:39 AM
624	Recent data show increased miscarriage risk with proximity to drill sites	8/5/2019 3:36 AM
625	I live in Estes Park, where oil and gas development is not an issue. However, air quality is, and mountain communities should not assume that they are not affected. In the 1970s, when I drove to Boulder or Denver, the source of air pollution was clearly Denver. Today, when I take the same drive, the source has clearly moved to the Weld County and Greeley area, and is significantly associated with methane leaking from oil and gas facilities.	8/5/2019 3:32 AM
626	Stricter regulations are needed to ensure the quality of the air, land and water. These are vastly more important resources for the citizens of Larimer County than oil and gas profits will ever be.	8/5/2019 3:31 AM
627	The future is not Oil and Gas. I would rather see our limited resources preserved and focus on renewable resources to take this planet and our children into the future.	8/5/2019 3:26 AM
628	It is vital for the health and well-being of our citizens and natural areas that we put all effort into transitioning away from oil and gas. We need to put our time, money, and energy into renewable energy. Research and on the ground experiences have proven that fracking poses grave risks to public health, clean air and water, and a stable climate. One of my close friends was personally affected by fracking- she had high levels of uranium in her body and experienced a great deal of health issues, including coughing up blood, for months before she was able to identify the problem. We have the technology and workforce to transition away from the fossil fuels that are killing our bodies and our planet. Please, for the good of your fellow citizens and the beautiful land we get to inhabit, help transition northern Colorado to renewable energy.	8/5/2019 3:24 AM
629	Steps towards a stop to new permits and plans to drill in Loveland until reviews and research completed -I support a moratorium	8/5/2019 3:23 AM
630	Please increase air quality standards and hold drilling and fracking operations accountable.	8/5/2019 3:21 AM
631	Public health and the environment are the most important considerations when it comes to regulating oil and gas development. Oil and gas operations negatively impact air quality - there have been studies that show that dust and air pollutants from oil and gas operations contribute substantially to the poor air quality along the front range. Methane emissions from operations, truck traffic, etc., not to mention the burning of the fossil fuels that are extracted, contribute substantially to climate change. We need bold action now on climate change to avoid an extinction-level catastrophe. Many cities and districts are pledging to go 100% renewable and the costs of renewables are going down, but we need to address this problem on both ends. If we can't entirely ban oil and gas development, we must at least make the industry pay for the full environmental and public health costs that their operations incur - including carbon taxes, etc.	8/5/2019 3:21 AM
632	There is scientific evidence that water pollution, air pollution, and soil contamination caused by the oil and gas industry have been linked to adverse health impacts through both exposure to toxic chemicals released during fracking, and through increased stress and anxiety caused by the increased light, noise, and truck traffic associated with fracking. It's a great contributor to climate change than coal production. Scientific studies have also found a number of documented health impacts, the ones with the most evidence for concern are negative impacts on pregnancy and birth outcomes. Evidence suggests women living closer to fracking have increased odds of having a baby with lower-than-average birth weight; of having a high-risk pregnancy; or having a baby with a low infant health index.	8/5/2019 3:18 AM

633	Regulations should require industry best practices to protect air and water quality. Also should require ongoing monitoring of air, water (ground water, surface water and aquifers) with immediate fix and remediation when needed. Sites must be chosen to avoid sensitive areas including no location near reservoirs, lakes, rivers, streams, irrigation ditches and wet lands.	8/5/2019 3:16 AM
634	Need for continuous monitoring of air and water quality in Larimer County along with widely publicizing this information.	8/5/2019 3:14 AM
635	1, Extractors be made to put into an escrow account sufficient money to cover road repairs needed to repair damage done by their associated equipment. 2, no environmentally damaging substances, including greenhouse gases resulting from flaring be allowed to leave the site.	8/5/2019 3:10 AM
636	The health of the planet must be our first priority, followed by the health of our citizens. Money to be made by the oil and gas industry should be at the bottom of our priorities.	8/5/2019 3:09 AM
637	The protection of our natural resources including water and air quality, as well as wildlife and open space is most important	8/5/2019 3:04 AM
638	Ensure full public comment/participation protocols are in place so that the local community (those affected directly) have the opportunity/power to have a voice.	8/5/2019 3:04 AM
639	Larimer County should NOT encourage expanded oil and gas development. Climate-change mitigation requires constraints on increasing supplies of fossil fuels.	8/5/2019 3:01 AM
640	Top priorities should be environmental concerns, and protecting parkland and natural resources. No Fracking!!	8/5/2019 2:57 AM
641	Climate change is real. We need to learn not to consume fossil fuels as we have up until present. It is critical that Larimer County invest massively to promote transit and the transition from individual private vehicle transportation.	8/5/2019 2:47 AM
642	disclosure of chemicals being pumped into the ground and more stringent air quality monitoring	8/5/2019 2:16 AM
643	There is a growing body of research based evidence concerning the negative health impacts on workers and the public. The task force should be provided with this information. Science should guide regulations. Negative externalities (including but not limited to health and safety) should be fully paid for by the industry regardless of economic feasibility. If they can't cover the costs then it is not a viable business model.	8/5/2019 12:20 AM
644	I live in Windsor/Larimer and the money we get from oil and gas does not come close to making the impact worth it. We will be cleaning up for decades. The methane in our air is off the charts. Larimer might see dollar signs. As residents, we do not want to be Weld. It's sad that so many people on the Task Force are positioned to gain financially from fracking. It is the counties DUTY to protect public health, safety, and the environment. It is not their duty to foster the oil and gas industry.	8/4/2019 5:46 PM
645	We have a right to live in a community free from fracking, drilling and the environmental hazards associated with these pursuits.	8/4/2019 5:25 PM
646	Be proactive and protective instead of reactive after harm is done.	8/4/2019 5:15 PM
647	Whatever you do, please don't put citizens' health at risk. I moved here from the Salt Lake Valley because of all the air pollution there (some of it from an oil refinery) made me sick during the winter (and I am young and healthy!) The jobs aren't worth it if the pollution is going to harm us.	8/4/2019 4:26 PM
648	I am very concerned about the amount of air pollution being generated, both locally and coming towards the Ft. Collins area from eastern Colorado, it's impact on health and the environment (including climate change).	8/4/2019 3:29 PM
649	Please incorporate the latest findings regarding the risks to health and safety for Larimer County citizens. See, for example, the peer-reviewed article, "Congenital Heart Defects and Intensity of Oil and Gas Well Site Activities in Early Pregnancy" at https://www.sciencedirect.com/science/article/pii/S0160412019315429?via%3Dihub from the University of Colorado Anschutz Medical Campus	8/4/2019 3:24 PM
650	Public health takes precedence over any industrial operation, including oil and gas. There are a plethora of peer reviewed, scientific studies that conclude there is no safe way to frack. They continue to be ignored which makes government entities complicit in the degradation of air and water quality as well as deterioration of human health and safety in exchange for the profits of a few.	8/4/2019 3:21 PM
651	They should follow the state guidelines period!	8/4/2019 3:18 PM

652	no drilling should take place within 1/2 mile of schools or neighborhoods and not at all on public land.	8/4/2019 2:53 PM
653	I would recommend that Larimer County minimize oil and gas projects and instead of looking back to 20th century energy solutions, turn to 21st century technologies and encourage solar, wind and other renewals to bring business to the area through incentives.	8/4/2019 2:34 PM
654	We can have all the regulations we want but if we don't have enough people checking the oil and gas wells to make sure they follow regulations, the regulations aren't worth much. Also, we need to make sure that once an oil well is no longer used or a company goes out of business, remaining wells are safely sealed.	8/4/2019 2:08 PM
655	That fracking should have been regulated at the federal level, by the EPA, but was prevented from doing so by the "Halliburton Loophole" in the 2005 Energy Policy Act. Please contact me if you need further information.	8/4/2019 2:04 PM
656	Who is going to clean it all up when it's all over in a few years? These companies will just go out of business and leave the area a mess.	8/4/2019 1:57 PM
657	Please safeguard our water and land Don't jeopardize community health	8/4/2019 1:36 PM
658	Public health impact is more important than money (jobs, economy, tax revenue, Data driven decisions are important and require time to collect all important data.	8/4/2019 12:59 PM
659	I would like to see more rigorous investigation into the environmental and health repercussions of fracking, and patience while this work is conducted.	8/4/2019 12:47 PM
660	Please give great importance to the idea of moving toward renewable energy--not oil and gas. Please protect us from the barrage of trucks, dust, traffic, land and air degradation, noise, and pollution that comes with these operations. Require the O&G industry to be fully transparent about all aspects of their operations.	8/4/2019 12:36 PM
661	Every community in America--state, local, county--must commit to restraining, then eliminating the extraction and burning of fossil fuels! We are in a life-or-death emergency! DO YOUR PART!	8/4/2019 12:03 PM
662	One person getting sick, one house in danger, one mistake... any one of these things... is one too many.	8/4/2019 11:58 AM
663	I am really concerned about air quality. More stringent regulations should be in place re: ozone and particulates.	8/4/2019 11:50 AM
664	My home is on the eastern edge of Larimer County, about 150 yards from the Weld/Larimer border. Over the last five years multiple wells have sprung up within a half mile. We have experienced periods of around-the-clock noise/vibrations (pictures rattling on the wall), fleets of truckloads of materials, chemicals, sand, waste water, crude oil, high traffic noise, excessive road-wear requiring repaving, and noxious odors (especially at night). I have complained many times to COGCC and by the time inspectors arrive, the air has cleared, (though they have discovered venting from time to time). A year ago last December, I heard/felt something that caused me to check the garage to see if a shelf had collapsed. The next morning the news reported that the Stromberger wellpad exploded.....that is four and a half miles away. It is my belief these well pads have no place being placed in close proximity to human occupied structures. Likewise, no new construction of homes/schools should be completed close to wellpads. Air testing and continual monitoring needs to be done, by NOAA or INSTAAR or some entity not in anyway connected to the industry to ensure confidence by the community. Retired wells must be secured and closed off - and old well in my neighborhood was found to be improperly closed in and after much hounding of the COGCC they were able to get the operator back to complete the work. That area still does not support vegetation.	8/4/2019 11:33 AM
665	I would like to have the "Fracking" impact on health addressed. I have induced asthma that has developed since I moved to Denver/Northern Colorado	8/4/2019 11:33 AM
666	Focus on the health of the environment for the sake of people, animals and plants.	8/4/2019 10:58 AM
667	high water usage for drilling & fracking, safe disposal of fracking water/liquid, leakage of methane into atmosphere	8/4/2019 10:53 AM
668	We should be focusing on renewables.	8/4/2019 10:50 AM
669	Seems like inspections should be on the list so that historical data is available.	8/4/2019 8:44 AM
670	We need to regulate oil and gas and prevent ongoing infringement and position in public and private spaces	8/4/2019 8:27 AM

671	We need to put a carbon tax on fossil fuel use.	8/4/2019 8:23 AM
672	I hope the Task Force will fulfill its duty to protect public health/safety, the environment and wildlife. This is the focus of the new law (SB-181). I support a moratorium on all new O&G development until the COGCC has completed its new rule making process. I want Larimer county to develop and enforce strict recommendations that will effectively push O&G development out of our area.	8/4/2019 8:06 AM
673	Larimer County needs to take control of its future by enacting strong oil and gas regulations that protect the health, safety, and environment.	8/4/2019 7:28 AM
674	Abandoned wells are a nightmare in an area that is growing as fast as Larimer. When a well or drilling site is abandoned it needs to returned to a state ok for residential development and use.	8/4/2019 6:32 AM
675	The task force membership should include more citizens and health and environmental planners and fewer people associated with oil and gas industry.	8/4/2019 5:26 AM
676	Put a moratorium on O&G permits until SB181 regs are finalized, then adopt county regulations. Hire a county inspector for all O&G operations.	8/4/2019 4:35 AM
677	Take a walk east on the Poudre Trail through the Frank State Wildlife Area in Windsor. Walk out of the wildlife area and straight into ... a fracking operation. Which one provides enjoyment, beauty, and economic vitality to the community and the planet forever?	8/4/2019 4:09 AM
678	Leave it in the ground, please.	8/4/2019 4:07 AM
679	The health and safety of the citizens of Larimer County now and in the future should be the first consideration in any permitting process.	8/4/2019 3:50 AM
680	Consider all aspects (above) and more!	8/4/2019 3:31 AM
681	We are headed for a collision between the desertification of this area and the using to extinction of very large volumes of precious water and water the pollution of water sources.	8/4/2019 2:59 AM
682	The O&G industry is not paying for true environmental destruction costs. Our economic model is all wrong. We must stop thinking economic expansion is good.	8/4/2019 2:37 AM
683	Releases of methane and other toxic compounds into the atmosphere.	8/3/2019 10:36 PM
684	I do not understand the need to rush county level regulations into effect when more stringent rules may be forthcoming from the reformed COGCC.	8/3/2019 8:18 PM

Q3 What suggestions do you have for future community engagement on this topic?

Answered: 640 Skipped: 176

#	RESPONSES	DATE
1	Talk to people who are not activist against oil and gas	8/29/2019 7:34 AM
2	The average person is ignorant of the importance of subsurface fuels to our lives and the economy. The oil and gas companies could do a better job of communicating and educating citizens about the importance and necessity of the industry. Otherwise, ignorant citizens should step aside and let the professionals handle business. Communities should be grateful for the resources and opportunities the oil and gas companies provide.	8/28/2019 3:58 PM
3	Gas sites should not be within 2500 feet on any human facility--school, home, hospital, etc. which are deemed to be safe for breathing health. Not 100 feet!= as now.	8/27/2019 3:40 PM
4	Prioritize public, health, and safety as well as the environment over oil and gas profits. It is now the law.	8/27/2019 1:09 PM
5	Keep us informed	8/27/2019 11:12 AM
6	The task force and the County Commission must be available to residents throughout Larimer County to answer questions about oil and gas development, their relationship with oil and gas developers, their commitment to protecting health, safety, and the environment, and their knowledge of climate change. No approval on oil and gas development should be made by the County Commission until a thorough investigation is completed on the impact of fracking and other practices, and the public has weighed in on this topic. There is too much at stake for the county to rubber stamp any recommendations from a task force weighted in favor of oil and gas interests.	8/27/2019 10:30 AM
7	I would follow a similar process as you did for the recent comprehensive plan. Multiple events to allow people who can't make one event an opportunity to attend, and please advertise public events. Online public surveys requiring your address and name to help eliminate input from those who would not be living in the county with the ramifications of these decisions.	8/27/2019 10:19 AM
8	Informing county and city residents properly with all the facts, consequences both positive and negative impacts to our community and environment. Information should be sent out by our elected government and their positions on oil and gas.	8/27/2019 5:12 AM
9	Don't just listen to the loudest voices in the room. Educate yourself on factual information and not rumors or incorrect information given by only one side.	8/27/2019 2:22 AM
10	Education - transparency - focus groups - public meetings	8/26/2019 9:16 AM
11	Public meetings in various county areas with notices in local publications or by email if possible.	8/26/2019 2:32 AM
12	Listen to us. Listen to your conscience and your heart, not with your pocketbook. Act accordingly.	8/25/2019 5:50 AM
13	Get the word out about health risks of well gas and how damaging for global warming the industry is	8/24/2019 8:48 AM
14	None.	8/24/2019 6:24 AM
15	Publish a public notice well before any appointments or decisions are made when forming a task force. Make sure the committee members are non-partisan, diverse, and have no conflicts of interest.	8/23/2019 5:01 PM
16	Community hearings.	8/23/2019 2:39 PM
17	Public forums to inform the Task Force about community concerns.	8/23/2019 10:29 AM
18	Stay out of the COGCC's way. They have regulated for many years.	8/23/2019 9:06 AM
19	Government needs to stay out of business	8/23/2019 4:33 AM
20	Surveys such as this are good, but some kind of feedback that addresses concerns and discusses potential plans can make it great.	8/21/2019 7:21 PM

21	Educate the public to think beyond the oil and gas promises .	8/21/2019 12:05 PM
22	These land use regulations must be reviewed and revised every 3 to 5 years, as we learn more about the effects and problems with fracking.	8/21/2019 9:15 AM
23	Our entire community uses NextDoor.com to communicate. Posting information about planned development and opportunities to get involved in the regulatory conversation on that forum would go a long way.	8/21/2019 8:50 AM
24	Please report to the Coloradoan and local radio stations when notified of a spill or release of fume or an accident. We need fearless 'transparency' on this topic of public health so those who are affected have data to guide decision makers; and so they can decide who to elect to best represent them.	8/21/2019 6:50 AM
25	Why have communities turned a deaf ear and blind eye to disastrous practices of fracking.	8/21/2019 6:38 AM
26	Reach out to families through the school system, and reach out to health care providers as we see more and more the effects of certain industries on our patients.	8/21/2019 6:35 AM
27	Town Hall meetings	8/21/2019 6:21 AM
28	More Social Media (not Coloradoan as their posts can not be read unless you subscribe)	8/21/2019 6:21 AM
29	public input meetings	8/21/2019 6:20 AM
30	No fracking	8/21/2019 6:00 AM
31	I live in Weld County. My partner and I were very active in trying to prevent, then mitigate, the damages done by oil and gas in our backyards. You need to get people on a letter writing campaign to their representatives; they need to comment regularly to the COGCC (there's an easy online tool); show up at COGCC meetings but don't just be rabble rousers - have reasoned arguments. An informed public is your best ally. Fortunately, I believe Larimer County is much more intelligent than Weld.	8/20/2019 12:27 PM
32	We need more information to be presented to the citizens of all communities on the issues on an on-going basis and more opportunities for citizens to give input to the decision-making boards. I want to see more specific on-going air and water monitoring in all areas.	8/19/2019 11:22 AM
33	N/A	8/19/2019 2:17 AM
34	none	8/19/2019 12:19 AM
35	Town hall forums are appropriate.	8/18/2019 9:06 AM
36	none	8/18/2019 8:04 AM
37	The task force needs to engage the community with meeting agendas distributed well in advance, reports of action after every meeting, and generous opportunities for citizens to comment during meetings.	8/17/2019 1:48 PM
38	Look at everything on a regional basis, since contaminated air, traffic, water contamination, disposal/injection wells, etc, know no county boundaries.	8/16/2019 10:15 AM
39	I think the county needs to have several meetings for the public, with the appointed commission present as well as the Larimer County Commissioners. The purpose would be for a civil conversation on what should be in the Larimer County rules for drilling/retrieval of oil and gas.	8/16/2019 8:19 AM
40	Appears as if the community has very limited knowledge of county activities; and as a result, leads to the conclusion that the current method of community engagement is not successful. Suggest more outreach initiatives such as presence at public events (county fairs, festivals, newspaper, TV, radio, mailings, flyers and handouts at community/public events, etc.	8/16/2019 1:49 AM
41	Educational engagements for the community to learn the processes and equipment in the development of oil and gas.	8/16/2019 12:57 AM
42	I would like to see more educational programs around all future energy sources- why do we need oil and gas facilities out our back door. Create a weekly or monthly forum where people can meet to discuss their concerns and have a vote on projects.	8/15/2019 10:17 AM
43	They have a right to operate as much as any business.	8/15/2019 9:56 AM
44	Target residents of larimer.	8/15/2019 9:44 AM
45	More surveys like this and public meetings.	8/15/2019 8:46 AM

46	Public notice of all future meetings.	8/15/2019 8:38 AM
47	Getting more people involved by any means. The vast majority of citizens want the focus to be on health and the environment/air quality. The only people I have seen against new regulations are currently working in the industry. We could also encourage O&G workers to educate themselves to be able to work for renewable energy jobs.	8/15/2019 7:57 AM
48	Don't let the environmentalist special interest groups destroy the industry	8/15/2019 6:55 AM
49	Have a website where a person can make a claim for damages caused by oil field traffic.	8/15/2019 6:49 AM
50	1. As you work on regulations, engage with experts in health effects from existing oil and gas facilities and consider landuse regs adopted in other Colorado jurisdictions for best practices. 2. I hope there will then be public forums to review proposed new regulations.	8/15/2019 5:53 AM
51	Town halls, focus groups, media social and traditional	8/15/2019 5:32 AM
52	Frequent and iterative involvement is crucial.	8/15/2019 5:01 AM
53	More meetings, actual attention paid to citizens instead of corporate money.	8/15/2019 4:56 AM
54	Identify the reservoir to negate the possibility of dry holes. Drilling for nothing is a problem for everyone.	8/15/2019 4:53 AM
55	Education. There is a lot of errant information (pro and anti-oil and gas) out there. Breaking down what SB-181 means for residents of Larimer County would be helpful. Also, discussion O&G development/existing infrastructure in Larimer County relative to the entire state may help the public understand where O&G currently is and what may be expected in the future. A panel of experts (including an O&G expert) may be helpful for questions too.	8/15/2019 4:47 AM
56	Let them drill Colorado has the strictest rules in the country	8/15/2019 4:38 AM
57	Keep the energy we have in our State going strong so we can be self sustaining and that we won't have to rely on foreign oil/energy	8/15/2019 4:36 AM
58	This is a state issue. Quit wasting our money or we will expect changes in staff.	8/15/2019 4:02 AM
59	Most of are not well educated on the topic. I'd like to be provided with education from someone other than oil companies as I feel they have an agenda to support their own growth. They may not be as forthcoming as an unbiased party.	8/15/2019 3:50 AM
60	Don't underestimate the power of social media. Be present on multiple platforms if possible. (Facebook, Instagram, email newsletter, newspaper etc etc.). The more people you can connect with, the better.	8/15/2019 3:42 AM
61	Additional public forums.	8/15/2019 1:46 AM
62	I note that none of your topics include my rights as a private landowner to benefit from oil and gas production on my land.	8/15/2019 12:47 AM
63	Mail your info to all households.	8/15/2019 12:26 AM
64	None	8/15/2019 12:21 AM
65	Discuss how much of the state is NOT in cities and maybe drill there	8/14/2019 11:57 PM
66	Nothing.	8/14/2019 11:52 PM
67	Stop using scare tactics to sway public opinion on what is a safe, viable, clean energy source.	8/14/2019 11:21 PM
68	Protect the environment to help humans and ecosystems thrive.	8/14/2019 5:30 PM
69	I think that both sides need to remain civil while discussing this issue and not have the circus that the COGCC has let happen. We need to focus on what operators can do to protect public health and safety while keeping the lucrative industry in Colorado.	8/14/2019 4:55 PM
70	Canvass to hand out lit & find out what people know. Many know very little! Public mtgs like LA are currently holding are great for this! Promote their events. It will snowball! Very educational!	8/14/2019 4:16 PM
71	Leave it alone	8/14/2019 3:05 PM
72	Eduaction on the Oil and gas industry is key. We need to extinguish the false fear that has been put into our society and created such need for a task force in the first place. Please!	8/14/2019 2:56 PM
73	LC has done a great job keeping us involved and updated	8/14/2019 2:35 PM

74	None	8/14/2019 2:08 PM
75	Listen to people who know what they are talking about. Too many people think we still do things the way they were done 50 years ago.	8/14/2019 2:05 PM
76	Please make reasonable decisions as this can be mutually beneficial	8/14/2019 1:55 PM
77	Listen to the actual people	8/14/2019 1:50 PM
78	If you don't work in the industry shut up	8/14/2019 1:38 PM
79	Go to the work place and make a presence there for oil and gas workers as well as those who cant make meetings due to schedule.	8/14/2019 1:30 PM
80	Perhaps taking each regulation or change in the county code to the people via referendum.	8/14/2019 1:28 PM
81	How about an open discussion on future oil well locations	8/14/2019 1:23 PM
82	Publish UNBIASED, IMPARTIAL information.	8/14/2019 1:11 PM
83	More info about accessing green renewable energy to the public	8/14/2019 12:04 PM
84	Any further regulating of the oil& gas industry in Colorado will result in a declining economy and loss of property values.	8/14/2019 11:37 AM
85	Don't allow drilling anywhere near populated areas. The current set backs are a joke.	8/14/2019 11:24 AM
86	Complete and open transparency regarding safety and precautionary measures taken for all aspects (except security).	8/14/2019 10:58 AM
87	Ballot measures, community forums, and surveys. Best way to reach your citizens for responses.	8/14/2019 10:58 AM
88	Try to take a bipartisan approach, keep extremists out of it.	8/14/2019 10:48 AM
89	Post on community websites like:"Real Storm Mt."	8/14/2019 10:46 AM
90	Please continue to work with industry to educate our residents with facts, statistics, etc. and help them to look past emotional responses based off of rumor and stories propogated by aggressive and outspoken detractors. As a citizen who is blessed to be a part of this community, please remember that my occupation not only allows me to be fully informed about the topics, but also affords me the opportunity to remain a part of the community. If unreasonable elements within our community continually make it more difficult without cause to remain in operation. my and many other companies will have to discontinue operations causing a significant loss in revenue, population, housing pricing, etc. as the ripple effects will be felt from those decisions.	8/14/2019 4:10 AM
91	Traffic Congestion downtown	8/14/2019 4:07 AM
92	educate the community to better understand process and safety built into each site	8/14/2019 1:27 AM
93	The citizens have the right to health and you're jeopardizing our health by allowing profits and big business to count for more than the quality of our lives and health	8/13/2019 1:36 PM
94	Stay informed and be aware of your surroundings. Safety and responsibility are to be observed and headed by everyone involved with any operations without being hindered in doing so.	8/13/2019 10:57 AM
95	Be thoughtful on who the stakeholders are and ensure they are productive in regulatory development.	8/13/2019 9:39 AM
96	Look at the revenue created by oil and gas and the population that it supports.	8/13/2019 9:04 AM
97	Let's keep open communication to create win/win for everyone.	8/13/2019 7:12 AM
98	More public engagement in the the new regulations and rulemaking from SB 181	8/13/2019 7:03 AM
99	The planning/building committee needs to include all utility companies for the opportunity to help them achieve the outcomes they want.	8/13/2019 6:15 AM
100	Need to have more community engagement on this topic it is what drives this community not only in growth but education of what Oil and Gas really does for the community.	8/13/2019 4:21 AM
101	Set standards that are not going to hurt the economy of your community.	8/13/2019 4:02 AM
102	Events that encourage open dialogue in a casual environment	8/13/2019 3:46 AM
103	Productive engagements between the community and the E&P companies is probably the best route to ensure the community's standards are met in a safe and effective manner.	8/13/2019 2:59 AM

104	Be respectful of both sides.	8/13/2019 2:41 AM
105	Ban fracking now	8/13/2019 2:13 AM
106	Please allow open forums with questions and answer, teaching moments for both sides - we the people want to be heard on both sides of this controversial issue	8/13/2019 2:10 AM
107	Be respectful	8/13/2019 1:46 AM
108	Make sure that community members who do NOT have professional ties to the oil and gas industry have representation on task forces, boards and commissions at least equal to that of the developers and the O&G interests. Facilitate more open *dialogue* with community, not just written comments.	8/12/2019 3:57 PM
109	Larimer County sponsored forums that present science and medical-based personnel about health and safety issues. Commissioners should attend Task Force meetings. Put results to a VOTE.	8/12/2019 1:27 PM
110	Public advance notices and awareness via newspaper, on-line bulletins, posters shown in Farmers Markets or outdoor special events.	8/12/2019 11:47 AM
111	More learning material from industry.	8/12/2019 10:21 AM
112	keep up good communication	8/12/2019 9:46 AM
113	I think setting discussions in the human flourishing context will help people see the full discussion and be beneficial.	8/12/2019 9:46 AM
114	We need to allow individual applications to be reviewed. Several oil and gas companies struggle with regulations, while other excel. Look into each application and who will be involved. Past history and properly following regulations should be reflected on applications.	8/12/2019 9:14 AM
115	Their are more than enough regulations on this industry. The community need to be educated with facts not fiction.	8/12/2019 8:58 AM
116	You should send a letter to everyone who lives within 2500 ft of an existing well notifying them about potential health and safety issues of living near oil and gas development sites. For potential future projects, you should notify everyone in the community and allow for public comment. If the majority of residents are opposed to the well, the project should be rejected.	8/12/2019 7:56 AM
117	Reaching out to threatened communities to give them a voice in deciding if oil and gas extraction would create a problem in their lives.	8/12/2019 7:54 AM
118	N/A	8/12/2019 7:50 AM
119	Allow an unbiased 'task force,' or at the very least, allow industry professionals onto the task force to allow people with experience to have a voice of reason against the anti-oil and gas voice.	8/12/2019 7:20 AM
120	Remember the oil and Gas built a great amount of the road infrastructure in rural Colorado Oil and Gas is good for Colorado	8/12/2019 7:19 AM
121	Allow for educational sessions for community members, neighbors, impacted stakeholders etc... Community forum's can help this cause. The more individual understand about Oil and Gas operations, the better the resulting plan/outcome can be for all parties (surface owners, communities, operators, etc...)	8/12/2019 7:16 AM
122	Remember that the loudest protestor is only one person and does not represent the entire state. Listen closely to the rational individuals on both sides of the issue.	8/12/2019 7:05 AM
123	If they are originally from California, don't listen to them.	8/12/2019 6:18 AM
124	n/a	8/12/2019 6:01 AM
125	Ensure that you honor the rights of all of the citizens of Colorado.	8/12/2019 5:46 AM
126	Try to strike a balance and ensure the information being used to make decisions is accurate and current.	8/12/2019 5:37 AM
127	Include both sides. Don't just listen to the ones who oppose O&G development.	8/12/2019 5:34 AM
128	Invite operators to engage the public with information so that the community is well educated before voting on a position/regulation that they have limited experience with.	8/12/2019 5:28 AM
129	Residents and neighbors in the State of Colorado who have not been educated with the facts on how the Oil and Gas in the State have gone above & beyond to protect our environment and all the people should be given the opportunity to participate in learning BOTH sides.	8/12/2019 5:26 AM

130	Utilize resources such as the internet to ensure the community is able to be well informed and make proper opinions on this topic	8/12/2019 5:22 AM
131	Coloradoan's need to understand the current regulations and how much has been done already to reduce emissions to some of the lowest levels ever seen.	8/12/2019 5:09 AM
132	don't let the vocal minority influence your decisions	8/12/2019 5:08 AM
133	I live in Larimer County, and I want oil and gas to be produced safely here in Colorado.	8/12/2019 5:04 AM
134	Address the economic conflict following regulations that cut local family income. How does this directly affect local taxes, housing, businesses etc.	8/12/2019 4:58 AM
135	Communication and education that oil & Gas is here to stay and both sides need to come together to make it work for both sides.	8/12/2019 4:55 AM
136	Don't tailor to the loudest voice. A lot of companies want to operate safely in Colorado and want to work with the county to do so.	8/12/2019 4:52 AM
137	Do not make your meeting about regulating as much as about how to make it work from both sides. The state has taken an approach that belittles anyone in oil and gas and that is not how a governing body should operate.	8/12/2019 4:48 AM
138	none	8/12/2019 4:46 AM
139	The county should host open forums where Oil and Gas experts can educate the public on the issues that are sometimes blown out of proportion and in some cases completely lied about by anti oil and gas advocates. The citizens of every county in Colorado deserve to hear the facts from the people who know how the oil and gas industry works and not just propaganda from organizations determined to shut down the industry in our state.	8/12/2019 4:40 AM
140	None	8/12/2019 4:37 AM
141	Limit engagement to only those who live in the community. There are too many paid voices expressing their opinions in an area where they do not even live.	8/12/2019 4:34 AM
142	More programs with future engineers at the high school level that promotes higher education and not chasing the money as soon as legally old enough to do so. Also more involvement at an elementary school level providing assistance for students with disabilities.	8/12/2019 4:33 AM
143	Meetings on state responsibilities And counties and cities responsibilities.	8/12/2019 4:27 AM
144	Have reasonable conversations with the industry, not extremist driven debates. It would also be beneficial that issues originate as grass roots not from foreign or out of state agendas that have no business interfering with our state	8/12/2019 4:23 AM
145	The facts. Instead of liberal agendas. Let the real facts come to the forefront. In other words let people know the impact the oil and gas has on quality of life in Colorado	8/12/2019 4:22 AM
146	That people actually educate themselves on the policies and procedures so they realize it's actually very eco friendly.	8/12/2019 4:22 AM
147	Lets educate the people on what the current regulations are so everyone is speaking from the same knowledge base.	8/12/2019 4:22 AM
148	Just be sure to be transparent and share views and regulation truthfully before it is implemented or made law.	8/12/2019 4:20 AM
149	Community Forums should be created and community education opportunities to make residents aware of the truth of the industry, giving the opportunity to know and understand both sides.	8/12/2019 4:20 AM
150	Transparency between the regulatory body, the stakeholders and the regulated industry.	8/12/2019 4:16 AM
151	Provide fact checking for when public comment is submitted to not allow for either side to spread false information.	8/12/2019 4:16 AM
152	none	8/12/2019 4:14 AM
153	Be as transparent as possible. There is quite a lot of false information circulating in the media and especially on public forums about the oil and gas industry. Transparency on the part of governments as well as the industry is the only possible way to move forward.	8/12/2019 4:10 AM

154	Economics and funding that oil and gas provides to the county and state. Explain the role of petrochemical products in life saving devices that are in hospitals....different perspective on plastics.	8/12/2019 4:09 AM
155	Surveys like these are much appreciated.	8/12/2019 4:08 AM
156	The contracts need to include the E&P contacts' information. In order to answer public questions.	8/12/2019 4:02 AM
157	Understanding the importance of oil and gas and working together professionally but economically	8/12/2019 4:01 AM
158	We want collaboration of the Task Force and the oil and gas industry to produce regulations that allow for development of the natural resources we must have everyday to live as we do.	8/12/2019 4:00 AM
159	Allow the energy companies a forum to tell there side of the story and how they operate	8/12/2019 3:59 AM
160	This survey is absolute garbage. There is no depth to the topics at hand. Please make another survey that give the chance for REAL input. What level of setback do you want? What should permit money go toward? Do you value renewable energy development? How strictly should we monitor groundwater contamination?	8/12/2019 3:59 AM
161	Community meetings with oil and gas developers and housing developers.	8/12/2019 3:57 AM
162	Please read what regulations that are already implanted	8/12/2019 3:53 AM
163	Tell your friends and loved ones to get involved!	8/12/2019 3:52 AM
164	I think it's important for the County to reach out to all stakeholders including citizens, the oil and gas industry and developers on their input in the regulations.	8/12/2019 3:52 AM
165	Quit publicizing and enacting legislation and procedures that are not necessary and make people who are uninformed about all of the positives of energy in the State of Colorado think EVERYTHING is bad.	8/12/2019 3:47 AM
166	Discuss the issues and understand the facts before making decisions that will affect the tax payers.	8/12/2019 3:47 AM
167	Providing non-biased education to the community.	8/12/2019 3:46 AM
168	Pay attention to actual facts and not false reports that rely on emotional responses.	8/12/2019 3:45 AM
169	Don't let the meetings get overrun with activists who don't follow the rules	8/12/2019 3:43 AM
170	I would like to see people educated on how much the oil and gas community helps to improve our environment, and how it strengthens our economy.	8/12/2019 3:34 AM
171	none, unless there is a dispute on the land use.	8/12/2019 3:09 AM
172	I suggest when something is voted on that the people have been heard by everyone not just the people but those with "power" in office. Just because a certain individual didn't like the results, then forced essentially the same thing down our throats. This same individual lied, "I am not for prop 112" to get into office. The people have been violated and our right to a fair vote to stand has been stripped from us. Please listen to what the people actually say, we were not heard when we said no to this.	8/12/2019 3:00 AM
173	Include a spiritual perspective as well as a political one! It can no longer be just about money.	8/12/2019 12:04 AM
174	N/a	8/11/2019 5:06 PM
175	FC .gov web page update weekly; regular town and neighborhood meetings to help everyone stay involved.	8/11/2019 4:32 PM
176	Engage with the community more	8/11/2019 3:43 PM
177	Not everyone is really an "expert", and their "facts" aren't always factual.	8/11/2019 12:13 PM
178	if your taking a poll, it should be restricted to the people who live there.	8/11/2019 10:23 AM
179	none	8/11/2019 10:19 AM
180	Don't make oil and gas production out to be the bad guys	8/11/2019 9:40 AM
181	Keep the community involved by mailings, radio, tv, and person by person with clip boards at grocery stores.	8/11/2019 8:24 AM
182	Unbiased facts given to all people	8/11/2019 8:23 AM

183	Multiple public hearings--different times and different locations.	8/11/2019 7:21 AM
184	At the risk of being dismissed as a "brainwashed puppet"... I am a Colorado Native, and proud of it. Colorado has ALWAYS been a "Boom or Bust" state, and it has a LONG history of subsurface mineral collection and adaptation. Look to the gold and silver years. Look to the lead years. Look to the molybdenum years. It is SO prevalent, we even have a highly esteemed, engineering-based, college-level school in Golden named for it. Oil and gas is no different. Leave the industry alone, and leave the draconian restrictions to Boulder, and Boulder alone. Do you REALLY believe that Boulder represents the feelings, wishes, and desires, OF THE ENTIRE STATE?	8/11/2019 5:30 AM
185	Let us do our work safely as we have been doing. Setbacks are not going to fix anything.	8/11/2019 3:09 AM
186	Don't be one sided listen to both sides. Don't cut off the hand that feeds you tax revenue.	8/11/2019 3:04 AM
187	Colorado can become an energy powerhouse with a huge tax base from business. We might as well take this opportunity given to us for county improvement and county funding.	8/11/2019 2:34 AM
188	Public "show and tell" meetings with industry officials to help ease the minds of those aiming at helping the environment. Public meetings with environmental officials to help industry officials and workers understand the other side isn't all that bad.	8/11/2019 2:32 AM
189	This survey works well.	8/11/2019 1:34 AM
190	Ongoing education.	8/11/2019 1:02 AM
191	out of site should not mean out of mind but that seems to be the norm. If we want the benefits of oil and gas as a society, we have to be smart about how to regulate responsibly and also consider what the alternative really means	8/11/2019 1:01 AM
192	Keep it open and available for comments	8/10/2019 11:42 PM
193	We need oil so let them frac	8/10/2019 8:46 PM
194	Let the companies explain the why and where. The faster you allow this development and the times of operation, the less impact to your county. In Broomfield, the process has been dragged out for several years for what could have been done in less than a year. The impact is greater on time when you restrict access and time of operation. Once again, let the experts be the voice with facts and not emotion.	8/10/2019 5:02 PM
195	None	8/10/2019 4:34 PM
196	Educate yourself instead of blindly protesting because others are.	8/10/2019 4:02 PM
197	You must ensure that there is a robust stakeholder process that respects the rights of the people to express their opinion but ultimately you must protect the property rights of citizens in the end.	8/10/2019 3:58 PM
198	Listen to your constituents and facts..not the new green deal baloney and crooked lying politicians such as Polis	8/10/2019 2:49 PM
199	Keep other states out!!!	8/10/2019 2:49 PM
200	Embrace it!!	8/10/2019 2:48 PM
201	Quit wasting tax payer dollars	8/10/2019 2:35 PM
202	Use sound science and give credit to the oil and gas companies and industry as safe and prudent operators in Larimer County. Ignore hysterical anti-everything people. Be Larimer County and not a puppet.	8/10/2019 2:28 PM
203	Get involved!	8/10/2019 2:27 PM
204	Listen to the O&G people when they come to your public meetings	8/10/2019 2:16 PM
205	Invite the major oil and gas operators for them to present and educate the county of their O&G assets and what they do currently do to protect the communities interest before changing what is currently in place.	8/10/2019 2:10 PM
206	None	8/10/2019 2:04 PM
207	Learn about it first hand not from a news outlet...	8/10/2019 1:56 PM
208	Listen to the voters	8/10/2019 1:53 PM
209	They need to leave regulation to industry experts and quit whining so much	8/10/2019 10:53 AM

210	Get an opinion from both sides. One sided arguments are never in the best interest of the people.	8/10/2019 7:02 AM
211	Help to keep these out of populated areas	8/10/2019 5:25 AM
212	Give people accurate information	8/9/2019 5:12 PM
213	Ensure all voices are being heard, especially those most vulnerable populations which requires new methods. Ensure that the community is aware of the existing tie of how oil & gas operations are impacting our air quality and how air quality impacts human health. Allow them to give informed feedback based on these connections and the overall prioritization of human health. Do not allow the industry to control these messages...use real data with proven facts.	8/9/2019 4:31 PM
214	Open houses	8/9/2019 3:36 PM
215	Have oil and gas producers hold public events	8/9/2019 2:24 PM
216	Stop the Californication!	8/9/2019 2:04 PM
217	Don't install wells or pipelines	8/9/2019 12:19 PM
218	It's easy to suggest public forums, but the industry is adept at filling them with employees who have rehearsed talking points & can shout down anyone who disagrees with them. Any way to control that to make sure alternative viewpoints are heard?	8/9/2019 12:06 PM
219	Follow State guidelines. Attend planning commission hearings, get educated and not emotional!	8/9/2019 11:50 AM
220	Economic impacts of over regulation.	8/9/2019 11:37 AM
221	Have a day to celebrate and recognize hard work and resources made available to communities by the oil and gas industry	8/9/2019 11:00 AM
222	Soliciting for comment on Facebook was a good idea and opens up the conversation to a broad audience. The only suggestion I might have is that one should be cautious to not limit the scope of narrow opinions one may get when using a slightly skewed (younger) audience on social media. I'm 30 and I highly doubt my father will see/complete this survey.	8/9/2019 10:51 AM
223	Accessible surveys and forums are efficient ways to gather feedback. It would also be great to have an informational meeting(s) in a setting that doesn't feel politically charged. Safety should be non-partisan.	8/9/2019 10:06 AM
224	Do not allow folks who are angry, disruptive or condescending to remain at hearings: this turns things into an unproductive circus. Give ample opportunity for the community to be educated on the process of oil and gas drilling, along with how we use hydrocarbons in our daily lives. The industry does a great deal to keep people safe and protect the environment. Let the community learn what those things are! Don't let activists spread inaccurate and misinformation in hearings and in the community. Allow real science to be presented and not emotional responses. Thank you again.	8/9/2019 9:50 AM
225	Open-mindedness would be a good start... Self-control and respect for others is next up.	8/9/2019 8:58 AM
226	The typical public session do not work. The anti oil & gas groups resorts to ugly intimidation tactics and intend to shut down the democratic process. They try to be the loudest voice in the room and use misinformation and health scares against the general public. Larimer County cannot be overbearing in its regulations and should share valuable information from Weld County.	8/9/2019 8:24 AM
227	Provide space for public comment but have people/agencies register beforehand if they wish to speak. All other public comments will be allowed based on time limits. Set time limits for public comment.	8/9/2019 6:55 AM
228	Economic impact	8/9/2019 6:34 AM
229	Keep the process open and transparent, which you have done a good job wii so far.	8/9/2019 6:05 AM
230	In order to achieve consistent regulation and reliable cooperation from all participants in exploration, production, and public oversight, it will be important that all participants see the motivations and the process of decision making clearly. If the producers feel excluded, they will choose ways to ignore inconvenient regulations or regulations they do not understand. This will be particularly true of small operators, who feel their individual livelihood threatened without seeing the long-term benefit of maintaining the health and productivity of the whole community.	8/9/2019 6:03 AM
231	Make sure all sides are at the table and that their views are presented. Emotion and reliance on discredited allegations should not be the basis for any decisions.	8/9/2019 5:42 AM

232	I am a local resident but heard of this through an advocacy organization. More public outreach/publicity by the county would be appreciated.	8/9/2019 5:20 AM
233	continued conversation about the best ways to develop our resources, not simply "keep it in the ground"	8/9/2019 5:09 AM
234	My understanding is that this is primarily focused on how oil and gas development can proceed safely with the community. How can we make sure that community development takes place safely around existing oil and gas development?	8/9/2019 3:26 AM
235	Round table discussions with key folks, open houses, etc.	8/9/2019 2:56 AM
236	none	8/9/2019 2:21 AM
237	Start sharing and talking about the good things the Oil and Gas industry does for this beautiful State.	8/9/2019 2:01 AM
238	I'd encourage respectful meetings and not allowing dissenting viewpoints to takeover a meeting through rude behavior.	8/9/2019 1:53 AM
239	Stop the scare tactics, politics and preconceived notions and truly listen to each side of the argument in order to come up with common sense solutions.	8/9/2019 1:46 AM
240	Make education of oil and gas operations part of the program. There is so much misinformation and unnecessary fear that's driving the general public.	8/9/2019 1:45 AM
241	Just keep an open mind. Remember that petroleum was once the energy of the future and solved a lot of problems. There is no magic solution for providing energy to all of the human population that will be all rainbows and unicorns with no negative impact to the environment or to a certain percentage of the population.	8/9/2019 1:42 AM
242	We should develop plans to foster and develop oil/ gas in Larimer County, in a way that we manage and control the development to ensure SAFE development in Larimer County.	8/9/2019 1:16 AM
243	Education about the industry is sorely lacking and it all seems to be all emotionalism not based on facts and reality. Our nation has to have energy for the people to survive and for national security. Without energy, I would not even be able to use this computer for this survey.	8/9/2019 1:09 AM
244	Oil & Gas has done a poor job of explaining what we do. We are now doing a better job, but try and take the time to understand our industry. We are moms, dads, grandmothers, grandfathers....we think we provide a valuable commodity and we do it safely and environmentally conscious. Continue to have surveys and public meetings, but expect the public to be civil on both sides and if they're not kick them out of the meeting. Public meetings should not be a place where people can chant, yell, fake cough, or do things to disrupt when other people are speaking. If they do, there should be consequences.	8/9/2019 1:06 AM
245	educate the actual truths.	8/9/2019 12:59 AM
246	Focus more on the negative, uninformed motives of those who oppose the industry.	8/9/2019 12:58 AM
247	Non Colorado companies should be banned. Go home. We don't want you here. You shitbag Trump dick suckers do not respect our way of life.	8/9/2019 12:54 AM
248	N/A	8/9/2019 12:50 AM
249	Rely on state officials who have been working with the O&G companies to regulate safe and environmentally sound operating practices	8/8/2019 11:20 PM
250	Be willing to learn and listen.	8/8/2019 11:06 PM
251	Listen to the public outcry! Please look at all of the many health studies pointing to dire health consequences for those that live within a mile of a fracking site. Study the air quality! Demand closed loop systems at the minimum if you are going to allow fracking.	8/8/2019 7:19 PM
252	Don't give in to hysteria of the Sierra club or its ilk regardless of how many protest or persist. Good judgement should prevail.	8/8/2019 7:09 PM
253	Try educating people about how crucial these energy sources are to modern society and in fact health, safety and security. Then educate about how tight the new in place regulations are that Gov. Hickenlooper's put in place. Stop fear mongering and vilifying this critical industry with dangerous and often false enviro-terrorist type language.	8/8/2019 6:25 PM
254	Be more specific with your survey questions	8/8/2019 4:43 PM

255	Please make sure all voices are heard on all sides of the issues to ensure that the regulatory outcomes are fair and appropriate. Thank you.	8/8/2019 4:42 PM
256	No idea	8/8/2019 4:35 PM
257	Personality I feel oil production should be reduced in Colorado and they can drill in less populated states.	8/8/2019 3:46 PM
258	Communication through social media and newspapers	8/8/2019 2:54 PM
259	please let them do their job and let us keep jobs in Larimer County	8/8/2019 2:46 PM
260	No new drilling	8/8/2019 2:34 PM
261	Town halla	8/8/2019 2:12 PM
262	Ask the children who play in toxic environments whether this is the world they want to live in. Ask asthma and other respiratory specialists what we are seeing in terms of increased respiratory diseases. Take the task force on the road to other parts of the county than north Fort Collins. Spend a meeting at a drilling site especially one that is just getting started.	8/8/2019 1:57 PM
263	Please make community forums as fair and balanced as possible and at a time to make it easier for those who work to be present. Thanks!	8/8/2019 1:53 PM
264	None	8/8/2019 1:33 PM
265	More community input before and after picking the Task Force, and don't be in a big hurry. Letting the oil & gas interests cash in before the state acts is not important.	8/8/2019 1:01 PM
266	I am in favor of oil and gas production. I would like to better understand the taxation implications and potential benefits to the county that could offset residents taxes.	8/8/2019 12:36 PM
267	Be reasonable	8/8/2019 12:33 PM
268	Address concerns through working with oil and gas companies. The individuals working for oil and gas are from the same community and want to do what is best for their families.	8/8/2019 11:59 AM
269	Treat others as you would like to be treated	8/8/2019 11:37 AM
270	When attendees of future meetings can't conduct themselves in a civilized manner, escort them out of the meeting so that the mature folks can have a productive discussion.	8/8/2019 11:12 AM
271	Please don't just listen to the loudest voices in the room. This is a democracy and should be run like one. Don't let a few squeaky wheels have undue influence.	8/8/2019 11:01 AM
272	What rights do property owners have?	8/8/2019 10:59 AM
273	Just stop, oil and gas can kill people in other countries, we don't need people dying in our county.	8/8/2019 10:57 AM
274	each proposed regulation has an estimated cost to enforce and manage it. Publicly provide a dollar amount to operate and manage the regulations proposed and advise where the money will come from to do this.	8/8/2019 10:55 AM
275	Make all the established factual evidence of the environmental, economical, and life advantages, that the energy industry promotes and exemplifies (and has exemplified in the past) widespread knowledge. We deserve equal presentation through the media that has so far been extremely one sided.	8/8/2019 10:54 AM
276	The focus of conversation should be on holding oil and gas operators accountable for improving the safety and environmental impact of their operations not shutting them down.	8/8/2019 10:53 AM
277	Community engagement should be minimized if not eliminated in it's entirety. State regulatory engagement is sufficient.	8/8/2019 10:49 AM
278	Limit opportunities for grandstanding and generic public outcry. Require sources to be cited when given data and claims about oil and gas impacts. Rely on the resources of the experts.	8/8/2019 10:48 AM
279	Keep it open, fair, balanced, and non-politicized.	8/8/2019 10:46 AM
280	Give both sides of the aisle a voice to clearly communicate their point.	8/8/2019 10:46 AM
281	Respect should be shown on both sides. It is very disheartening to endure insults and shouting when you're fighting for your livelihood and career, not to mention the ability to help provide energy for every citizen of Colorado.	8/8/2019 10:38 AM

282	Education is key.	8/8/2019 10:33 AM
283	Online to make it easy for a wide range of people to be involved and ask for people to state who they are and where they live.	8/8/2019 10:32 AM
284	Be sure in involve and listen equally to all sides of the debate.	8/8/2019 10:31 AM
285	Education from the agencies on the requirements O&G is already subject to	8/8/2019 10:30 AM
286	Let the industry professionals guide it not politicians	8/8/2019 10:22 AM
287	Please ban fracking now. There are to many risks, spills and environmental factors. Our kids deserve a better future go green.	8/8/2019 9:42 AM
288	Hold more town hall style meetings	8/8/2019 8:27 AM
289	SEE # 2. WE NEED TO PROTECT OUR FUTURE WHICH MEANS EDUCATION AND ACTION ON PRESERVING OUR ENVIRONMENT! HAVE INTEGRITY AND COURAGE AND FOR A CHANGE... TELL THE TRUTH	8/8/2019 7:52 AM
290	Participate as a booth or vendor at local events and festivals to open the conversation to the public in an inviting way.	8/8/2019 6:26 AM
291	Notify every resident who currently lives within 2500 feet of a fracking well. Inform them of the health and environmental hazards caused by fracking. For future wells, notify all citizens in advance that a well will be drilled within 2500 feet of their property. Allow citizens to make public comments on the proposed well. Send a similar notification to all citizens whose workplace or school is within 2500 feet of a fracking well.	8/8/2019 5:25 AM
292	That the County use its educational resources to create true polling and engagement with its taxpayers rather than using push-poll style polling which appears to be designed to decrease rather than increase engagement. Were the County to be truly interested in citizen input, the Task Force membership would have equal representation rather than being so heavily weighted toward oil and gas industry bias. Ideally, a balanced Task Force would be comprised of 1/3 citizens with no direct or indirect connection to the oil and gas industry, 1/3 oil & gas industry representatives from within the county and 1/3 citizens who are objective science professionals and educators with knowledge of the health, safety and industry aspects needed.	8/8/2019 3:49 AM
293	Keep posting updates to Facebook, and other social media.	8/8/2019 3:12 AM
294	Slow the process down and pay attention to the impact to the neighborhoods. OG are making intractable enemies with the careless way they behave.	8/8/2019 2:48 AM
295	Stop pandering to the liberal environmentalists who only want the elite to have energy resources. America needs to be energy self-sufficient not at the mercy of foreign powers.	8/8/2019 2:29 AM
296	Put it to a vote	8/8/2019 2:19 AM
297	Don't allow oil and gas to buy off the votes on this or any other subject	8/8/2019 12:47 AM
298	Stay politically active. Keep legislators informed.	8/7/2019 4:24 PM
299	I appreciate meetings held in different areas of the county, including Loveland, Berthoud and Estes Park.	8/7/2019 2:53 PM
300	Post on social media	8/7/2019 2:33 PM
301	Use all social media channels as well as email addresses of all property owners and utility customers.	8/7/2019 2:19 PM
302	Consider employment. Oil and gas creates lots of jobs and economic growth.	8/7/2019 2:05 PM
303	Oil and gas is great for the economy. But it has its drawbacks when it comes to land use and appearances. Unfortunately community "engagement" is going to be the typical ruse that we see with government ran community involvement attempts. The population is becoming wise to the fact that the government does not care what we think. When enough money lines the pockets of the decision makers, then the paid for decisions are made. Simple as that.	8/7/2019 1:31 PM
304	Have an outside consultant run a public process. Matt Lafferty and others at the county do not have the experience to run this process.	8/7/2019 12:38 PM

305	There needs to be MUCH MORE public education and input, time, science, safety concerns and thoughtfulness put into developing NEW, currently non-existent O&G permitting regulations for Larimer County-- Especially since they that are intended to be incorporated into a 20 year land use plan. Something this impactful, this weighty, should have much more communication, more transparency and more ethical consideration of the impact. More opportunity for scientific input based on reputable studies regarding health safety and the environment. More information to the community. With plans to use the task force's recommendations for the 20-year Land Use Plan-- Larimer County needs to SLOW DOWN. What is the rush with trying to craft new regulations in a few short months. How could ANYONE be expected to weigh and coordinate the complexity of the permitting process with existing regulations and SB-181 in such a short time? And WHY? The State expects it to take a year to craft new regulations, with full-time effort. How can a volunteer task force really weigh all factors, especially with the implementation of 181 for COGCC still being worked out. The Larimer County people have the right to be informed, included, and their safety and health, paramount.	8/7/2019 11:49 AM
306	As a community what are the most important actions we can take as individuals and society to address and meet the climate emergency?	8/7/2019 11:31 AM
307	Be practical and thoughtful, not extreme.	8/7/2019 11:05 AM
308	Stop giving platform to activists who are uninformed	8/7/2019 10:27 AM
309	Cable TV panels, Local panel discussions, All oil and gas maps and accidents should be listed on county website. See Broomfield's city website for details.	8/7/2019 10:12 AM
310	Public forums; public vote on any policy making	8/7/2019 10:08 AM
311	Let the people decide and leave politics out of it	8/7/2019 9:37 AM
312	Quit letting money win!!	8/7/2019 8:57 AM
313	monitoring of site and regional air quality	8/7/2019 7:36 AM
314	A	8/7/2019 7:23 AM
315	Fairly discussing the pros and cons of drilling and fracing without the scare tactics that often go along with these discussions.	8/7/2019 7:16 AM
316	Open community in person meetings, as well as online meetings which the public can participate in.	8/7/2019 7:13 AM
317	Don't just ask one side of the aisle what they think—ask both	8/7/2019 6:44 AM
318	Get some true information. Give the entire story from every side with all of the information instead of just a si gle side of the story.	8/7/2019 6:16 AM
319	If the counties want the revenue from gas and oil they need to sit down and really think about what impact the well sites have on future development. Look at the true statistics and not the hysterical bleating of the liberal left.	8/7/2019 5:48 AM
320	Put out additional resident surveys	8/7/2019 5:27 AM
321	I support a moratorium if not an outright ban.	8/7/2019 5:00 AM
322	Public meetings and ability to respond to proposed rules/regulations would be helpful.	8/7/2019 4:35 AM
323	Show how oil and gas benefits everyone daily and is so important.	8/7/2019 3:52 AM
324	None	8/7/2019 3:44 AM
325	Look for environmentally conscious alternatives to natural gas and oil!!!	8/7/2019 3:20 AM
326	Please consider the opinion of the majority of the residents, not just the energized activists who represent 10% of the population. Making energy more expensive hurts vulnerable families	8/7/2019 2:09 AM
327	Ask an Oil and Gas professional questions. Ask your county reps for information. The O&G industry wants you to be informed and looped in their projects.	8/7/2019 1:37 AM
328	Education that increases the knowledge about the process of economics and how oil and gas supports so many other parts of our economy	8/7/2019 1:35 AM
329	Leave the Oil and Gas industry alone and RECALL POLIS!	8/7/2019 1:34 AM

330	Do not let the O&G Task force be dominated by members with ANY history of relationship to O&G! Provide the county citizens better access to information regarding participation opportunities on task forces (not only O&G). Conduct your actions with public information and meetings using standards that rise above the state mandates. Do your best - not - just enough to get by!!!!	8/7/2019 12:43 AM
331	We should be asking how we can promote this industry not regulate it.	8/7/2019 12:28 AM
332	Educate the public on the FACTS, both good and bad, of oil and gas development	8/6/2019 11:17 PM
333	I think it is time we seriously look into what Weld county has created over the last ten years. They are the number one producing county, the availability to O&G tax money to fund projects is evident when traveling through.	8/6/2019 10:39 PM
334	Follow Weld County with regulations and a committee.	8/6/2019 10:21 PM
335	Educate on the efficiency of hydraulic fracturing and show how its development has led to the decrease of emissions through the construction of a well. Inform the public on safety and environmental practices of oil and gas companies and and show the truth rather than unsubstantiated allegations by the anti oil and gas community.	8/6/2019 9:43 PM
336	Leave that to the professional oil and gas individuals. It creates a "Zohnerism" when uneducated and uninformed people regulate or decide how best to use our natural resources.	8/6/2019 8:33 PM
337	Take a poll of local business owners, have them tell you who is buying their products, upgrading, tipping. Oil and gas has spurred our local economy greatly in recent years.	8/6/2019 7:58 PM
338	We need a citizen's task force, not an oil and gas industry task force	8/6/2019 6:25 PM
339	Community health and environmental concerns expressed in comments should be considered as Priority One	8/6/2019 4:24 PM
340	Listen to people putting forward serious economic justice policies. Put aside sensationalist activists groups and business interests to hear out well informed individuals who have well thought out ideas and expertise	8/6/2019 3:54 PM
341	Education to the public	8/6/2019 3:53 PM
342	If you're going to have these community forums, allow both sides an equal amount of time to speak instead of railroading the industry to push your personal agendas	8/6/2019 3:47 PM
343	If you do a public event, I'd suggest a moderator to allow all sides to share thoughts, opinions and science and avoid shouting matches and disrespect. This is an emitional topic for some	8/6/2019 3:06 PM
344	Show both sides of the story	8/6/2019 2:59 PM
345	Please reach out to a broad spectrum of the community.	8/6/2019 2:51 PM
346	Just more of the facts more frequently...	8/6/2019 2:40 PM
347	Open forums.	8/6/2019 2:39 PM
348	Ignore the NIMBY and develop our resources wherever they may be found.	8/6/2019 2:37 PM
349	Hold frequent meetings at varied times. Many of us work shifts, and it is impossible to get there during your times, unless we miss work.	8/6/2019 2:27 PM
350	Anyone who moves here in the last 5 years cannot participate.	8/6/2019 2:23 PM
351	Keep drilling and fracing	8/6/2019 1:48 PM
352	Keep doing things like this, but also if possible let's get less O and G on the task force.	8/6/2019 1:37 PM
353	Please be sure to include the community in your decision making processes. They are a valuable part of the process and have insight and support that can help shape regulations for the better of all citizens.	8/6/2019 1:34 PM
354	Total openness with State & local citizens. Complete accountability for safety, health & environment. Oil & Gas HAVE TO DO IT OUR WAY OR NOT AT ALL!	8/6/2019 1:30 PM
355	None	8/6/2019 1:16 PM
356	Well advertised opportunities to have discussions at times that are convenient for many sectors of the community	8/6/2019 12:50 PM

357	Add people to the committee whom are not paid off by the oil and gas industry and will work on behalf of the people!	8/6/2019 12:46 PM
358	Public hearings addressing all aspects regarding drilling operations as well as notices on line and in local papers. The public must have input and a voice in the process.	8/6/2019 12:45 PM
359	Listen to professionals with real facts not scare tactics by environmental group	8/6/2019 12:36 PM
360	Follow the law FIRST! This is a republic and our representatives have given you rules!	8/6/2019 12:32 PM
361	Wind and solar all the way.	8/6/2019 12:29 PM
362	Provide all households with the latest science on fracking and on how oil and gas has been operating, its contempt toward citizens at every stage. Educate citizens!	8/6/2019 12:15 PM
363	Every proposed new well should be put up for community comment. This process must become much more transparent. Each community should be able to decide for itself if it wants to allow fracking or not.	8/6/2019 12:02 PM
364	How about no oil and gas in larimer county. Let weld county destroy its water, air, roads.	8/6/2019 11:31 AM
365	Publicize more, ask for citizen involvement, make use of social media and public radio and tv.	8/6/2019 11:23 AM
366	Have a fair and honest talk with both sides of the table. Throw people out that disrupt meetings that have happened in the past.	8/6/2019 11:23 AM
367	Equal time should be given to all sides of a discussion and outbursts similar to what has been on offer at recent COGCC meetings should not be tolerated in any way, shape, or form. Opportunities for engagement should be publicized well in advance and rulemakings should not be conducted in closed sessions at the 11th hour. Finally, the committee should be weighted evenly between all sides of the discussion.	8/6/2019 11:11 AM
368	Neighborhood meetings might help residents understand the issue.	8/6/2019 11:09 AM
369	Here both sides of the fence on this issue,Not just the one side or the other,Together we can come together and use common sense to oil and gas production.	8/6/2019 10:47 AM
370	Neighborhood meetings for each proposal.	8/6/2019 10:40 AM
371	Invite residents who live next to oil/fracking operations testify as to how this affects their daily living, health, and quality of life.	8/6/2019 10:22 AM
372	Open hearings on the regulations proposals	8/6/2019 10:12 AM
373	Education of the public about both cons AND the pros about resource management and economic stability. Don't be one sided!	8/6/2019 10:08 AM
374	Put the rules to a vote.	8/6/2019 10:04 AM
375	Education! !! Careful planning with options for possible redirection if necessary	8/6/2019 10:04 AM
376	None	8/6/2019 9:56 AM
377	None, thank you	8/6/2019 9:31 AM
378	Let's educate people about what oil and gas operations is really about. I work in the industry in safety but also have a MS in environmental policy and management. I find that most people outside the industry don't know what it's all about. They don't know about all of the regulations that we are held to (I'm in midstream, not upstream where it is slightly less regulated). Most people don't know the process and what the real hazards are. People will be more scared of what they don't know and I don't blame them. I don't think the industry has done a good job about communicating it, but I also think many in the public spread misinformation.	8/6/2019 9:28 AM
379	Too bad a site visit at an operating site can't be arranged Are there groups of citizens from weld county willing to gove their views & experiences??	8/6/2019 9:08 AM
380	balanced representation	8/6/2019 9:07 AM
381	social media especially Nextdoor outreach. Town hall style meeting with county officials	8/6/2019 8:43 AM
382	More surveys and several public forums.	8/6/2019 8:38 AM

383	Ask concerns of people that don't understand and ask the people that actually design and operate sites. Everyone should be involved and not just the loudest should be heard. The effects can hurt families and communities that are supported through the industries health. I have a hard time listening to a side that operates off argumentative fallacies.	8/6/2019 8:26 AM
384	Surveys like this are good.	8/6/2019 8:20 AM
385	Members of the public are not stupid - asking for public input and then ignoring it will not be a good look for this new council.	8/6/2019 8:16 AM
386	Oil and gas should benefit a community. Extracting mineral rights without investing in the community and being responsible for unforeseen consequences should not be permitted.	8/6/2019 8:06 AM
387	Tell the truth to the community. Make this conversation about us...not Oil and Gas profits/	8/6/2019 8:00 AM
388	Everything must be transparent and up for public discussion and input. THAT WAS THE ENTIRE POINT OF GIVING PEOPLE SOME CONTROL OVER THEIR COMMUNITIES AND HOW OIL AND GAS ARE INCORPORATED INTO THEM.	8/6/2019 7:36 AM
389	While local control should be mandatory what do you do about Weld County which embraces oil and gas development but fails to protect neighborhoods i.e. Triple Creek site!	8/6/2019 6:31 AM
390	Community forums.	8/6/2019 6:15 AM
391	Please schedule open and well-publicized hearings and meetings to take input from homeowners, communities, and businesses.	8/6/2019 5:42 AM
392	Let open comments be done on a one on one setting. We don't want disruption when we are taking our time to speak.	8/6/2019 5:41 AM
393	Have knowledgeable groups host meetings to educate the public. Vital for Colorado, COGA, Royalty Owners groups, etc.	8/6/2019 5:32 AM
394	More news coverage with facts. Not paid for by oil lobbies.	8/6/2019 5:29 AM
395	Treat every industry the same!!! If you can't get a new job!	8/6/2019 5:17 AM
396	Is it not possible to have order in sanctioned meetings? It's becoming a disgrace to sit in on meetings where the O&G industry waits in silence to speak, only to have unruly and disgraceful activists speak over and cause distractions when the O&G industry members speak. You become the joke when this happens. You can prevent this from happening. Call the meetings to order, remove the distractions, and listen to what people have to say - right, wrong, or indifferent.	8/6/2019 5:11 AM
397	This questionnaire is a good idea! Managing meeting better than the recent COGCC fiascos will draw more people from a more diverse background. No one offering their opinion, in a public forum, wants to be shouted-down or have comments behind their back. Your responsibility is to engage the ENTIRE community, not just the activists.	8/6/2019 5:04 AM
398	Keeping the paid activists from overrunning public meetings. They cannot be allowed to shout down, insult and heckle speakers whom they don't agree with. They need to be removed immediately. If they cannot be polite then they need to go home.	8/6/2019 4:33 AM
399	Have quorum requirements for community participation so O&G does not act alone	8/6/2019 4:27 AM
400	Continue to allow public involvement /engagement online for those who like me with small children at home, or disability, or shift workers are able to be involved outside of just attending hearings.	8/6/2019 4:11 AM
401	More transparency in government. Our country and our land belongs to all citizens, it does not belong to corporations.	8/6/2019 3:43 AM
402	Listen to civil debate, but quit feeding into the lies that are being spread about this industry. Work with your local oil and gas family, we love what we do and we're more than willing to show you our way of life if you can come to the table with an open mind.	8/6/2019 3:36 AM
403	Transparency & responsibility by oil corporations & executives. (Ha!)	8/6/2019 3:30 AM
404	let them drill they are not hurting boulder county the air is cleaner now except all car driving in Denver	8/6/2019 3:25 AM
405	Community voting on specific development team of well sites	8/6/2019 3:15 AM
406	Please don't allow the "green activists" to determine what is best for us.	8/6/2019 3:05 AM

407	Public information meetings that are scheduled when working folks can attend, more opportunity for public input on future extraction plans.	8/6/2019 3:04 AM
408	Please think about how this will impact the community economically. Many oil and gas employees reside in Larimer County including owning homes. They contribute to taxes which help the local businesses, schools, first responders. The growth of Larimer County is mostly contributed by oil and gas. Pleass get facts about how every aspect of the oil and gas field and how they impliment saftey first.	8/6/2019 3:03 AM
409	Be open and honest less scare tactics and if it is in fact an issue I request we stop all consumption and make it to consume anything that has ties to oil and gas to include natural gas and petrol!	8/6/2019 2:50 AM
410	Allow for municipalities to play role in decision making process.	8/6/2019 2:19 AM
411	Community outreach events without political input but members of the actual oil and gas community who can provide true facts on how oil and gas operates, their safety plans currently in place and how they are meeting each of the requirements already.	8/6/2019 2:17 AM
412	Educate the public on the benefits and needs of OG and how it can benefit them as an individual	8/6/2019 2:15 AM
413	While public meetings are necessary, the extremely vocal disruptions need to be shut down. Listen to those who are respectfully waiting to speak. All those who are respectfully waiting to speak without interruptions.	8/6/2019 2:01 AM
414	Raise indigenious voices	8/6/2019 2:01 AM
415	Drill baby drill	8/6/2019 1:57 AM
416	The money spent in the communities helps all business be able to flourish and stay open, and more people can afford to buy homes. Leave it alone	8/6/2019 1:52 AM
417	Don't be fear mongers	8/6/2019 1:47 AM
418	Use common sense, don't back down to environmental groups.	8/6/2019 1:46 AM
419	The economic growth that comes from the field. The safety and environmental regulations already in place and adhered too.	8/6/2019 1:44 AM
420	Bring in oilfield workers and hear their stories. Get to know them and see how their health hasn't been impacted from years and years in the field. Make sure to be fact based and open to changing your mind.	8/6/2019 1:42 AM
421	It is imperative to visit, speak with, and solicit input from residents who have lived through this type of development near their homes. First-hand experience is critical.	8/6/2019 1:36 AM
422	Come visit oil and gas sites in other counties like Broomfield, weld and Adams county and see what is already being done and see what can be feasibly improved. Try to understand the industry and what it does to prevent impacting the community and environment before making regulations.	8/6/2019 1:36 AM
423	Truth and open communication.	8/6/2019 1:33 AM
424	More awareness using key social talking points to debunk and educate the opposition. Use the community to spread a passive discussion. Make aware that impolite and disruptive behavior will not be tolerated by either side.	8/6/2019 1:23 AM
425	There is a need to publish the workings of the Task Force on a periodic basis so that citizens can provide feedback to those members on the Task Force that supposedly represent them.	8/6/2019 1:21 AM
426	Invite everyone to attend. Dont make it clandestine like other groups have.	8/6/2019 1:13 AM
427	Stakeholder views and employees matter too!!! They have a right to jave there voice heard and actually listened to.	8/6/2019 1:02 AM
428	Well advertised meetings.	8/6/2019 12:59 AM
429	Air quality measurements must be public, and control local.	8/6/2019 12:51 AM
430	Try YouTube or Facebook ads targeting residents of Larimer county, along with community meetings.	8/6/2019 12:37 AM
431	More advertisement regarding opportunities to share thoughts and opinions	8/6/2019 12:31 AM
432	Listen to everyone not just anti oil and gas groups	8/6/2019 12:30 AM

433	Do not ban oil and gas. Think about the ripple affect that it will have on this area if you do. Money lost and spent elsewhere due to bans, families moving because jobs were lost.	8/6/2019 12:24 AM
434	The state has set a great ground work for rules. If you are going to admen and enforce them only in the country. City's will have the contract in there area. Keep your regulation open enough that city can work with in that. We also want the economy of oil and gas in our county.	8/6/2019 12:23 AM
435	Invite the Oil & Gas industry and other THIRD PARTY folks to educate yourselves and the public on truth instead of hysteria and misinformation.	8/6/2019 12:12 AM
436	The community engagement needs to have structure. If people are there to be immature and rude they should be escorted off the property they can stand outside. The only reason they are there is to be a headache. Why don't you talk about what the o/g industry does to help the environment what standards are in place that are making a difference.	8/5/2019 11:52 PM
437	Do not allow hyper emotional protesting take precedence over a true open and honest debate on the merits of oil and gas exploration and extraction. Too many open forums have been overrun by ultra left-wing protesters, which drowns out an entire side of the debate. Allow industry leaders and employees an equal platform, and be prepared to listen to both sides of the debate with an open, and unbiased ear.	8/5/2019 10:37 PM
438	Well regulated meetings in a forum that both parties can respectfully speak on either side of the issue. Possibly even removing certain activist groups if they can't be respectful.	8/5/2019 8:40 PM
439	Share all the facts and benefits of oil company partners in our community.	8/5/2019 8:20 PM
440	Please learn the facts.	8/5/2019 7:29 PM
441	Colorado companies will do it right if you let them	8/5/2019 6:20 PM
442	The same as my response above. Our planet is in peril. This is not an opinion, or a matter of belief any more than the Great Depression, the attack on Pearl Harbor or the Nazi death machine were questions of opinion. It is actual and we must act upon it.	8/5/2019 5:50 PM
443	Throw a party to celebrate a fracing ban in Larimer County. People and the environment are more important the oil and gas profits!	8/5/2019 5:49 PM
444	I want to see many well publicized open and transparent town hall style meetings in organizations such as churches, schools, clubs, and recreation centers in every Larimer County city and town, at times when it is convenient for the majority of residents to attend. I want our city and county leaders, and all residents to be informed through community forums, print media, radio, and tv about the scientific evidence currently available regarding fracking's effect on people, wildlife, and the environment. I would like to see county-initiated specific information and education outreach into the low socio-economic communities where fracking is planned.	8/5/2019 5:47 PM
445	Have open minds and understand how the industry employees numerous people. How it brings money into the state. The trickle down effect.	8/5/2019 5:06 PM
446	Public education on the dangers to the community of having oil and gas wells / fracking in our county. Tell us the truth about the real dangers,	8/5/2019 5:01 PM
447	Actual tours on site at gad and oil sites for everyone who cares about this issue and certainly for all staff and elected officials.	8/5/2019 4:54 PM
448	The amount of jobs that the oil & gas industry supports in the county. Also all of the taxes contributed to the economy and what they specifically support such as schools, roads, bridges, etc...	8/5/2019 4:47 PM
449	Public hearings on regulations with local and county commissioners before implementing ANY regulations on any infringement on private ownership of lands	8/5/2019 4:41 PM
450	I believe real, factual data needs to be promoted for development- Facts over feelings.	8/5/2019 4:36 PM
451	Commercials? People need raw data that is easy to understand.	8/5/2019 4:33 PM
452	I would refer you to box #2, as it applies to this question as well.	8/5/2019 4:23 PM
453	Don't allow it!	8/5/2019 4:22 PM
454	How can our community say no to fracking and no to permits for fracking	8/5/2019 4:18 PM
455	Public education. Spam it like Boulder and Denver spam the whole state with false 'facts' and assumptions.	8/5/2019 4:12 PM

456	Focus on actual facts within the scope of the community outreach, do not allow unproven statements from either extreme to invade the engagement process.	8/5/2019 4:04 PM
457	Make sure you use common sense when developing rules and regulations. There are a lot of organizations trying to provide misinformation on oil and gas development. Look at the safety and environment standards for other chemical industries and how they are regulated and use best practices to prevent injuries and spills.	8/5/2019 3:59 PM
458	Give the community proper notice, give enough time for people to react and adjust schedules to make meetings and town halls. Don't allow meetings to get out of hand and become a platform to protest... nothing will ever get done if that's the case. Allow people to speak their minds and LISTEN to both sides. Have an agenda for those meetings and stick to that agenda. The focus of this engagement should be focused on moving forward with O&G development with safety of people and the environment in mind.	8/5/2019 3:53 PM
459	Improved notification processes for community engagement opportunities.	8/5/2019 3:51 PM
460	Gain legitimate 3rd party professional recommendations, peer reviewed research and studies, gain insight from the eia.gov website.	8/5/2019 3:48 PM
461	thank for asking these questions and for your concern.	8/5/2019 3:41 PM
462	Engage stakeholders on both sides and be transparent at every step.	8/5/2019 3:35 PM
463	USE SCIENCE! NOT EMOTION!	8/5/2019 3:32 PM
464	To make sure there are always a few knowledgeable industry people when you have engagements like this.	8/5/2019 3:26 PM
465	Truthful science based information. No more lies.	8/5/2019 3:25 PM
466	Open Houses, Town Halls, mailed questionnaires	8/5/2019 3:25 PM
467	Speak Ins & Town Halls with Researchers, Academics, neighborhood and community organizations, Schools and universities, environmental groups and organizations, gov't organizations; involve students volunteers farmers and agribusinesses; long term conversations eith all community residents and citizens and those seeking to pursue it; intense examination of materials methods	8/5/2019 3:18 PM
468	Be more involved with the oil and gas companies that already give so much back to the communities	8/5/2019 3:17 PM
469	Public announcements through the Larimer county website is very useful.	8/5/2019 3:16 PM
470	Drill baby drill.	8/5/2019 3:12 PM
471	Mind your own business if you won't take time to do sufficient research on the topics.	8/5/2019 3:10 PM
472	Drill baby drill	8/5/2019 3:10 PM
473	Educate yourself on the facts regarding how it affects your life. Leave your feelings and what you read on the internet out of it.	8/5/2019 3:05 PM
474	We aren't Boulder	8/5/2019 3:04 PM
475	Real science related to energy extraction, not bogus anti rhetoric	8/5/2019 3:03 PM
476	Frac on	8/5/2019 2:59 PM
477	Listen to the communities you are impacting. And respect them over corporations.	8/5/2019 2:58 PM
478	Bi-annual open meetings to allow for continued public awareness and involvement	8/5/2019 2:45 PM
479	I'd suggest at least two public meetings after normal business hours so that more community members can attend. The county needs to do a better job of soliciting input from people when they're off work.	8/5/2019 2:39 PM
480	To give equal time to people whom wish to speak equal time agaisnt the professional BS	8/5/2019 2:33 PM
481	More public meeting where we can voice our concerns	8/5/2019 1:33 PM
482	Equal weight and participation from environmental groups like WildEarth Guardians and local Sierra Club. They speak....for resources and wildlife that cannot.	8/5/2019 1:03 PM

483	Listen to your constituents. Pay attention to our concerns. Stand up to future Oil & Gas development.	8/5/2019 12:42 PM
484	Not sure. I do not like or approve of fracking at all, believing we should be focused on renewable energy instead.	8/5/2019 12:07 PM
485	Use all possible media to notify your constituents of upcoming meetings and comment periods. We are in a new era now with the passage of SB 181	8/5/2019 12:06 PM
486	Make sure the people of the community have enough lead time and the opportunity to comment on any resource issues.	8/5/2019 12:04 PM
487	None	8/5/2019 11:59 AM
488	Hold public hearings/meetings later in the day so that people who work can attend.	8/5/2019 11:55 AM
489	We intend to offer patrol services to local communities and county.	8/5/2019 11:53 AM
490	none at this time	8/5/2019 11:49 AM
491	Fight for your community. Protest and use direct action to stop fracking	8/5/2019 11:46 AM
492	Be as open as possible. Print postcards and mail to each address within 3 miles of any well. Tell them with a map on the postcard where their house is, where the well is. Do the same for addresses within 3 miles of any grid where drilling orders have been approved. You will find out how many people in Colorado have no idea what you are allowing to happen under their feet. How many people have no idea how close they are to the toxic discharge of the neighborhood well operations. Be honest and disclose in full that only 1/4 th of the Denver metro area is untouched by fracking. Show that the poor and rural communities are the ones paying the toll with health and property value declines. Their surprise, concern, and anger will tell you How informed they really are of the operations near them.	8/5/2019 11:42 AM
493	Before any negotiations are started between any government entity and O&G , all citizens of that city , county should be contacted and given a vote on what they would like to see happen.	8/5/2019 11:39 AM
494	Ban drilling.	8/5/2019 11:30 AM
495	Visit oil field sites with organized groups and see for yourself how regulations are taken care of through engineering experience. The Oil and Gas Industry are some of the best stewards of the land there is. We also buy produce from farmers in these areas, as well as hunt and fish.	8/5/2019 11:19 AM
496	You should not allow any drilling period	8/5/2019 11:18 AM
497	Abide by the new state laws.	8/5/2019 11:11 AM
498	Pass laws against oil and gas wells and pipelines!!	8/5/2019 11:09 AM
499	Ban oil and gas in residential areas.	8/5/2019 11:00 AM
500	Get the community more involved - hold local, regional and national concerts/art events where your message gets heard by a large audience.	8/5/2019 10:54 AM
501	Quit force pooling people to give up their mineral rights, it is against everything our country stands for.	8/5/2019 10:39 AM
502	Public meetings are important and there should be more. The officials at the public meeting should be there to listen and to interact, and be open minded and not there to read text messages on a cell phone. Not pointing a finger at anyone, but just saying.	8/5/2019 10:31 AM
503	More representation from scientists not aligned with oil and gas! No more industry insiders!	8/5/2019 10:26 AM
504	Allow citizen petitions and votes to determine whether or not the drilling/fracking process goes forward.	8/5/2019 10:24 AM
505	Why is it ok to subsidize oil and gas at public expense?	8/5/2019 10:20 AM
506	Oil and Gas have bought off votes and representatives. They should not be allowed to bully communities they are in. Migrating so many new people into an area to work is a hard task. Yes, they bring money into our community but also bring a lot differences. Putting people in the states and communities to work before transplanting so many others that it takes away from what made the area unique and home! So many protests and the only ones punished is the protesters. WHY?!?! How many spills in this last year alone?!?!	8/5/2019 10:16 AM
507	Listen to the people, not the oil and gas industry!	8/5/2019 10:09 AM

508	While it is important to service the population, we also need to ensure that environmental and safety issues are always taken into account, especially in areas near homes, families, schools and churches.	8/5/2019 9:50 AM
509	Ask one of your local Climate Reality Leaders, 350.org leaders, CO Rising, or Conservation CO presenters to host a face-to-face seminar that will allow for audience participation and discussion. All questions would be screened; the discussion would be monitored closely. Security guards would be desirable.	8/5/2019 9:45 AM
510	Ban all oil and gas extraction activity in Larimer County. We need no more engagement than that.	8/5/2019 9:44 AM
511	Add "wildlife conservation" to the list of concerns.	8/5/2019 9:23 AM
512	I think you need more public feedback forums	8/5/2019 9:19 AM
513	(none come to mind)	8/5/2019 9:13 AM
514	We must get oil & gas insiders off of the task force immediately. People that were responsible for putting them on the task force need to be held directly responsible for promoting dirty oil and gas. This is OUR county and we pay their wages. This behavior is deplorable.	8/5/2019 9:09 AM
515	Ban fracking in Larimer County. At the very least, enact a moratorium on new permits until SB181 rulemaking by COGCC is complete. Then Larimer County should make stronger, more protective rules than SB181 to fully safeguard the community.	8/5/2019 9:08 AM
516	Publication of proposed new or revised regulations and notification of proposed new oil and gas drilling or processing facilities with sufficient opportunities for public input before finalization or approval.	8/5/2019 9:04 AM
517	Alter your behavior as if you had actually listened to input.	8/5/2019 8:59 AM
518	Reach out to established community groups and seek their input	8/5/2019 8:51 AM
519	Look at the whole picture. By this I mean instances of gas/oil mishaps, how clean up has been done, effects on the environment. Also look at the jobs created, funding for schools, parks and the environment, and costs to citizens to power our homes. Thank you	8/5/2019 8:50 AM
520	More surveys and public opinion gathering.	8/5/2019 8:49 AM
521	Continue to engage with local communities.	8/5/2019 8:41 AM
522	Keep the public involved.	8/5/2019 8:36 AM
523	Allow researchers who have studied human health as it relates to oil and gas development near schools, homes and parks and be part of the conversation	8/5/2019 8:35 AM
524	We are counting on you to publicly support transformative policies, financing, investment or insuring that would lead to an IMMEDIATE (or as fast as possible) and CONTINUAL SWITCH AWAY from OUTDATED, MUCH MORE EXPENSIVE, CORRUPT, DESTRUCTIVE and wasteful fossil fuels, including: • An end to using, financing, investing in or insuring: • all fossil fuel infrastructure • all fossil fuel pipelines • all fossil fuel extraction • all fossil fuel burning • all fossil fuel power plants • all fossil fuel heating systems • all fossil fuel exports • all fracking • all fossil fuel leasing • Using, financing, investing in or insuring a Green New Deal that incorporates a planned fossil fuel phase out, while prioritizing the needs of workers and communities. In addition, we are counting on you to do all of the things, or as many as you can, to support the fastest possible acts to IMMEDIATELY (or as fast as possible) and CONTINUALLY SWITCH TO using, financing, investing in or insuring ONLY 100% clean energy and ONLY 100% clean transportation.	8/5/2019 8:34 AM
525	Parents of small children should be the most involved in this issue.	8/5/2019 8:34 AM
526	Expand the use of electronic media like this survey to get real community involvement. Oil and Gas employers PAY their employees to attend and overcrowd rallies, community events, and town hall meetings. The voices of Colorado get drowned out by temporary people who only move here to profit off of extracting our resources and destroying our environment. When the oil dries up they will go, WE will still be here.	8/5/2019 8:28 AM
527	Every town and community should have a say as to whether this type of activity should be allowed.	8/5/2019 8:27 AM
528	Transparency about how much money oil and gas make executives make compared to their employees	8/5/2019 8:22 AM

529	Do what is right for the community. Protect our environment and natural resources, which will protect our people from pollution that is unhealthy and an energy source that is about to be the past.	8/5/2019 8:22 AM
530	We need to see the numbers for each site by inspectors so we can be on top of sites near our homes and in our communities. Our family's health and our neighbors' health depend on the oil/gas industries doing what is required by any regulations that are instituted. They make a lot of money and they need to spend some if it to keep our communities safe.	8/5/2019 8:10 AM
531	A community wide education program that citizens can learn from.	8/5/2019 8:08 AM
532	Keep Informed	8/5/2019 7:52 AM
533	Stop fracking.	8/5/2019 7:49 AM
534	More open meetings, on-line comment solicitations.	8/5/2019 7:47 AM
535	Come to the people. Holding meetings in multiple locations, involving credible speakers and making decisions based on safety first rather than profits would be a start.	8/5/2019 7:44 AM
536	The community should be involved at every step, and be informed of the costs in health and environment.	8/5/2019 7:43 AM
537	The ability for community members to have stakeholder status, not just mineral owners. They need to know their health and safety rights. Here is a prehearing statement on this during the 500 series that depicts what this should include: https://drive.google.com/file/d/1U-zgwwyJgdbSABclmhgWK7MqwemFaExC/view?usp=sharing	8/5/2019 7:33 AM
538	Meetings held more often in several locations in Larimer county. Also mass email sent to county residents notifying of meetings or robocall.	8/5/2019 7:31 AM
539	Community engagement should recognize cities like Fort Collins who are in the process of declaring a Climate Emergency resolution, whereas the phasing out of gas and oil has to become the number one priority as we find the political will to embrace and promote, both socially and economically, more sustainable and carbon free sources of energy.	8/5/2019 7:27 AM
540	I would like to see robust community outreach that goes beyond having an open comment period or open public meetings with representatives only answering questions. Instead, I would like facilitated meetings with the public that break participants into topic-oriented groups to find publicly acceptable solutions to community concerns. Meetings should be advertised through various channels, including social media and community meeting spaces, including targeted outreach to neighborhood-level residents, community interest groups, as well as university departments and students relevant to the topic (e.g. Natural Resources, Atmospheric Science, Public Policy, etc.).	8/5/2019 7:26 AM
541	?	8/5/2019 7:25 AM
542	Develop methods that work for communication to all the sub-communities in the neighborhoods involved; door to door if need-be.	8/5/2019 7:18 AM
543	What ever became of public environmental impact discussions and reactions??	8/5/2019 7:16 AM
544	The community needs to be adequately informed of all changes to regulations proposed by the Oil and Gas Industry.	8/5/2019 7:15 AM
545	Continue updates.	8/5/2019 7:10 AM
546	If in the past, like 20 years ago, the oil and gas industry leaders had held safety and health ahead of profits we would not be having this discussion. In the FUTURE they must agree that health and safety are primary. Not how big they can increase profits. I heard the statistic that Anadarko claims they paid \$6 million in taxes in Colorado in the past TEN years. That's only \$600,000 a year to the whole state. Hardly a fraction of their profits. We need to stop being swayed to make unhealthy and unsafe decisions because they hold taxes paid as the carrot.	8/5/2019 7:10 AM
547	Oil and gas is very complex and technical. I'd like to better understand how the industry works so expert speakers available to answer questions and concerns would be very helpful.	8/5/2019 7:05 AM
548	It is THE place to begin or are we not a democracy??	8/5/2019 7:02 AM
549	Open meetings that notify all interested parties ensures transparency and doesn't allow the industry to dictate the conversation.	8/5/2019 6:56 AM
550	More door to door outreach	8/5/2019 6:54 AM

551	If anything goes wrong they clean after themselves. They pay for any harm they do to persons ,animals , land and air .	8/5/2019 6:52 AM
552	Why are we destroying our environment when renewable energy is so much safer and does not destroy our environment for centuries and jeopardize or health in the process!	8/5/2019 6:52 AM
553	I have worked on the land/legal side of the industry for over the 35 years of my career. I feel we do not have to drill every square inch of the country to produce oil and gas we do not need, and only to export to foreign entities. We do not benefit from development, and only the oil and gas industry does at the expense of our beauty. Looking at the sharp decline rate of the current wells, we need to keep running fast in place just to keep production up, and for what goal, as decline will eventually occur and all we have left is scared landscape.	8/5/2019 6:51 AM
554	Keep away from housing	8/5/2019 6:51 AM
555	Balance CASH OPPORTUNITIES with HEALTH CONCERNS.	8/5/2019 6:48 AM
556	see reply to #2 , above	8/5/2019 6:46 AM
557	Organize town hall meetings where the public can a) be informed about the tremendous costs of oil and gas exploration on our air quality in Northern Colorado and b) provide feedback on the best way to transition oil and gas jobs to renewable energy.	8/5/2019 6:45 AM
558	Public forums, more social media, surveys	8/5/2019 6:44 AM
559	Defend the community rights to healthy environment - remove all externalities normally passed to taxpayers and show that is not a viable business	8/5/2019 6:43 AM
560	We own an income property that horizontal drilling is taking place under and we found the announcements from the company to be utterly confusing and nothing but legalese. I had no idea what it actually meant for our property. And even after I wrote to the law firm asking for more information, they just responded with more legal-isms. I shouldn't have to get a law degree to understand what is happening under my property.	8/5/2019 6:37 AM
561	Citizens should choose renewable sources of energy, such as solar panels, and government should invest in this.	8/5/2019 6:28 AM
562	Listen to the residents of Larimer County and then actually act on what they want done. Don't bow to the special interests!	8/5/2019 6:23 AM
563	I suggest that more information is shared with the community utilizing methods that will reach greater numbers of Larimer County citizens. We need to be more informed/empowered so that we can make educated decisions about our own well-being and that of the county at large.	8/5/2019 6:20 AM
564	Do not allow the oil and gas companies to bully you into decision making. I spent over 10 years in the oilfield and have seen the destruction first hand. There is zero care for the environment from top officials down. Someone must stand up for the health of our citizens.	8/5/2019 6:14 AM
565	Please hold at least two open Public Hearings before the O&G Task Force, as soon as possible, so the community may have input BEFORE the Task Force considers recommendations to the BOCC. Make sure ALL community members who desire to have input have at least 3 minutes each to speak. Slow down the Task Force schedule to allow community input; the current schedule does not seem to accommodate such. And, lastly, please put more information on this website - so the community will know the County desires to be - and IS - fully transparent. Thank you.	8/5/2019 6:08 AM
566	Surveys are good. Let people know when they have other opportunities to publicly give their input, whether it's in person or in writing. There are mass numbers of people who don't want this poisoning industry to be allowed to continue.	8/5/2019 5:49 AM
567	Make sure that the Larimer county oil and gas task force is balanced. Right now it is weighted towards the oil and gas industry	8/5/2019 5:48 AM
568	Mob rule is immoral	8/5/2019 5:47 AM
569	Please give at least 7 days notice of meetings and allow up to 14 days for input. Use all available social media and traditional media to notify the public of upcoming meetings or requests for input.	8/5/2019 5:26 AM
570	keep us informed	8/5/2019 5:25 AM
571	Take the time to consider all facets of the process, all of the equipment and chemicals used, do not allow a permit to go through until the full process has been considered. Work with regional municipalities and counties that are working on these issues. Do not go this alone.	8/5/2019 5:22 AM

572	open forums at different times of the day. Publish information in the newspapers	8/5/2019 5:21 AM
573	Communities should have the capability to override COGA decisions as well as impose its own penalties on the industry.	8/5/2019 5:15 AM
574	The more community input the better. O&G has a lot of money to spend and will do it's best to try to keep everything behind closed doors.	8/5/2019 5:10 AM
575	I carefully reviewed the makeup of your task force and it is heavily weighted towards oil and gas and land development interests. Many of us do not believe this is a representative group for making recommendations on this topic. You have only 2 members who have scientific backgrounds that are independent from the energy interests. I'd suggest you consider adding more neighborhood and environmental interests to the Task Force. The existing group's recommendations will not be accepted by the community at large and I believe you will have a major controversy on your hands. This group is not representative and should be expanded to include more stakeholders.	8/5/2019 5:01 AM
576	FACTS, the community must present FACTS. Not speculation and extremist views. Point and questions should be vetted prior to presentation, and possibly through a mediator. The meetings are not effective when a screaming person who is venting emotions and unsupported news reports makes false claims against O&G.	8/5/2019 4:45 AM
577	I would suggest that you speak with activists, Indigenous people who have been forcibly removed from Fort Collins by colonization and genocide (The Northern Arapahoe tribe for example) and communities who are working to actively protect our natural environment	8/5/2019 4:39 AM
578	News articles in the local newspapers will be essential. Encourage TV weathermen to comment occasionally on the effects global warming can have on our daily weather.	8/5/2019 4:15 AM
579	We need a committee that is not made up of a majority of oil and gas people. We need lots of transparency for the public . We should be working on getting away from fossil fuel dependency.	8/5/2019 4:09 AM
580	Better communication with all residents potentially affected.	8/5/2019 4:00 AM
581	None	8/5/2019 3:59 AM
582	"Town hall" discussions at the neighborhood level.	8/5/2019 3:55 AM
583	Adopt measures that effectively protect the general public.	8/5/2019 3:50 AM
584	Bring in the real scientists who are looking at the big picture and the impacts on the community from fracking. Make sure we are fully addressing air quality and that any operation that fails to meet air quality standards is immediately shut down. Work to find options beyond drilling for our fuel and work to reduce demand for gas so we don't have to ruin our homes in favor of a few years worth of natural gas	8/5/2019 3:48 AM
585	Take peer reviewed science seriously and look skeptically on industry paid science; those pose worrisome conflict of interest problems.	8/5/2019 3:47 AM
586	None	8/5/2019 3:39 AM
587	Public forums to discuss prior to planned drilling	8/5/2019 3:36 AM
588	Meetings and door-to-door surveys.	8/5/2019 3:32 AM
589	Absolute transparency in all regulatory processes.	8/5/2019 3:31 AM
590	I suggest that the committee does more to try to inform the community about the conversations going on. Luckily, I am on an email list that provided me with this survey link, but most people probably will not see this survey. Perhaps some mail should be sent to residents to inform them that their opinion is wanted.	8/5/2019 3:24 AM
591	clear information broadcast on public radio	8/5/2019 3:23 AM
592	None.	8/5/2019 3:21 AM
593	I suggest when this task force or other important groups are established that will have an input on our community,health, environment and safety they will be a DIVERSE, sample of citizens that make up Larimer County. The current task force is incredibly skewed to oil and gas interests and anyone who says otherwise is wrong or out of touch with reality. What's more important , money or the health and safety of our environment and community members?	8/5/2019 3:18 AM
594	vote intelligently.	8/5/2019 3:14 AM

595	Better publicity regarding the regular monthly meetings and regularly scheduled public input meetings regarding policy policy proposals prior to formal votes being taken by commission members.	8/5/2019 3:10 AM
596	The legislature should listen to the citizens. We have spoken, and it is clear that we DO NOT WANT fracking in Colorado.	8/5/2019 3:09 AM
597	Facebook is a good way for community engagement.	8/5/2019 3:04 AM
598	Empower citizens to say "NO" to further oil and gas development.	8/5/2019 3:01 AM
599	ALWAYS bring the community into the discussion. Thank you for hearing our voices through this survey.	8/5/2019 2:57 AM
600	Re-compose the Oil and Gas task force (1) to represent Larimer County and *only* Larimer County (no external "stakeholders"); (2) to better represent the serious concerns of the residents of Larimer County, *not* the interests of the Oil and Gas industry.	8/5/2019 2:47 AM
601	Colorado already voted NO on 112 land and mineral owners have rights as well. We cannot afford to lose jobs and revenue to the county due to people that have no clue how the industry works and that we have the highest standards already!	8/5/2019 2:40 AM
602	continued surveys; public meetings	8/5/2019 2:16 AM
603	This is an extremely important issue that will affect the county for well into the future; I believe there should be multiple public forums in different communities and that these should take place early enough in the process so as to be more than just a rubber stamp for decisions that have already been made. This questionnaire is also a much appreciated step in the right direction! Thank you and I hope to see more of these!	8/5/2019 12:20 AM
604	Regardless of what you do, residents are going to rise up as Larimer residents are not going to accept fracking like Weld. The Commissioners lives are going to be altered by fracking to the point that they will dread going to work. The industry will try to buy them, maybe even offer a job after their term ends. There is no middle ground to make everyone happy. They will be hit hard from both sides. This is going to be like the Thornton pipeline protests on steroids. You are going to get more community engagement than you thought was possible. I hope you do the right thing and do not go against the will of the people.	8/4/2019 5:46 PM
605	Public meetings, extensive opportunities for the public to speak out, surveys, news articles in the Coloradoan. Do not run things thru without genuine communication and listening.	8/4/2019 5:25 PM
606	Include the people in attendance in the conversation and exchange pro oil/gas folks with concerned health/medical personnel.	8/4/2019 5:15 PM
607	Please notify community members with sufficient advance warning to attend meetings.	8/4/2019 4:26 PM
608	Factual presentations by the city and county about the new statutes, pros and cons of development, the current impacts, experiences of communities in WY e.g. earthquakes, water pollution, etc.	8/4/2019 3:29 PM
609	Be as open and transparent as possible. Convene a panel of Medical Professionals and Researchers to present their unbiased findings, and invite the public to attend. Thank you.	8/4/2019 3:24 PM
610	Better representation on the commission. Public comment periods that are not dismissed. Prioritizing discovery of health impacts by speaking first hand with those that have been negatively impacted.	8/4/2019 3:21 PM
611	Follow state guidelines and continue to ask for public feedback and take it seriously.	8/4/2019 3:18 PM
612	We need to research earthquakes associated with fracking and water quality issues	8/4/2019 2:53 PM
613	I would ask the community to envision being a leader in energy production that does not increase our carbon footprint, and offers humanity both sustainable energy solutions and a sustainable habitat/climate for human life.	8/4/2019 2:34 PM
614	Full transparency from the government and all oil companies and power for local towns cities and municipalities to determine whether oil and gas can drill on their land	8/4/2019 2:08 PM
615	Regular, scheduled meetings to keep the community informed on the implementation of SB181. This is on the front lines of fighting climate change at the local level in Colorado; it is exceedingly important to keep the public informed of their opportunity for involvement, and why it is critically important.	8/4/2019 2:04 PM

616	If a local community doesn't want these operations then they shouldn't be forced to allow it.	8/4/2019 1:57 PM
617	Include input from all stakeholders.	8/4/2019 12:59 PM
618	While I appreciate the opportunity to fill out this survey, I have not been aware of opportunities to address the Commission on this issue. Clearly I have strong feelings, and would like the opportunity to be heard in more depth. Thank you.	8/4/2019 12:47 PM
619	Have open meetings. Give citizens a voice. Encourage citizens participation in any way possible.	8/4/2019 12:36 PM
620	Leave no option un-exploited to keep the public informed of every action you propose with honest statements of the pros and cons. Do NOT attempt to "manage" or manipulate us for commercial profit!	8/4/2019 12:03 PM
621	I'd like to hear stories of how people and wildlife have been endangered. I don't need to know more about the financial benefits, just what can go wrong. Murphy's Law.	8/4/2019 11:58 AM
622	Monthly updates re: air and water quality, and other issues re: environment and peoples' health.	8/4/2019 11:50 AM
623	There is concern that the community engagement is missing when looking at the makeup task force. If the Larimer County Commissioners (and task force) are to be prepared and qualified to write rules and regulations, it would seem that there should be a component of people involved who have experience and knowledge of what it means to live in a neighborhood with significant oil & gas development. These rules need to be constructed to better protect Larimer County residents than those currently in place. I appreciate this survey and hope that there will be increased forums for public comment - I recognize it is difficult to open up meetings to public comment because of the passionate opinions from all sides, but it is quite important to have it in some form. Lack of public participation will bring doubt and discord about the fairness. Would it be possible to have discussions with members from various town boards (such as Windsor, Loveland, Berthoud, etc)? Or to hold sessions in rec centers/community centers where the public could come in and submit their concerns and hopes for the task force? These could be in writing or verbally presented, provided there is enforcement of discipline and respect. Thanks for taking on this important effort to make sure our county has rules and regulations that are relevant and protect health, safety and environment.	8/4/2019 11:33 AM
624	Not allow oil wells be created/operated inside city limits and increase the setbacks around new wells.	8/4/2019 11:33 AM
625	Discuss how to give people control over the oil and gas industry so we can move from carbon based energy to sustainable energy.	8/4/2019 10:58 AM
626	listen to the public & especially to the scientists who are alarmed concerning the toll the oil & gas industry is adding to climate change	8/4/2019 10:53 AM
627	Please schedule meetings after normal working hours so that more concerned citizens are able to attend. I can not make the task force meetings due to my work schedule.	8/4/2019 8:06 AM
628	At a minimum, there should be public meetings in Loveland, Fort Collins, Berthoud, Timnath, and the Larimer portion of Windsor, to receive input from citizens	8/4/2019 7:28 AM
629	I think a bi-annual report to residents of Larimer County on the county website and emailed to subscribers of Commissioner newsletters with a map showing wells and stats on permits granted and results of air and water tests and anything else of interest during that period.	8/4/2019 6:32 AM
630	More transparency about decision-making.	8/4/2019 5:26 AM
631	Future public involvement should emphasize public health& safety over industry profits. The public knows the Task Force is stacked. Disband & name a new Task Force that fairly represents Larimer County residents over industry.	8/4/2019 4:35 AM
632	Continued public meeting and requests for information. Thanks.	8/4/2019 4:09 AM
633	Have a board less biased toward ONG extraction	8/4/2019 4:07 AM
634	After attending one of the meetings with the new advisory board, I feel it has been stacked with industry affiliated people that will have the interest of their company ahead of the people of Larimer County. This is no way for a democratic government to work. This sets a tone of mistrust with citizens of Larimer County. More transparency in setting any new regulations will be important for the citizens to believe the county is working in the best interests of its citizens.	8/4/2019 3:50 AM
635	Post meetings and events in public places and well ahead of the designated time.	8/4/2019 3:31 AM
636	opportunities for community members to speak out in an open forum to discuss their concerns	8/4/2019 3:15 AM

637	The County should publicize the meetings and conduct public education forums more than they are on this topic. When SB-181 was passed, the public got a seat at the table and the rights of residents to health and safety were included, but I see very little in your process that reflects this. This will not go over well when people realize that the changes the Commissioners adopt have been passed under the radar, due to lack of public engagement. I ought to know since I'm a community educator. The County needs to make this a much more open process	8/4/2019 2:59 AM
638	This industry is empowered not only by our economic model that is unsustainable due to pillaging earth resources but by the values of entitled, spoiled, materialistic consumer culture.	8/4/2019 2:37 AM
639	Listen to community concerns about makeup of the commission.	8/3/2019 10:36 PM
640	I believe a period of public comment at the Oil and Gas Task Force meetings is needed, critically.	8/3/2019 8:18 PM

Email Responses Received from
July 4, 2019 - February 2, 2020

Public Comments

The following is a record of the comments received form Oil and Gas web page starting on July 4, 2019. The comments listed below have been taken directly from the emails received and have not been modified with the exceptions of typographical errors. The Community Development Department does not endorse any of the comments provided, we are merely providing transparency with the information we have received.

July 4, 2019	I am concerned about the ruin of our air quality from Weld County. We continue to get F's from EPA — proven largely to be from Weld County's methane. Can our county make an agreement with Weld regarding air quality?
July 9, 2019	How will the new Oil and Gas Commission use SCIENCE to establish protections for the health, well-being and safety of all Larimer County residents, human and animal alike? A majority of the appointed members of this new task force have ties to the oil and gas industry, so how can we trust them to put our concerns first?
July 9, 2019	I just watched the first meeting of the Larimer Co. O & G Task Force and was SHOCKED at all the oilers on this board. Matt Lafferty seems to think it's great and that is very concerning. The Larimer County Commissioners are opening themselves up for litigation if they are not more careful. Your job is to protect us, not align yourselves with dirty oil & gas. They are directly responsible for our poor air quality and 'F' rating from the American Lung Association. Time to follow the law and heed what SB-181 is telling your to do - Protect the people and environment.
July 9, 2019	It is quite shameful to think that the public officials who say that they represent the people's health, safety and security needs as our County Commissioners could possibly have thought that they'd get this poor excuse for an Oil and Gas Task Force to be created without public outcry. This is beyond shameful and needs to be questioned to see if it represents an illegal act by the commissioners as you have NOT followed the stated agenda of putting the task force together. You had 4 medical Physicians who applied for this task force who were not even interviewed. You selected a much greater than 50% group of members for the task force who are either closely aligned with Oil & Gas Industry or who have vested interests in pleasing the Oil & Gas Industry, or who are doing research with Oil & Gas Industry funds. What's the meaning of this!??? You should be ashamed of your vote for the greater than 50% membership with vested interests for O&G, and you will all be called out for not having acted in the best interests of the health, safety and welfare of your constituents. You have not interviewed people in great numbers with health and medical backgrounds who are NOT aligned with the Oil & Gas Industry. Shame on you.
July 9, 2019	Is this the proper form for leaving public comment for the O&G Task Force? Also, what opportunities will there be for the public to address members of the Task Force directly?
July 10, 2019	I am totally upset that more than half of the appointees to the oil and gas task force are either employed by that industry or have vested interests with the industry. That is equivalent to letting the foxes in the hen house. Contrary to some public officials' belief climate disruption is not a fad it is a fact. Larimer county's air quality got an F from the American Lung Association this year. That is not just from cars it is also from that fact that the harmful gases produced by fracking in Weld county comes

	back over Larimer county at night by prevailing winds. We need a task force that will look out for our health and not the bottom line of oil and gas. We need to move away from fossil fuels not encourage more use. Please rethink your appointments. Thank you
July 10, 2019	<p>I will be paying very close attention this issue for the following reasons:</p> <ol style="list-style-type: none"> 1) The oil lobby seems to be the dominant force on the task force. How did that happen? It is not a good way to insure the trust of your community. 2) There are no "extremists" from the environmental community on the task force, yet there are at least three "extremists" from the oil lobby on the task force. 3) The public should be given more than one opportunity to speak their minds directly to the task force. 4) The oil lobby is not working in the interest of our country, or our communities, because it is exporting record amounts of our oil, gasoline, and diesel, while charging us more at the pump. More exports=higher demand=higher prices for Americans. 5) There are hundreds of orphaned and abandoned wells in Colorado, left behind by bankrupted drillers. Who pays to clean up their mess? Taxpayers do. 6) There are 23,000 wells in Weld County. Each well uses millions of gallons of fresh water during operation. That water is then polluted with chemicals and shot back underground into disposal wells. Where are they getting this water from, and where will they be getting water from Larimer County? Where will disposal wells be located, and how many? How much of our open space and parks is protected? We don't this filthy industry in Larimer County. I hope these questions will be addressed by the task force. 7) According to Colorado State Employment Statistics, the oil lobby employs less than 1% of the workforce statewide. Why do you think they have the loudest voice in the room? 8) That loud voice crows about the "huge" tax revenues the state collects from the oil industry. Why, then, don't we have the best roads and schools in the country? Where's the money?
July 11, 2019	Seems to me the Oil & Gas Commission for Larimer county is heavily weighted toward the industry and developers. This is contrary to the goal of Senate Bill 181. What was the criteria used to select the panel members and who made the final selections?
July 12, 2019	<p>I am very concerned about the makeup of the Oil and Gas Task force. The task force consists of more than half of the members being from the oil and gas industry. This suggests a certain disregard for the recently passed SB181, which makes protecting public health and safety and the environment a priority when considering oil and gas projects.</p> <p>I want to make sure my home, water and family are safe from oil and gas projects in Larimer county. We need to be moving away from oil and gas anyway due to the climate crisis. Please reconfigure the oil and gas task force to consider the safety of citizens of Larimer County in the spirit of SB 181.</p>
July 22, 2019	Hello. I was wondering how the health impacts of oil and gas development will be assessed? It doesn't appear that any physicians or public health experts are on the task force. Since assessing the impact of development on public health is a key component of the 181 legislation this is very concerning. Thanks for your reply!
July 25, 2019	I have often heard reassurances from members of the oil and gas industry that the annoyance factors (noise, truck traffic, smells, lights) associated with drilling are

	<p>short-term and easily mitigated. However, these are not the primary concerns for Coloradans living along the Front Range. The impact on air quality, especially in regard to VOC emissions and ozone, are of far greater import. These emissions have long term negative impacts for a large percentage of the population of Larimer County. In just the last year we have had days when our air quality was worse than that of Mexico City or Beijing. And studies of the ethane markers of Front Range ozone show that at least half of those ozone producing emissions are directly attributable to oil and gas operations.</p> <p>I would like to refer the members of the Oil & Gas Task Force to the following article written by a researcher from Colorado State University. The information is timely, current and relevant to the effort of crafting a draft proposal of Larimer County regulations.</p> <p>Lesley Fleischman Gasping for Breath: An analysis of the health effects from ozone pollution from the oil and gas industry. Clean Air Task Force http://www.catf.us/resources/publications/files/Gasping_for_Breath.pdf</p>
July 26, 2019	<p>I noticed that the question of set-backs has been raised in Task Force discussion. I would like to offer the paper cited below as a resource for making recommendations on this very important matter. The article points out that in general setbacks have been determined by a process of negotiation between the industry and government entities with very little basis in data. The purpose of this review is to provide data from a number of different perspectives: What are adequate setbacks in the case of a blow-out event? What is a safe distance in regard to H2S emissions and VOC's? How should emissions be monitored? And what criteria should be considered for establishing emergency protocols and training first responders?</p> <p>Environmental Health Perspectives, Vol. 124, No. 9 Review Adequacy of Current State Setbacks for Directional High-Volume Hydraulic Fracturing in the Marcellus, Barnett, and Niobrara Shale Plays Marsha Haley , Michael McCawley , Anne C. Epstein , Bob Arrington , and Elizabeth Ferrell Bjerke Published: 1 September 2016 https://doi.org/10.1289/ehp.1510547</p>
August 5, 2019	<p>Regarding oil and gas development along the Front Range: As the VP of a growing Northern Colorado Manufacturing company my largest struggle is finding good employees to work in fabrication and assembly. Frankly I am tired of hearing about how we need oil and gas jobs, this statement may have been true 20 years ago, but today oil and gas hardly employ as many people as the Colorado tech and tourism industries. Today, solid, long term employers like my company are competing with short term employers like oil and gas. I have watched the cycle of some of my best workers leave for the oil fields, get laid off, and come back again too many times. Our Colorado employees are a commodity far more valuable than oil. We need them working in sustainable industries that will be here in a decade. They need stable employment, that's not oil and gas.</p>
August 5, 2019	<p>We need oil and gas jobs for people and the taxes they pay for schools and other things they participate in.</p>
August 5, 2019	<p>Four generations of our family have been in this area, in particular around Loveland and Fort Collins. Family members who have farmed and invested blood, sweat, and tears into this land. Family members who have lakes and ponds around here named</p>

	<p>after them. Family members who were involved with the community as fire chief, accountants, cattle farmers, realtors, and many other occupations. One thing none of our family has done is being employed by oil and gas, this stated so that the extremists cannot default to their usual comment that anyone supporting the industry must be employed by them. O&G is a proven safe industry of hard working families and community members, we cannot afford to kill our economy due to extremist views and emotional unsupported responses from them. Also, and very important, land owners and mineral owners have rights to access their resources. The city and other government are responsible for taking this into account during expansions plans just as they account for water, open space, proximity concerns, and other associated details. This community came together and voted clearly to NOT further restrict this industry, then politicians forced 181 down our throats anyway. Restrict access to this industry and they will move out, taking their safe operations with them and taking our great economy with them. We cannot survive without fossil fuels. Not even the extremists renewable energies and electric cars can exist currently without fossil fuels. Eventually we all hope to be 100% renewable, but we are not there and we better embrace the O&G industry now to get us there.</p>
August 5, 2019	<p>I think that people need to realize the truth and stop following blindly while attacking an entire industry. Someone from earthworks just filmed an extraction location with a flir camera while it's in frack stage, and said that all the stuff you see is VOC's being poured into the air. When it was simply exhaust which I might add has all the local and federal required emission systems. I think people have no idea about the truth on what happens in the industry, and judge hard working people in the sense that they feel we all want these earth to die and people's public health to be at risk. When we live in the same communities and drink the same water. People. Need to get an actual clue. Because what they read is 99% so far off it's ludicrous.</p>
August 5, 2019	<p>I am very much in support of local drilling and as part of 4 generations of Loveland families, it's important to note Colorado is a national leader in energy regulations already. The short time the initial operations are actually on site compared to the benefits are a no brainer. If the land owners have no issues with the equipment on their owned land, it's hard to understand why all the mineral owners (including the city) would not be thanking them for the site use and the benefits they will get for basically doing nothing but finally finding a company who is willing to pay them for mineral rights. These homeowners and the city need to realize if we shut down this opportunity the industry will move on and now our mineral rights are WORTHLESS. Colorado has the most comprehensive and stringent environmental rules in the nation, including rules that require disclosure and ensure the safety and transparency of fracking which has operated safely for over 60 years in Colorado. 43 thousand jobs currently are counting on moving forward, and many more in the future. Oil and gas sites will employ local Loveland families who pay taxes and contribute to this community daily. Everything from our home and rental home values, to the grocery stores, to the car lots, to the daycare centers, and on and on.....have benefited from the local jobs this industry provides. As a state we voted NO on 112 !!! We must respect that vote</p>
August 5, 2019	<p>A temporary Economy booster is NOT more important than Colorado's permanent ECOLOGY. These oil and gas companies and their employees do not care about Colorado. They come here, extract our resources for massive profit and leave the ecology in ruin. Their lack of understanding of the environmental impact of their industry is negligent and dangerous.</p> <p>On top of that they pay their employees to attend our town hall meetings and drown</p>

	<p>out the voices of the Colorado citizens that will be here long after their oil wells dry up and they leave.</p> <p>Proposition 112 was a perfect example of these companies. They spent 31,350,000 lobbying to regulate the distance they can drill for Oil from schools and rivers, meanwhile environmentalists could only raise 1,000,000. They outgunned Colorado by 30 millions dollars, and only won the vote by 5%. Now they are setting up a rig literally on Mead High Schools campus between the school and the baseball fields. Deplorable.</p>
August 5, 2019	<p>Oil and gas had allowed me and my wife opportunities we otherwise would never have had.</p> <p>Creating a good savings Decent vacations Her to work in education that does not pay well Decent cars and not living pay check to paycheck Paying home off faster Stimulating the economy with extra discretionary income</p>
August 6, 2019	<p>I have lived next to a fracking operation for 4 years. My 1 important insight has been the length of the operation. It is one thing to have your life disrupted this way for a couple of months, but the length of these operations has been a nightmare. Often operating 24 hrs. a day no one should be subjected to this for such a long time. 4 years! Please advocate for shorter term of drilling whenever within any residences including rural residents</p>
August 6, 2019	<p>As a 4th generation Colorado native family of Loveland, we support the safe and efficient use of our natural resources. This industries operators and associated businesses have provided income, jobs, increased housing values, and safe resources to our area for longer than many have lived here. The operators big and small have to follow the required regulations and liabilities. Loveland and the front range was built on small business growth and our community providing opportunities to organizations. Thanks to this, we have had family members who were cattle farmers on this very land who went on to retire as long-time government public servants for the Loveland community. The same people who by the way worked with and lived next to previous wells operated under far older technology. This industry has come a long way and deserves credit and the ability to move forward, our community cannot afford to restrict these hard working and safety minded workers and families. We have majority VOTED TWICE NOW NOT TO RESTRICT this industry, regulations and safety standards are being followed, governing entities have an obligation to the voters to allow these permits to move forward. Our schools, roads, parks, housing values, families, jobs, and much more need the income to continue to have a thriving community.</p>
August 6, 2019	<p>According to a study done by the National Academy of Sciences, “fracking is safe, end of discussion. “In an examination of 130 different wells that was funded by the National Science Foundation and Duke University, researchers found “that when properly conducted, no groundwater or aquifer pollution resulted from the practice of fracking itself.” “Proving beyond doubt that fracking itself does not cause gas to seep into the water. “Also according the US Geological Survey, “Fracking is NOT causing most of the induced earthquakes. “These wells will be safe, there is scientific proof, so let’s keep our citizens employed and expand the oil and gas production safely. How can we possibly allow our politicians and extremist out of state groups to manipulate our communities VOTE and change laws against our vote, such as 181!</p>

August 6, 2019	Have grown up in the oil field with my dad. We move every where there was a big oil boom or production facility's being built all over the world! Still work in the oil and gas industry today myself. Love it great money and Benefits to raise a family with. Never seen or heard of anyone getting sick from working or being to close to oil and gas!
August 6, 2019	We need a moratorium on new drilling permits until regulations can be finalized. The city of Berthoud and nearby Adams County both have temporary moratoriums in place for this reason. The task force also seems over represented by O and G interests- let's make sure our health and air quality is valued more than money.
August 7, 2019	Ban fracking. Have strict air, water, safety, and environmental regulations to protect our right to breathe and drink clean water
August 7, 2019	I would be willing to help so that development continues. Oil and Gas plays a large role in the Colorado economy. It is safe and reliable so please moved forward.
August 7, 2019	If the concern for the county and state is truly health and safety, please look at the stats. Our state has grown over a 1,000,000 people in the last 5-yr's, the rig count has dropped almost in half, and our air is about 70% cleaner than it was over 10-years ago. The oil and Gas industry does so much good for their local communities and not to mention the countless jobs and tax revenue it brings in for the state. Please don't ignore the facts and allow these permits and drilling to continue. Thank you for your time!.
August 7, 2019	Working in the Oil and Gas business has allowed me to use my talents to build a small business that employees 9 people with families. Each of these people earns an average wage of \$85k per year. I can also completely provide them and their families with full health insurance. Oil and gas tax dollars have improved the quality of life in our community by allowing us to build better parks, roads, and schools. So many other businesses that are not directly employed by the industry have also benefited. Please don't take away our prosperity.
August 7, 2019	I hope the good that comes from a boost to the economy from oil and gas is not overlooked. Often in public settings, it seems that those that shout the loudest are those that get heard. Employment to Larimer County should be considered.
August 8, 2019	1. What kind of steps are in place or are being considered to assure the taxpayer that will not be responsible for road repairs that stem from oil & gas development? 2. Also wondering about dust mitigation efforts. 3. Is Larimer County going to improve regulations to make sure that erosion control methods are utilized and maintained by companies/ Contractors?
August 8, 2019	IT IS TIME TO STOP HIDING FROM REALITY AND SCIENCE! IT IS TIME TO PUT THE AMERICAN INGENUITY AND FORTITUDE TO WORK ON ENDING DRILLING AND FRACKING! LET'S WORK TOGETHER ON RENEWABLE, SUSTAINABLE AND HEALTHY ENERGY! IT IS THE RIGHT ATTITUDE AND GOALS TO GIVE OUR ENVIRONMENT A CHANCE TO RECOVER. THE PATH ALONG THESE GOALS WILL CREATE GOOD JOBS NOW AND IN THE FUTURE. IT IS TIME TO UNDERSTAND THAT SCIENCE IS NOT SOME KIND OF FAKE NEWS THAT WE CAN IGNORE...NOT SOME KIND OF POLITICAL IDEA.
August 8, 2019	Our family strongly supports more regulations and a ban on fracking. Our environment and health matters! No new rigs period. Colorado needs to lead the way on renewables not destroy our home.
August 8, 2019	Please create stringent protections for the citizens of Larimer County from the emissions generated by oil and gas drilling and fracking. Oil and gas emissions contribute to the Ozone alerts that Larimer County residents have been experiencing

	<p>in just the last couple of weeks, let alone the that few years. To illustrate the problem in a relevant manner for you, here is CDPHE's alert for yesterday:</p> <p>Detailed Air Quality Summary for 08/06/19</p> <p>All data are collected real-time and have not been corrected nor validated.</p> <p>Daily Highs: Area Site Air Quality Max AQI Pollutant Conc. Period Time * (MST) Ft. Collins - Greeley [expand +] FTCW Unhealthy for Sensitive Groups 104 Ozone 72 PPB 8-hour 7 PM</p> <p>Yesterday was not been the only day with ozone alerts in the last two weeks alone. Please write your regulations in a way that will protect people as the focus and not the profits of the Oil and Gas industry.</p>
August 10, 2019	I think current oil and gas regulations are serving us well right now. Further restrictions will damage the oil and gas industry, and I DON'T want that to happen.
August 13, 2019	The Larimer County Commissioners #1 responsibility if to protect and enhance the public health and safety of county residents. Facilitating the expansion of an already highly subsidized, polluting industry borders on dereliction of duty. Do the Commissioners believe industry profits are more important than the health, safety and quality of life of Larimer County citizens? The Task Force should take a good look at the map to see how fracking is supplanting tourism as an economic driver. Tourism serves the entire state and benefits residents. Do the right thing for the citizens of Larimer County, the majority of whom see zero benefits—only loss of quality of life—from the explosion of fracking industry. Larimer is not Weld County. Respect science. See the following article/map on how climate change is affecting Larimer County, no small thanks to the frackers.. Tourists once came to Larimer County to enjoy cooler summer vacations in the natural environment. Those cool, summer vacations are history, as Larimer County experienced a 2.0 rise in temps and has been out of compliance for air quality for decades. https://www.washingtonpost.com/graphics/2019/national/climate-environmen...
August 14, 2019	I fully support the production of Oil and Gas not only in our State but in our county. We have some of the strictest rules and regulations already in place. We need to move forward with drilling to help support our communities.
August 15, 2019	I worked in Weld County for six years, and my job required me to travel throughout the whole county and East as well. I saw well pads next to schools, playgrounds, and on farmland. I read up on fracking and learned about the millions of gallons of clean water used to frack one well, the toxic gases and chemicals used and released, the degradation of our air along the Front Range (American Lung Association giving us an "F" rating on air quality). My boss at the time, who lives in Ault, said she saw the oil and gas developers burning off gas they couldn't immediately sell, and I know there have been numerous toxic spills, accidents, and several deaths associated with fracking. I sometimes feel irritation in my sinuses and throat due to the ozone. I am horrified and scared by the degradation, and I believe the studies about increased rates of cancer and issues with fetal heart defects caused by fracking. I feel grief due to the poorly managed and insufficiently regulated oil and gas development and by the fact that the state has overturned all

	<p>the citizen initiatives to protect neighborhoods, schools, sources of water, and air quality (let alone the beauty of our state). The development has caused me great concern and worry, and I know it is compromising our environment and health. We need to slow this process down dramatically, limit it, and regulate it so the least amount of pollution possible is released.</p>
	<p>We need to put the needs of our children, water, air, wildlife & natural lands before the greed or "need" for fossil fuels.</p>
<p>August 16, 2019</p>	<p>#1: Planning/Zoning: Would it be realistic to incorporate a "framework" of Mr. Jon Turner for initial Planning Approval, not necessarily re-zoning the surface site, but approval being made via a Condition Use Permit? Would this allow for incorporation of existing state and county rules/regulations but also allow for site specific details and public comment incorporation, and also enhance/strengthen County Enforcement and issuing penalties for violations?</p> <p>#2: Air Permit: When is the air permit issued? The COGCC data base does not include the air permit (or may not be readily/easily navigable to find) What levels are required for dust, NOx, SOx, Benzene, hydrocarbons, etc during drilling and production? How are these monitored?</p> <p>#3: Community Relations (Producer): The public voice to the the producer is the Complaint system, which as was presented by the State representative, the system is a "nuisance"; and the State presenter no longer wants this responsibility. From recent experience, the term "nuisance" may have less use if there are much improved community relations requirements and activities. Could this include: accurate information from the producer including site layouts, well layouts, timely responses, action and response correspondence, etc. Could the Use Permit include the condition on volume/quantity of complaints?</p> <p>#4: Frac'ing & Geologic Consequences, Pollution Emissions (noise, light, dust, hydrocarbon): Prior to permit approval, would it be possible to have studies/reports on these conditions, with Public comment? It appears that there is very little research to further understand long term Environmental effects from the Frac'ing fluid chemical composition, and resulting geological impacts after injection of high pressure fluids, extraction of high pressure gas/fluids.</p> <p>#5: Permit Denial: As presented by the State, there is no permit denial process. Would it be possible that if conditions aren't met within a specified time, the permit would be denied?</p> <p>#6: Environmental protection of Livestock (and wildlife): Construction/drilling, and long term production has impacted the livestock (horses) and caused wildlife dissipation (movement outside of their habit). Could buffer zones be incorporated to protect the livestock and wild life?</p> <p>#7: Flaring: Could requirements be included so that all flaring events (both temporary/construction and long term operation) are conducted using an enclosed flare, to minimize bright lights and noise? Additionally, can regulations include control and enforcement on the number of flaring events?</p> <p>#8: Emissions: With MACT, it appears as if Exploration and Production emission reduction technologies are available, not written into permits (including vapor recover at production [tanks] and transport trucks). Similar to USDOT and vehicle emissions, can more conservative emissions be incorporated?</p> <p>#9: Buffer Zones: Could this be revisited to include a buffer zone to property line versus the current regulations to "habitable residence"?</p>
	<p>https://www.ecowatch.com/fracking-boom-methane-climate-change-2639835805...</p>

August 18, 2019	How much does it cost to do a blood test for benzenes and volatile compounds from O&G operations? I hope the county considers asking operators to fund blood tests for citizens who are concerned they are being adversely affected.
August 21, 2019	<p>Colorado law now prioritizes protecting public health safety, and the environment in matters of oil and gas development.</p> <p>Since racking causes many different types of problems in the environment and in the aquifer that the public depends on for drinking water, I am asking Larimer County government to prioritize protecting public health and safety, and the integrity of public lands in accordance with Colorado Senate Bill 181, by suspending all pending applications for extraction.</p>
	<p>At BOCC meeting yesterday, Commissioner Donnelly seemed offended that the Larimer Alliance for Health, Safety & the Environment had not given due credit to the many levels of government that have long worked hard to improve our air quality.</p> <p>I feel it very important to point out that no one is doubting these efforts, but instead trying to guard them. . .</p> <p>Commissioner Donnelly seems unaware that for what little movement all these efforts may have won (we're still flunking national ozone standards for public health), increasing oil and gas drilling in Northern Colorado without insisting that the industry take responsibility to clear the air will absolutely ruin any small advancement on behalf of any other contributing factor.</p> <p>The overwhelming amount of poison in the air is from industry — not cars, not lawnmowers, not lack of rules for how individuals navigate in their communities. And industry is in a far better position to do something about it. The tax base it provides is proven not dependable, and not worth ruining public health.</p> <p>Do we want to fix our pollution problem? Or pretend that recycling and other consumer habits stand even a chance at wiggling the ozone meter?</p>
	<p>I live in rural Larimer County. There is a fracking rig within 2000 feet of my house and a mere 1000 feet of some of my neighbors. I occasionally note a strong "chemical smell" when I am outside and I have even driven into town, parked my car and left the windows open for it to air out. (I park in a garage at home and the odors permeate). The chemicals in the air are nasty. We also have some noise pollution since they run generators all night. (the vertical drilling was completed over a year ago). I wish our country could survive without oil and natural gas but currently I know this is not feasible. Until we have 100% renewable energy, please keep Larimer County residents healthy by enforcing setbacks of at least 2500 feet. Thank you.</p>
August 23, 2019	<p>According to Colorado State employment statistics, less than 1% of Colorado jobs are created by the oil and gas industry. In 2014, at the peak of the fracking boom, there were over 100,000 wells in CO. Americans were paying \$4/gallon at the pump for fuel, while we were swimming in oil. Where was all our oil going? It was being exported as gasoline and diesel in order to keep the price high. At the time, there was a ban on US crude oil exports, not on gasoline and diesel exports.</p> <p>In 2015, when the US oil industry ran out of storage space for the oversupply of oil, the market crashed. Oil prices dropped from \$100/barrel to about \$30/barrel, gasoline and diesel prices dropped from \$4/gallon to about \$1.59/gallon. Good news for American consumers, bad news for the US drillers. Half of them went bankrupt,</p>

	<p>and abandoned their wells. That is why Colorado now has over 50,000 orphaned, and abandoned, wells. (These stats come from COGCC). The US oil lobby got right to work, and coerced the Republican dominated US Congress to repeal the ban on US crude oil exports. That being done, US oil exports have soared to record levels, while prices at the pump have risen from less than \$2/gallon to about \$2.50/gallon. More exports=more drilling=higher prices for Americans.</p> <p>The point of all of the above is that when all those drillers went bankrupt, drilling activity in CO dropped by at least 50%. What happened to Colorado's economy? Nothing. It didn't blink. The industry's importance to Colorado's economy is greatly exaggerated. We would do fine without them. They have the loudest voice in the room, and leave the biggest environmental footprint of any current industry in CO. With all the spills and explosions, I don't believe any fines were ever imposed on the industry.</p> <p>I would also add the following question. With all the imagined tax revenue that comes from oil and gas, why don't we have the best roads and schools in the country?</p> <p>This industry needs (at least)to be heavily regulated, taxed, and fined when disasters occur. They should also be forced to pay for closing abandoned wells. Taxpayers should not have to pay for any of the mess left behind.</p>
<p>August 27, 2019</p>	<p>Ft. Collins passed a moratorium on oil and gas within city limits some years ago, but the gov. sued to stop it. Now we need to do it. !!!</p>
<p>August 28, 2019</p>	<p>With the passage of major reform legislation earlier this year, Colorado law now prioritizes protecting public health, safety and the environment regarding oil and gas development. At this time the county should block new oil and gas development as the county develops new regulations that meet the goals of the new law. Also, the county needs a balanced task force as currently the task force has a majority of member with direct ties or invested interest in the oil and gas industry.</p>
<p>August 29, 2019</p>	<p>I just spent a couple of days backpacking in in the Comanche Peak Wilderness above 11000 ft. It was absolutely gorgeous but how depressing to see the brown smog when looking to the east. We have to get our air pollution under control and one way is to suspend oil and gas operations in Larimer County.</p>
<p>August 30, 2019</p>	<p>Please no new wells, no fracking, our water and health matters!</p>
	<p>1. What's most important to regulate at the local level when it comes to oil and gas facilities? My response: Land use Setbacks Environment Air quality Operational protocols Other: Financial protection for residents and government: O&G operators/companies should be required to provide current information about their financial condition, proof of financial strength and adequate liability insurance, and disclose records of past financial, operational, or employee-related citations or violations; and required to post financial security bonds of \$100,000 per well to cover future clean-up and capping costs in the event of default, bankruptcy, or other failure to properly clean up, cap, and remediate wells/sites.</p> <p>2. What other input regarding regulations would you like to share with county staff and the Oil and Gas Regulations Task Force?</p>

My response:

State policy and law (SB-181) now clearly prioritizes protection of public health, safety, and environment in matters of oil & gas development. The intent of SB-181 is also to ensure that communities will no longer be endangered and harmed by O&G development, and that O&G emissions must be significantly reduced to improve air quality.

Protection of public health, safety, and environment needs to be based on facts and evidence, and not a political compromise intended to foster oil & gas development as in the past. Substantial scientific evidence, including research conducted in Colorado, indicates that 1,000' setbacks are insufficient to provide protection of public health and safety. Many studies have found that oil and gas development causes negative health impacts at 1000' distances and beyond. Health dangers associated with proximity to oil and gas development include cancer, respiratory illnesses, congenital heart defects, high-risk pregnancies, birth defects, other pre- and post-natal health issues, headaches, nose bleeds, throat irritation, eye burning, shortness of breath, and skin rashes. See Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking
<https://www.psr.org/blog/resource/compendium-of-scientific-medical-and-m...>

Larimer County residents want to breathe clean air; and pollution and bad air quality hurt Larimer County residents and businesses. Oil & gas development including drilling and fracking contribute significantly to toxic air pollution and smog (ground-level ozone) at levels known to cause health damage and environmental impacts. California determined that fracking can have “significant and unavoidable” impacts on air quality, including driving pollutants above levels that violate air quality standards. Scientific evidence (FRAPPE-NCAR and Boulder Reservoir air quality research) indicates this is also true in Colorado. O&G emissions send toxic plumes across local neighborhoods and schools, and damage air quality throughout the Front Range, causing dangerous ozone and giving Larimer County some of the worst AQ in the country. To protect public health and environment including the climate, Larimer County needs to adopt regulations that will rapidly reduce and prevent emissions from oil & gas development; needs to accurately monitor (24/7) and report (in real time) on emissions from oil & gas operations and air quality; and needs to undertake effective and timely enforcement actions for all violations. Monitoring should be paid for by O&G operators. The County must immediately stop allowing unmonitored and unlimited emissions from new wells for 90 days.

The County should also establish credible monitoring of water quality and noise near O&G facilities, require immediate reporting of all spills, and undertake effective and timely enforcement actions for all violations.

The County needs to recognize the urgency and issues related to climate change, and the role of O&G gas development in climate change, which has major economic costs as well as impacts on public health, safety, agriculture, water resources, and environment in Larimer County and elsewhere. Natural gas is a major driver of the climate crisis; methane (fracked gas) leaks into the atmosphere, greatly accelerating climate change; it has contributed one-third of increased methane emissions globally over the past decade. The County needs to adopt stringent regulations that minimize and prevent methane and other greenhouse gas emissions from O&G gas

development; establish credible monitoring of potential methane and other greenhouse gas emissions from O&G gas operations; and undertake effective and timely enforcement actions for all violations.

"All together, findings to date from scientific, medical, and journalistic investigations combine to demonstrate that fracking poses significant threats to air, water, health, public safety, climate stability, seismic stability, community cohesion, and long-term economic vitality. Emerging data from a rapidly expanding body of evidence continue to reveal a plethora of recurring problems and harms that cannot be sufficiently averted through regulatory frameworks. There is no evidence that fracking can operate without threatening public health directly or without imperiling climate stability upon which public health depends."

from the Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking

<https://www.psr.org/blog/resource/compendium-of-scientific-medical-and-m...>

3. What suggestions do you have for future community engagement on this topic?
My response:

The County should provide reasonable and timely information to the public, and establish effective mechanisms for public participation.

The County made highly consequential decisions about appointments to the Oil & Gas Regulations Task Force with bare minimum legal (24-hour) public notice, which was not reasonable, contrary to the County's promise of transparency and public participation in prior public statements, and a violation of public trust.

The appointment of a Task Force in which two-thirds of the members work for the O&G industry, are service providers to the industry, or land developers with interests in profiting from O&G development, with no opportunity for public participation or comment in the appointment process, was a violation of public trust. The violation carries forward now in the composition of the Task Force.

It appears that Task Force members have substantial conflicts of interest that compromise the Task Force, but the County has provided no public disclosure of conflicts of interest by Task Force members. Where is public participation in the matter of conflicts of interest by Task Force members?

The claim by Larimer County that Task Force members who are O&G industry employees and service also qualify as environmentalists who can represent environmental interests is incredulous. As noted above, Larimer County appointed Task Force members without real transparency or public participation, which suggest that Larimer County did not want to risk public comment on its incredulous appointments.

At this point, the shortcomings in transparency and public participation by Larimer County in appointing the Task Force, and allowing no public participation to date in the Task Force proceedings, have made a farce of the Task Force and its eventual recommendations. A belated effort at "public engagement" can do little to remedy the mistakes already made by the County, or to rectify the violation of public trust.

	<p>The County should start over with a Task Force that is appointed with transparency and public participation, and which proceeds with transparency and public participation. For the County to try to add "public engagement" at this point in the badly flawed current Task Force process is tantamount to putting lipstick on a pig</p>
	<p>Until the new COGCC has settled on new guidelines (inn a few weeks or months), please do not approve any Oil & Gas permits (for either new or re-activating dormant wells) anywhere near where people live, work, or play or any water used for crops, wildlife, or drinking water for human habitation. There are more than 60,000 active wells in Colorado now (per Fracktracker.org). That's enough to keep them in business for now, don't you think? Please do not approve any permits until safety and health are a bigger part of the decision-making</p>
	<p>Why is the questionnaire on Survey Monkey no longer available? It was announced to be live until 8/31. I write on 8/30 well before midnight and it is "not available." Why is everything so rushed??</p>
	<p>The Oil & Gas (O&G) or O&G Task Force Survey was supposed to stay open for public comments until the end of the month but was closed earlier today. Why?</p> <p>Please open it back up for at least (2) more days like it was supposed to be unless public comment isn't really appreciated. If the county truly wants to be fair and transparent it will do this plus sufficiently advertise the survey's reopening so the public has time to respond to the reopening of the survey and make additional comments.</p>
August 31, 2019	<p>I have had a chance to submit my opinion through your website, but I am disappointed something that was supposed to remain open through to the end of the month has been shut down early. Data can and should continue to be gathered as it was publicized until the end of the month. . . weekend be damned!</p>
	<p>The Oil & Gas (O&G) or O&G Task Force Survey was supposed to stay open for public comments until the end of the month, today, but it was closed yesterday. Why? Many working people only have time on weekends for this sort of thing, and if the end of the month falls on a county day off, the time should be extended, not shortened from the announced "end of month."</p> <p>Please open the public comment period back up for at least (2) more days like it was supposed to be, unless public comment isn't really welcome and appreciated. If the county truly wants to be fair and transparent it will do this, plus sufficiently advertise the survey's reopening so the public has time to respond to the reopening of the survey and make additional comments. Indeed, the time should be extended a reasonable amount to account for this, most likely by 1 week</p>
	<p>I planned to comment on The Oil & Gas (O&G) Task Force Survey today however the survey was closed. I believe this survey was supposed to stay open for public comments until the end of the month but was closed earlier today. Why?</p> <p>I urge the Task Force to open the survey back up for at least (2) more days, like it was supposed to be. Public comment is important for our democracy and if the county truly wants to be fair and transparent it will do this plus sufficiently advertise</p>

	the survey's reopening so the public has time to respond to the reopening of the survey and make additional comments. Thank you for considering my point of view.
	It has come to my attention that this oil and gas task force is a sham. Stacked with oil and gas insiders. If so, that disgusts me! How dare you go about governing our county this way, that is the worst of Washington, DC, and the worst of government. Colorado is better than that! And it better stay that way. I see all the signs of corruption in my two Republican County Commissioners. Larimer County is not Weld County, we have far better options to continue having a great economy, and more importantly a great place to live. And we are doing very well. We're smart enough and moral enough to have pulled that off without destroying our natural environment. And we are smart enough to know how important our natural environment is to every aspect of a high quality of life. If you two proven wrong Republican Commissioners, proven wrong by all the success Ft. Collins has had with very progressive policies, again successful policies, fail to learn from what works and why, you are in the wrong jobs. Are you corrupted? Are you part of the worst of human nature and the worst of capitalism? Are you oblivious to the fact that we know how to do much better? Are you horrible people whose greed outweighs their moral fiber? Will you harm everyone else for a few people's selfish gain? If you cannot prove otherwise with your actions, then the answer is yes, you are corrupted, and therefore a disgrace to all things intelligent, honorable, moral and advanced. If you are honorable, or Christian in any way, you will not continue with a stacked task force, and you will not ignore the will of we the people. Almost every comment I've seen has been against what you are doing. If you ignore all that, especially without coming clean and facing us like honorable men, then we know you are not. We will know that the worst of the proven dead wrong across the board, and now proven immoral GOP has poisoned Larimer County. No real Coloradoan accepts that. Neither does God, if that matters to you. Don't gain the world and lose your souls. Don't put your faith in material things while destroying our beautiful part of the world, that would make you real scumbags
	Please protect our beautiful state and environment. Our air and water are a precious resource that we can not abuse! Lives matter, health matter much more than temporary jobs. WATER is all we have, we can not drink oil. Be responsible and protect our us from abuse and DO the RIGHT thing.
September 4, 2019	Please ensure that oil & gas regulations in our county fulfill the spirit & letter of the recent law, Senate bill 19-181, that says Colorado must protect the health, safety & environment of the state & its citizens. Thank you for considering my views on this matter
September 8, 2019	I would like the county to take into account what is happening to air quality. Methane gas is known to be more than 80 times worse than CO2 for global warming. We know that we are trashing our environment with the use of carbon base fuels. Government needs to step up and protect the small farm owners, homeowner from a fracking well that is polluting the air we breathe, the ground and the water we drink. Do something.. Stand up to the oil and gas companies. Stand up
September 11, 2019	To reference some facts here with a comment. Emissions dropping by 20% in Weld County since 2006 even with a 100K population increase, data from the Bureau of Labor Statistics shows that oil and natural gas extraction is the seventh SAFEST industry in this nation, Colorado implementing precedent-setting regulations from baseline groundwater testing and monitoring to air regulations targeting methane leak detection, flow lines tested with a common passage rate of 99.65 percent, with zero having an issue of reportable size, and an in depth study done by the National

	<p>Academy of Sciences states, “fracking is safe, end of discussion.” In an examination of 130 different wells that was funded by the National Science Foundation and Duke University, researchers found “that when properly conducted, no groundwater or aquifer pollution resulted from the practice of fracking itself.” “Proving beyond doubt that fracking itself does not cause gas to seep into the water. These operations have been safely used in Colorado for well over 50 years. Families, schools, parks, our economy, housing values, city and state revenue, and staying out of the unemployment lines are counting on us safely utilizing these available resources. Twice our citizens have voted NOT to further restrict the O&G industry only to now have 181 forced upon us by those who think they don't need to listen to their constituents.</p>
<p>September 15, 2019</p>	<p>Hello - I attended the recent open house and of all the exhibits, what jumped out were the clear priorities of the public based on the input received to date. The county/task force's priorities listed were starkly different, so clearly a re-alignment needs to take place.</p> <p>Particularly for concerns over the air and water quality, and otherwise environmental impacts being rated above all else. As county residents, we are expecting that the task force will be architecting its priorities and next steps based on the public's input and these specific items. With those in mind, it is disappointing and irresponsible that the county has not paused permits until plans are in place to prioritize health, environment and safety per what SB-181 allows for municipalities' control levers.</p> <p>Please adjust and do what constituents are clearly asking for.</p>
<p>September 29, 2019</p>	<p>Fracking's costs outweigh its benefits</p> <p>Some policymakers along with oil and gas companies are quick to cite the benefits of fracking and exaggerate the number of jobs that it produces. In one multistate peer-reviewed study, the industry claimed 31 jobs were created per well, but in reality, the number was four. A large percentage of jobs go to out-of-state workers, and more and more oil and gas drilling jobs are being replaced with automation.</p> <p>But there is much more to the whole story. There are also significant social and environmental costs. With a large influx of workers in fracking communities, there are documented increases in crime rates including: assault, drug abuse, drunk driving, and crimes against women. Social costs also include the straining of police, emergency services, and municipal workers to handle road damage, noise, air pollution and odor complaints. And, the loss of affordable housing may result in more homelessness in our city and county.</p> <p>Fear of hazardous materials used in and generated by fracking reduces property values, which means fewer tax dollars for the county. Profits flow to corporations and people living elsewhere, as well as out-of-state workers who leave for the next job, while residents get stuck with lasting environmental degradation, health concerns, and unsightly structures.</p> <p>In 2017, CSU researchers Loomis and Haefele attempted to quantify the costs of and benefits of fracking. They found that the long term costs outweighed benefits. These costs were dominated by health damage from air pollution, greenhouse gas emissions, wildlife habitat fragmentation, and pollution of private drinking water wells. They also found that fracking damaged community aesthetics, diminished</p>

	<p>open spaces, and caused seismic activity. It also hurts livestock.</p> <p>Between 2001 and 2013, CSU researchers Opsal and Shelley report that Colorado citizens filed 2,444 complaints about the oil and gas industry with the state about harmful effects that were considered "extensive and complex," not short-lived or isolated.</p> <p>Now is the time for us to assess the costs versus the benefits.</p>
October 15, 2019	<p>My family moved to Loveland 18 years ago when my husband retired and our eldest daughter started attending CSU. The sky was blue in 2002 as we traveled West leaving Long Island in our Dodge Minivan looking forward to starting a new chapter in all our lives in the big wild west. For the first 8 years we thought we had reached paradise but then the fracking industry started closing in and the white haze appeared on/off over the Rocky Mountains out our window. Today, it is a rare occasion to have a clear blue sky. My granddaughter (age 5) has chronic asthma, even our dog (Zoey) was diagnosed with asthma, my husband has burning eye syndrome and the rest of us are healthy but uncertain what the future will bring. We mistakenly thought we were headed to a cleaner, healthier environment leaving NY ... we were wrong. If it weren't for the fact that my granddaughter has to stay within 50 miles of her divorced parents, we all, once again, would be headed to a less polluted state (if that exists in today's environment). PLEASE NO MORE FRACKING ACTIVITY AROUND AND IN CITIES ... our water, our air, our children's health and future depend on the decisions you make going forward! Support clean air, clean water and a clean planet. Thank you</p>
October 18, 2019	<p>As vice president of Foothills Audubon Club, I feel the protection of birds is not being addressed in the new land use regulations for oil and gas development. To protect Larimer County's raptors, I am asking the Larimer Oil and Gas Task Force to include CPW's guidelines on raptor buffer zones in the new regulations. These guidelines can be found at https://cpw.state.co.us/Documents/WildlifeSpecies/LivingWithWildlife/RaptorBufferGuidelines2008.pdf It is recommended that there be a 1/2 mile buffer from bald eagle, golden eagle, osprey, ferruginous hawk, red tailed hawk, Swainson's hawk, peregrine falcon, prairie falcon and northern goshawk nests and winter roosts to best protect them from oil and gas activity. It should be stipulated that roads, pipelines, well pads, etc would not be allowed in these buffer zones. Burrowing owls, listed as a threatened species in Colorado, should have no human encroachment within 150 feet of the nest site from March 15 through October 31, including no eradication of prairie dogs and their burrows in the nest area during this time.</p> <p>These protections will necessitate wildlife surveys, which should be conducted by qualified independent consultants approved by the County, using accepted and approved protocols, and costs paid by the applicant.</p> <p>I thank you for your consideration of my comment.</p>
October 21, 2019	<p>I am a resident of Larimer County. We do not own the mineral rights to our property. I know that owners of the mineral rights have the legal authority to extract oil and gas from beneath my property. It seems that since the invention of horizontal drilling it would not be necessary to drill close to homes and yet as I drive around the</p>

	<p>county, I often see drilling rigs very near residences. I have read that people living near drilling rigs have more health issues than other people. I am hoping that this issue can be resolved in a way that protects residence from illness as the owners of mineral rights are allowed to access their oil and gas.</p>
October 21, 2019	<p>After studying this issue extensively, I am of the firm belief that fracking and Oil and Gas wells should not be anywhere near where people gather or live. I know we still need oil and gas, but the wells are too close, thus creating an environmental concern. We do not know enough about the long term effects of the particulates in the air on our bodies and what we know of the short term effects is enough to deny further permits of any more wells at this point. We also know that water leaching into the water table from fracking is dangerous.</p> <p>I equate this with the opioid and tobacco crisis where it was easiest to ignore the growing body of evidence that these are bad for us. Let's NOT make the same mistakes with Oil and Gas wells. Our air quality on the front range is already considered serious. Please hold off on granting any new permits.</p>
October 24, 2019	<p>I am concerned that fracking is too close to schools and homes. I would like that the county limits how close they can build to homes and schools. I do realize this industry is needed and important to Colorado however they do need to be regulated. thank you</p>
November 3, 2019	<p>Suggestions and additions for Oil and Gas Rules for Larimer County, Colorado</p> <p>The "Larimer County's proposed oil and gas regulations specify that drilling sites . . . state that the county can inspect operations and revoke permits if operators are not following the rules." How would the County know if drilling site operators were in violation of the rules without unscheduled inspection of sites? In the past there has not been enough inspectors or money for inspection of sites. I suggest that the oil and gas companies be charged a large enough sum of money to cover the cost of inspections to protect people and the environment. Perhaps they will invest in safe operations for the benefit of their workers and the public. These commitments need to be put in writing so there are not loopholes. Otherwise there really are no protections for our communities.</p> <p>"The draft rules specify that 'to the extent practicable' they will require operators to demonstrate how they will 'mitigate any negative impacts.' " It will likely not be practicable to mitigate all negative impacts, but it would be necessary to protect the health of people and health of the environment regardless of the cost to the oil and gas industry to do so. It is important to write into the regulations requirements for mitigating negative impacts of oil and gas operations. The Larimer County Commissioners should not grant a special-review permit to the oil and gas operators unless they agree to abide by the established regulations.</p> <p>The Larimer County Commissioners should vote on whether to grant or deny a special-review permit before approval from the Colorado Oil and Gas Conservation Commission is asked for their approval. These issues directly affect the health and environment of people in our communities and</p>

	<p>community voices should be heard first.</p> <p>The words, “unless the application demonstrates that it is economically infeasible or impractical,” should not be included in any of the rules. This is a loophole big enough to allow the oil and gas industry to get around preserving the health and environment. The money spent by the public to counter damage caused by the oil and gas industry puts the burden of economic infeasibility on the public. Leak and spill detection by the public or oil and gas operators should be reported to the Larimer County Sheriff and the Larimer County Commissioners immediately. In addition to the 23 chemicals that may not be used within the oil and gas operations, any chemical used in oil and gas operations should show that it does not harm humans or the environment. The oil and gas operators should pay for any human and environmental damages caused by earthquakes related to oil and gas operations.</p>
November 6, 2019	<p>There needs a to be section concerning setbacks for bird nests; particularly raptors. These nests are very important for the sustainability of birds on the northern front range and should always be protected, not just when there are nestlings. Human activity can cause the birds to abandon the nest and they are running out of places to go.</p>
November 9, 2019	<p>As an observation, it truly appears the oil and gas industry is being singled out in reference to impacts of the equipment and process. As an example, I currently reside less than 1000 ft from a large housing development. I cannot even hear my tablet at full volume during morning coffee due to the construction noise including tractor trailers, nail guns, reverse beepers, saws, and ground moving equipment. Also, we have very high levels of Radon in our area, most of our homes have mitigation systems, and surely the construction of pipelines, foundations, and roads is releasing a great deal of this into the air for the workers and us close proximity home owners. Yet, I understand this will be temporary (probably two years, approximately 1.5 years more then it takes an oil and gas rig to finish) and I understand its for the good of the community, jobs, housing values, and the growth of our area. I also understand regulations and monitoring are in place to insure any side affects are indeed at most, temporary. SO, it seems very confusing why politicians and extremists are clearly targeting one of our most valuable industries in this area, but not any of the comparable industries causing more disruption and side effects than oil and gas does. If we are going to take on what we feel are issues such as these, its only fair to the entire community to put our efforts towards all industries that are possibly contributing to these perceived issues. Otherwise its an obvious bias against one industry.</p>
November 11, 2019	<p>These regulations mimic the generalized language that is appropriate for statewide regulations, but entirely inappropriate for local jurisdictions. Our unique situation-- including the fact that we are slowly being poisoned (see urls below) by air pollution which can be traced directly to oil and gas operations--requires that we develop our</p>

	own customized regulations. We don't have to "reinvent the wheel," but we do need to improve it and make it so it will run smoothly on our own terrain.
November 13, 2019	<p>Allowing any drilling (fracking) at all in Larimer County flies in the face of the mountain of recent evidence that suggests otherwise. Specifically:</p> <ol style="list-style-type: none"> 1. Our air quality is rated F by the EPA. People in Larimer County are suffering due to air contamination caused equally by motor vehicles and existing wells in other places. This will get worse if we pollute our own county. Please remember that we receive tax dollars based on Larimer County's being a destination for its natural beauty and recreational opportunities. 2. Renewable energy sources are now cheaper and more sustainable than fracking for fossil fuels. This economic reason alone should motivate people who don't appear to yet understand the many real health and safety dangers of fracking. 3. Fracking ruins neighborhoods through noise, excessive vibration, road wear and tear, heavy truck traffic, and chemical exposure, all of which lower property values. People who live near fracking have rights too. 4. It is a myth that fracking creates long-term jobs and economic prosperity. Drillers migrate from one fracking operation to the next. Due to today's glut of oil, abandoned wells left by companies that go bankrupt can cost taxpayers millions to cap. 5. There is no way to safely store the millions of gallons of water that fracking requires. It is permanently contaminated and removed from the hydrologic cycle that normally returns water to us. <p>Please consider the science, the facts, and the will of the people who have carefully studied this issue in developing new regulations that look to the future health and safety of our residents.</p>
November 14, 2019	Please do not allow fracking to continue. There is no need for it now that renewable energy is more economically feasible. Our health and natural resources need to be preserved and protected.
	As a person who believes in a higher power, it is sad to see what fracking is doing to this beautiful planet and every living thing that depends on it to survive. Please do not let any more fracking take place within Larimer County.
November 18, 2019	<p>I would like to share with you my comments on the first draft of Larimer County's Oil and Gas Regulations. Suffice it to say that I am appalled by the vague, inaccurate, and wishy-washy language in the first draft.</p> <p>I have attached citations from those regulations which are in direct conflict with Senate Bill 19-181. Cost effectiveness and technical feasibility will be removed from the Colorado Oil and Gas Conservation Commission (COGCC) rules, according to SB 19-181, and therefore the local regulations cannot be less stringent.</p> <p>The use of "strongly encouraged" is equally unacceptable, and it is clear those words should be replaced by "required." And how will the applicant demonstrate "financial capacity" (Section U, page seven), and how much liability environmental liability insurance is required (Section U, page seven). Under 17.8, C, what is meant by "financial security"?</p> <p>Again, and again, the language is vague and very favorable to the industry. That is not what SB 19-181 is all about. So please make sure that these regulations are strengthened to conform with State law and, to the best of your abilities, to conform to anticipated COGCC regulations.</p>
November 19, 2019	Asking the fox to guard the hen house is never a good idea. Nonetheless, the draft of regulations for oil and gas development in Larimer County depends

	<p>very heavily on this flawed approach.</p> <ul style="list-style-type: none"> -In every instance where the words “minimize” or “reasonable” are used, the county is essentially ceding its authority to set specific standards. - The same can be said for the euphemistic phrase “unless the application demonstrates that it is economically infeasible or impractical...” This is a free pass that allows operators to increase profits at the expense of public welfare. -The semi-annual leak detection and repair inspections cited in section 17.3 C1 should be conducted by an outside party not the industry. -There is no mention in section 17.3 F of who will be measuring decibel levels to assure that the given standards are respected. Is this a continuing monitoring system? It should be. - Section 17.4 is almost entirely predicated on the assumption that a nicely phrased request will be met with ready compliance. This seems naïve. -And in section 17.5 there is a long list of plans that are to be provided to the county but the required content of those plans is not specified. <p>The oil and gas industry has been granted free rein through legal codes that allow them to call the shots. We are only beginning to experience the long term costs of these policies. I would encourage the county to fulfill its mission to protect and promote “the health, safety, and general welfare of the residents and environment of the County.” We need regulations that clearly and with exact, enforceable language put public welfare over private gain.</p>
<p>November 20, 2019</p>	<p>Basic human rights named by the United Nations and many other local and global organizations include the right to a secure life, clean air, clean water, housing, sanitation; property, & mental and physical health. We know our County Commissioners have an obligation and a commitment to a safe, clean, and sustainable Larimer County. Hydraulic fracturing is a clear violation basic human rights.</p> <p>It poses risks to air quality including chemical processes used in drilling and wastewater, dangerous emissions of methane and other gases. Thousands of truck trips expose people to diesel particulates as well as to noise and light pollution. Benzene and other air pollutants put people at risk for adverse health effects including asthma, lung cancer, diabetes, stroke, and heart attacks. Vulnerable populations – infants, children, the elderly, cancer survivors, & those with compromised immune systems – are at greatest risk. A recent multi-year scientific CO study found elevated risk of nosebleeds, headaches, and dizziness among people living between 500 and 2,000 feet of drilling sites.</p> <p>Each fracking operation uses huge amounts of trucked in fresh water. Much of this “used” water will remain underground, permanently removed from the earth’s hydrologic cycle. Wastewater, or “flowback,” contains hydrocarbons, heavy metals, radioactive materials, & a range of dangerous additives. As hazardous waste it requires special handling, but there is no clear agreement about how best to dispose of it. Removing millions of gallons of fresh water each year from future use, particularly given the increasing scarcity of fresh water makes no sense.</p> <p>We often talk about the property rights of individuals to the minerals on or under their</p>

	<p>land. But what about the rights of people whose enjoyment of their property has been compromised by fracking equipment, noise, and/or contaminants? Loss of property value due to smells, sounds, contamination, or natural beauty robs these people of their property values. It is stealing from them.</p> <p>Hydraulic fracturing is one of the most controversial industrial practices of our time. Were Larimer County to stop fracking now, we would be in good company along with the states of Florida, Vermont, New York, Maryland, Washington, Oregon, and Hawaii; parts of California and Minnesota; the provinces of Quebec, Prince Edward Island, Newfoundland, Labrador, and New Brunswick in Canada; Tasmania in Australia, and entire countries such as France, Wales, Northern Ireland, Bulgaria, Luxembourg, Uruguay, and Germany. As more research appears, the list grows. Larimer County can still be on the right side of history on this issue. There is still time if we act now to stop fracking and concentrate on renewable energy resources instead. Thank you.</p>
<p>November 21, 2019</p>	<p>1. recent article in journal "Environmental Science and Technology" 3/2018, authored by John Adgate and Lisa McKenzie of Colorado School of Public Health, states that even at 500' from well being fracked, the exposure to cancer causing benzene is 8 times EPA safe limit. No mention in draft for Larimer County land use rules for O&G harvesting on considerations for increasing setbacks from homes.</p> <p>2. With the level of expertise in health concerns with hydraulic fracturing at Colorado School of Public Health, why no representatives on public committee working on rules?</p> <p>3. No mention either of adverse effects of continuing to burn fossil fuels on climate change and the serious effects on public health. Harvesting and burning fossil fuels adds CO2, ozone, particulates which accelerates climate change and adds to air pollution. Children, the unborn, the elderly and those with heart and lung disease are most at risk. Every year 71,000 Americans die prematurely due to air pollution. We can't solve it in Larimer County, but we can those to be part of the solution. Thank you.</p>
<p>November 26, 2019</p>	<p>I would like to share with you my comments on the first draft of Larimer County's Oil and Gas Regulations. Suffice it to say that I am appalled by the vague, inaccurate, and wishy-washy language in the first draft.</p> <p>I have attached citations from those regulations which are in direct conflict with Senate Bill 19-181. Cost effectiveness and technical feasibility will be removed from the Colorado Oil and Gas Conservation Commission (COGCC) rules, according to SB 19-181, and therefore the local regulations cannot be less stringent.</p> <p>The use of "strongly encouraged" is equally unacceptable, and it is clear those words should be replaced by "required." And how will the applicant demonstrate "financial capacity" (Section U, page seven), and how much liability environmental liability insurance is required (Section U, page seven). Under 17.8, C, what is meant by "financial security"?</p> <p>Again, and again, the language is vague and very favorable to the industry. That is not what SB 19-181 is all about. So please make sure that these regulations are strengthened to conform with State law and, to the best of your abilities, to conform to anticipated COGCC regulations.</p> <p>Thank you for considering my comments.</p> <p>Inaccurate and vague parts of Draft (Version 1) Larimer County Oil and Gas Regulations</p> <p>Page one</p>

17.1 – Intent and Purpose

A. fourth line

“To the extent practicable...”

B, item 5

“...indemnification and insurance as appropriate... “

17.2 - Required Process and Permits

B, ii

“Reasonable and necessary mitigation steps...”

Page two

17.3 – Standards Required for all Oil and Gas Facilities

B. Air Quality

Item 3. “... unless the application demonstrates that it is economically infeasible or impractical to utilize such a system.”

Item 4. End section of first line - same as above (B3)

Item 5. End section of first line – same as above (B3)

Page three

C. Leak Detection and Repair

Item 3. “...unless technically or operationally infeasible.”

Page four

F. Noise

Item 5 “... for a reasonable period of time for completion of the project.”

G. Odors

Item 2 “including drilling, fracking, and flowback to the extent reasonably possible.”

Item 4 “... we encourage the Operator to communicate the schedule/timing ...”

Page five

K. Recycle, Reuse and disposal of Fluids

Item 1 “...shall be recycled, unless technically infeasible.”

	<p>Page seven</p> <p>T. Temporary Water Lines</p> <p>Item 1 “Temporary waterlines shall be used, unless technically infeasible.”</p> <p>17.4 Guidelines for Oil and Gas Developments</p> <p>A. “Applications for oil and gas facilities are strongly encouraged to incorporate the following guidelines (best management practices).”</p> <p>A.1. “Applicants are encouraged to:”</p> <p>Page eight</p> <p>A. 2. “Applicants are encouraged to:”</p>
	<p>I just read the document submitted by LOGIC and the Larimer Alliance regarding the county draft for oil and gas regulations. LOGIC and the Larimer Alliance have provided an excellent resource! I fully support the suggestions they make and would encourage the county to give serious consideration to amending the current county draft accordingly. We want regulations that will set a gold standard for local regulation of oil and gas extraction, including precise language, comprehensive oversight, up to date use of technology, and full compliance with the mission mandate to protect public health, safety, the environment and wildlife.</p>
	<p>In reviewing the draft land use regulations for oil and gas operations, I find the vague language or "unless clauses" troubling in that they create loopholes that industry lawyers would easily take advantage of. I believe that you as our elected officials are charged with protecting the individuals of the county over and above the profit seeking oil and gas industry. The will of the people should be your highest consideration. I currently have in my possession a lease for a pending permit for a proposed well that would drill 12 fracking wells through residential neighborhoods within the city of Loveland. I have not nor will I sign that lease but, if permitted, I will have no say. I am left powerless and can only hope that the county will adopt rules and regs that will give me the protection that I and many others in the county are asking for. Please strengthen the language in the rules and regs to give us those protections.</p>
	<p>SB 19-181 is a just in time godsend to Larimer County. To save our air, water, and recreational lands I am asking County Commissioners to do the following:</p> <p>First- Stop all drilling and permitting until the COGCC has completed its rule making and Larimer County has reviewed it and made its own modifications.</p> <p>Second- Create an education campaign to inform residents of the actual social and health costs of fracking</p> <p>Third- Install air monitoring equipment that is sensitive enough to accurately measure dangerous chemicals in the air, and coordinate with Boulder, Longmont, and other front range cities that already have this equipment to assess how wind patterns carry pollution that endangers us all.</p> <p>Fourth- Insist on a half-mile or more setback for oil and gas drilling which is in line with newer studies on harm reduction</p> <p>Fifth- Clean up the language in the draft standards that allows for ambiguity in</p>

	<p>interpretation. Let's be clear about our current and future health and safety. Thank you.</p>
<p>November 28, 2019</p>	<p>I have been to two of the commission meetings for developing regulations. My belief is that the Commission should not be developing new oil and gas regulations until the state has concluded their regulations which will affect every county by developing a baseline. It seems to me it would prudent to not proceed further with Larimer County specific regulations until the State minimums are known.</p>
	<p>I have followed the process of oil and gas development in Northern Colorado since 2012. Over these 8 years, I've observed a consistent lack of regard for the concerns of local communities and the override of residents' rights to health and safety, due to an unholy alliance between the State of Colorado and the oil and gas industry. That is, until the passage of SB 181.</p> <p>SB 181 is a first step to bring justice and sanity to the oil and gas exploitation of the Northern Front Range and give Colorado citizens a say in the invasive oil and gas development that is permanently altering our land, our health, and even our futures. However, we and our elected officials must make the promise of this bill a reality.</p> <p>Many people I personally know have left the area because they could not stomach the idea of being poisoned here. After having seen what has happened since 2012, I believe it is a matter of time before we are identified as a "sacrifice zone". Imagine what that would do to our property values and the tax base of Front Range cities.</p> <p>My perception of the proposed county regulations, as drafted, is that (unfortunately) they are business as usual. First and foremost, adequate setback rules for well pads is something that has been needed to be addressed for a long time, but the public health data is slow to come.</p> <p>Now, after a lengthy study, we know that the CDPHE has found significant health impacts up to 2000 feet from wells. Setbacks have been a contentious point between industry interests and the public since I first learned that setbacks were not based on health, but probably on the distance a firetruck would need to put out a fire a drill site. I've even personally heard an industry head say they would not live near a well pad. So, 2000 feet should be a new standard.</p> <p>Where regulations could be spelled out specifically in the Larimer County regulations, the ambiguous, euphemistic language of the draft regulations allow loop holes that favor fossil fuel industry. They will override our health and safety. We've seen them do it many times. In this draft, there seems to little expression of prioritizing public health. I think acknowledgement of the new priorities for health, safety, and environment needs to be reflected in the regulations.</p> <p>I would like to add a few other points regarding the County's process in relation to the public: I first observed this orientation to the regulations at the first public open house when I saw the priorities list for developing the regulations. There was a complete mismatch between the public priorities and the task force's priorities, reflecting what I have perceived as an imbalance of special oil and gas related interests on the task force vs. public health interests.</p> <p>I would like to point out that that air quality as at the top of the list for public, whereas it was 5th or 6th on the list for the task force. That open house occurred before</p>

	<p>Larimer County moved into EPA'S designation as "Serious" in our non-attainment of air quality for ozone. This needs to be acknowledged and changed. Much of the poor air is coming from Weld County, but we must do what we can to protect our health. We do need transparency about air quality and water issues. People who live in this area must be better informed, so that they can choose to leave if they need to for their health.</p> <p>Please do better by following the suggestions submitted on behalf of Larimer Alliance and the League for Oil and Gas Impacted Citizens. Thank you.</p>
	<p>My main concern is about public health and safety from oil and gas operations. I was struck by difference of priorities between the public feedback and Oil and Gas Task force regarding air quality concerns at the last public forum. I request air quality be continuously monitored utilizing INSTAAR equipment currently being utilized in Boulder County. We need to know what types of emissions and their concentrations in our air, especially known carcinogens such as benzene, etc.</p> <p>I suggest you provide a glossary of terms. For example, definitions of: flaring, venting, setbacks, reverse setbacks, flow lines, gathering lines, etc. in order to inform us laypeople.</p> <p>I cannot find any mention of setbacks or reverse setbacks in the draft document. I recommend at least a 2000-foot setback and/or reverse setback from homes, hospitals, schools, flood plains and water sources.</p> <p>Need standards /reporting on amount and types of emissions released during "venting" incidents scheduled or unscheduled again the public should be notified in "real time" through there website and/or other emergency notification systems.</p> <p>Please eliminate loophole phases including but not limited to: "economic feasibility", "to the maximum extent practicable", "where feasible", "encouraged to".</p> <p>Below are my comments on specific sections in the draft document: 17.3.D As soon as the county authorities have been notified of the spill and/or emergency event, the public should be notified in "real time" through there website and/or other emergency notification systems. 17.3.N.d Suggest the coordinates of the abandoned wells be mapped and available to the public through the Larimer County website and the Planning and Zoning department to inform developers and real estate owners of the abandoned well. 17.4.A.1 Change the final words in the paragraph to "...required to" rather than "...encouraged to" Thank you.</p>
<p>November 29, 2019</p>	<p>I am writing you to express my utmost concern that the full intent and purpose of SB-181 be duly upheld in Larimer County. As you must be aware, the Front Range has been out of ozone compliance since 2008; I have friends who suffer from asthma, and cannot go outside on bad air days. That is one, but one of the foremost, concerns: the poisoning of our air.</p> <p>This needs to be addressed by continuous air quality monitoring, such as has been constructed at the Boulder Reservoir, and now in Longmont, using technology built and maintained by INSTAAR; see http://instaar.colorado.edu/ar/boulder_reservoir.html</p>

	<p>The data from such monitors needs to be compiled and maintained with the expectation that it can be used in filing lawsuits against Weld County for poisoning the environment -- which must surely happen some day, and to which Larimer County should be a party.</p> <p>For the remaining concerns I have, I urge you consider the recommendations made by the Larimer Alliance, which can be found at: https://sites.google.com/view/larimeralliance/resources/logic-la-comments</p> <p>As a concerned citizen, I have attended several BOCC meetings, and the public meetings by this Task Force; but I have not yet seen the kind of commitment and urgency that this situation demands. Climate change is not waiting: we need to be taking action on moving our economy to clean energy ASAP.</p>
November 30, 2019	<p>Mandatory/Verified Capping of all flow lines prior to allowing wellhead abandonment. Chain of Ownership responsibility for wellheads (Financial responsibility by all owners for any damages due to wellhead or flowline failures) Mandatory mapping and public knowledge of all wellheads and all associated flowlines especially those within city areas of influence Currently abandoned wellheads inventoried, capped, and all associated flowlines removed.</p>
	<p>I think Version 1 of the Oil and Gas regulations is specious. While on the surface the proposed rules seem okay, in reality they lack any real teeth. I want to see some hard and fast regulations. I want to see a setback of at least 2,000 feet. We know that oil and gas operations can cause human harm when conducted within this range. Furthermore, first responders will not be able to help anyone within a blast radius of 2,000 feet if a major accident were to occur. Stop pandering to O & G interests and start standing up for the citizens of this community. It should not be about what is "economically infeasible or impractical" (section 17.3.B.3). Oil and gas operators must pay the cost, WHATEVER THE COST MAY BE, to ensure they are not ruining our air and water quality! Sorry, that is the cost of doing business in this county. If they don't like it, then they can leave. I would really like to see a moratorium on any new permitting until the COGCC has finalized its rule-making process so that we know what the new "floor" will be in terms of regulations. Furthermore, I want Larimer County to start using continuous air monitoring similar to what is being used at the Boulder Reservoir and in Longmont.</p>
	<p>My Brother owned a home in Berthoud that had an operational oil well practically in his back yard. It was less than 300 feet from the back door of his house. They lived there for a decade, and raised two children with no health issues or any other problems. The media has overblown safety issues to get political attention. Air quality is a non-issue. The people of Colorado have already voted on this subject. No need for a hand full of politicians to dictate what the industry does in our county.</p>
	<p>Larimer County's Draft Oil and Gas regulations are inconsistent with the intent and substance of SB19-181. SB19-181 rightly, and for the first time in Colorado history, prioritizes the protection of public health, safety, welfare, the environment, and wildlife resources over oil and gas development. It explicitly declines to predicate such protections upon considerations of economic feasibility, which in any case are hopelessly inadequate to consider the complex, full range of short and long-term economic impacts on public health, safety, welfare, the environment, and wildlife of continued and new oil and gas development.</p>

On a detailed level:

Section 17.1 [intent and purpose] should therefore eliminate loopholes such as “ to the maximum extent practicable” and “where feasible.”

Section 17.2 [Required Process and Permits] should include a public notice process supportive of informed, broad-based public participation, a requirement for public disclosure of all documentation required by the County, and should specify these required documents, which should include an independent analysis of health, safety, environmental, and financial risks.

Section 17.3 [Standards for all Oil and Gas Facilities] must include:

- A minimum required 2,000 foot setback from residences and other buildings used by people, as well as water bodies and other environmentally sensitive areas;
 - Absolute compliance with and enforcement of all regulatory monitoring, emissions, and worker protection standards, best management practices, baseline air quality monitoring, and mandatory annual inspections for Leak Detection, Repair, Pressure testing, and any needed inspections, at all wells.
 - Mandatory disclosure of leaks and spills to regulatory agencies, the public, and relevant researchers. Operations must be shut down until leaks are proven stopped, and spills cleaned up.
 - Noise levels in non-industrially zoned sites must not exceed ambient noise by > 10 decibels in the day, and 3 decibels at night.
 - A hotline must be established and staffed for public health and safety, nuisance, or environmental complaints.
 - A post-closure Plan including compliance with State closure, plugging, abandonment, and marking requirements, plus State and County-mandated post-closure environmental monitoring.
 - A surface and groundwater quality protection plan.
 - GIS Mapping System, made available to the public, of:
 - o All flow lines, transfer lines, and gathering lines, that are submitted to COGCC and relevant local agencies and development corporations, and made readily available to the public at large, and those in the market for buying a home or other building. New lines should have tracer wires to ensure detection.
 - o All current and future UIC wells used or potentially intended for disposal of contaminated return flow wastewater, with overlays for current and potential fracking well locations.
 - o Detailed hydrogeological and seismic maps.
 - A plan identifying anticipated volume of water to be used, and where that water is expected to be obtained.
 - A waste disposal plan that accounts for temporary storage and ultimate disposal of all waste, including flow-back waste, with anticipated volumes.
 - A plan identifying trucking routes and anticipated number of trucks needed for both received water for fracking, and removal of flowback waste.
 - Integration of mapping from existing fracking or proposed fracking operations with existing and proposed water and sewer pipelines, aquifer and surface water body locations, and existing and proposed developments.
 - Prohibition of flaring except during emergencies or other unusual conditions;
 - Best available technologies and best management practices;
- Section 17.4 [Guidelines for Oil and Gas Development]
- There should be a moratorium on approving additional fracking permits until SB19-181 regulations are in place.
 - There should be a moratorium on additional wells until cumulative impacts from

existing and potential new fracking operations are analyzed w.r.t. impacts including:

- o Meeting local and Regional AQ standards;
- o Meeting local and State GHG reduction and renewable, non-carbon energy transition goals;
- o Potential and existing seismic impacts and threatened resources including dams and pipelines;
- o Impacts on surface and groundwater resources;
- o Impacts on open lands and wildlife resources;
- o Comprehensive epidemiology studies of known endpoints or markers of human and animal health impacts in response to known carcinogens and toxins like benzene, commonly released from fracking operations;
- o Comprehensive socioeconomic impacts of continued O&G development in comparison to non-carbon energy sources, including impacts on: housing values and quality of life, the slowing of CO's and Fort Collins' clean energy transition and GHG reduction goals, and the socioeconomic, environmental and public health impacts of exacerbating global warming. These impacts in Colorado and Larimer County have been felt already in an increase in frequency and intensity of wild-fires, destruction of mountain forests by insects not checked by sufficiently cold winters, air and water quality impacts, depletion and earlier melting of snow packs which decreases summer water supplies, increasing frequency and intensity of heat-waves, droughts, and average temperatures, and accompanying increases in ozone, contributing to increases in respiratory disease and tropical diseases like West Nile. On a macro level, there are clearly many public health, safety, economic and environmental reasons for, at a minimum, putting a moratorium on new fracking wells in Colorado until such a time as the regulations for SB19-181 are written and implemented. New York State banned fracking in 2015 on the basis of 6 years of synthesis and analysis of health studies and environmental research by leading researchers and institutions. The NY State Commissioner of Health concluded that, after reviewing the evidence, he wouldn't let his own family live near a fracking site, and could not in good conscience impose this on other families. Physicians for Social Responsibility's 2019 Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking, reviewed over 1500 reports of credibly demonstrated impacts on public health, water contamination, air pollution, inherent engineering problems, as well as abandoned wells, pipeline leaks, seismic risks, and fracking's large contribution to accelerating climate change since 2006 due to methane.

Although the immediate health and safety risks of fracking are now inescapably obvious and well documented, and a flashpoint among concerned and affected citizens throughout Colorado and the nation, global warming somehow remains an 800-pound gorilla in many rooms, somehow invisible to many seemingly oblivious elected officials/decision-makers. How is it possible to ignore that anthropogenic climate change is a real phenomenon, already being experienced by millions, including in Colorado, and if not mitigated it will cause terrible suffering and destruction all over the world this century and beyond? How is it possible to ignore the evidence all around us, and the science that shows we have only about 10 years to change course drastically?

An October 8, 2018 report from the Intergovernmental Panel on Climate Change tells us the consensus of 97% of climate scientists: we can still avert some of the most catastrophic consequences of climate change by limiting global average warming to 1.5 degrees C, but ONLY IF we abandon coal and other fossil fuels in

	<p>the next decade or two at most. The Emissions Gap Report of November 26, 2019, states that globally, WE MUST NOW REDUCE OUR GHG EMISSIONS 7.6% EVERY YEAR FOR THE NEXT DECADE starting in 2020, or lose humanity’s chance to limit global average temperature increase to 1.5C. (GHGs have been increasing globally every year for the past decade on average by 1.5%.) Nationally, and for Colorado to do our part, we need to reduce GHG pollution about 25% by 2025, 50% by 2030, and to net zero by 2050.</p> <p>Methane from fracking plays an additional bad actor role in increasing GHG emissions. Researchers from Cornell (Howarth et al, August, 2019) have shown that the sharp increase in methane in the past decade has a “chemical footprint” from shale gas fracking, 89% of which has occurred in North America. Methane traps heat 84X better than CO2 over a 20-year period, and scientists estimate it is responsible for about 25% of current global warming. WE CANNOT LIMIT GLOBAL WARMING TO A LESS DIRE 1.5 degrees C IF WE KEEP BURNING FOSSIL FUELS, AND INCREASING METHANE RELEASES FROM FRACKING. WE THEREFORE CANNOT PERMIT NEW FRACKING WELLS ON THE ONE HAND, WHILE TRYING TO REDUCE GHG EMISSIONS AND ADDRESS CLIMATE CHANGE ON THE OTHER HAND. TO DO SO IS TO MAKE A MOCKERY OF PROTECTING HUMAN HEALTH AND THE ENVIRONMENT FROM THE WORST THREAT TO BOTH.</p>
	<p>Our air quality is bad and it’s deteriorating as O&G extraction increases to our easy. Potential groundwater contamination, and the costs of closing down drilling sites which will be borne by us taxpayers, are also serious concerns.</p> <p>Are we doing all we can to protect Loveland’s residents — despite the failed vote on a moratorium on permits and despite the COGCC?</p>
	<p>My biggest concern about the First Draft of the proposed revision to Land Use Code for oil and gas projects is the lack of a rigid setback requirement for siting near residential, high occupancy buildings, wetlands, and critical ecosystems. The atmospheric effects closer than 2000 feet are marked, especially for anyone with any kind of compromised respiratory or endocrine system. Even folks with relatively normal functions find effects from nausea to nosebleeds in the event of any venting close at hand. The other concern is a safety zone in the event of any catastrophic failure and/or blast in an oil and gas development.</p> <p>I have a secondary concern that the language of desired operating or equipment requirements is too vague. The COGCC in revising the statewide regulations avoids compromising language around technical and economic feasibility. Larimer County's regulations should be at least as tight as anything the state ends up formulating, if not more so. . .</p>
<p>December 4, 2019</p>	<p>I have read the Larimer Alliance and LOGIC response and recommendations to Larimer County’s proposed Oil and Gas regulations. I agree with the response and recommendations put forth by the Larimer Alliance and LOGIC. I have a couple of issues I will highlight although I agree with all the recommendations. I think all of the recommendations are important for the health and safety of our citizens and for a sustainable environment and wildlife protection.</p> <p>We need a strong process for accountability that keeps the burden of Oil and Gas impacts from costing taxpayers. We also need to hold the oil and gas industry accountable to the health and safety of Larimer County residents not to the industry’s profits.</p> <p>As part of the health and safety of residents, we need to regulate the industry to a high standard for air quality. Southern Larimer County is in Colorado’s 8-hour ozone</p>

	<p>non-attainment area. Oil and Gas development is a top contributor of greenhouse gas emissions. Citizens deserve local regulatory measures that prioritize their public health. Additionally stringent air quality monitoring programs need to be put in place. Thank you.</p>
December 12, 2019	<p>I strongly encourage the county to take full advantage of Colorado's new SB-181 to implement oil and gas regulations that place public and environmental health as THE TOP PRIORITY. Short term revenue from out-of-state oil producers is not worth the long term cost in public health, pollution or environmental degradation that Larimer county will be dealing with for decades after the wells are no longer pumping. Ideally, this would mean a complete moratorium of current drilling. The next best option would be a moratorium on the approval of new permits. Failing either of those, the next best thing is to stringent regulations that place health and environmental protection at the forefront of the new drilling regulations. Such protections should include, at minimum, a 2000 ft set-back from homes and high occupancy buildings, thorough environmental impact analysis before any drilling occurs, full public disclosure of the planned impacts of drilling, and the ability of the county to deny or revoke permits due to excessive negative impacts. Additionally, I agree with the Larimer Alliance's suggestion to "eliminate loophole language such as "to the maximum extent practicable" and "where feasible", and replace the term "encourage" with "require" compliance with regulations." As a young, concerned citizen of Larimer county who will have to live with the consequences of drilling for the next several decades, please take my comments into due consideration.</p>
December 13, 2019	<p>I support the strictest regulation possible of the fossil fuel industry. I am extremely concerned about the environmental implications of further oil/gas development, as well implications for public health and safety. I do not support any new or current drilling operations. I love our natural lands as they are. I love living here. As a concerned citizen under the age of 30, I speak as someone who has to live with the consequences of pollution in the air/water, and general environmental degradation for decades to come. Oil and gas developers are notorious for downplaying the risks of their industry. Please don't be lulled by false promises. I respectfully request full public disclosure of all proposed drilling operations, as well as retained authority on the part of the county to revoke any drilling permit in the face of excessive negative impact. Of course, full environmental impact assessment is essential prior to approval in the first place. Please look to the Larimer Alliance for guidance in your decision-making, especially their suggestion to "eliminate loophole language such as 'to the maximum extent practicable' and 'where feasible', and replace the term 'encourage' with 'require' regarding compliance with regulations." Putting this kind of pressure on the energy industry is critical to drive human innovation towards sustainable alternatives. We need to send a clear message as consumers and as a community.</p>
December 14, 2019	<p>Please take full advantage of Colorado's new SB-181 to implement oil and gas regulations that place public and environmental health as THE TOP PRIORITY</p> <p>"I support the strictest regulation possible of the fossil fuel industry. I do not support any new or current drilling operations. I love living here, and as an outdoor enthusiast, a clean environment is important. Oil and gas developers are notorious for downplaying the risks and tout the economic benefits of jobs. Unfortunately, many of the jobs are temporary while the consequences of pollution are permanent I respectfully request full public disclosure of all proposed drilling operations, as well as retained authority on the part of the county to revoke any drilling permit in the face of excessive negative impact. Of course, full environmental impact assessment</p>

	<p>is essential prior to approval in the first place. Please don't be lulled by illusory promises. look to the Larimer Alliance for guidance in your decision-making, especially their suggestion to "eliminate loophole language such as 'to the maximum extent practicable' and 'where feasible', and replace the term 'encourage' with 'require' regarding compliance with regulations." I love living in norther Colorado. Please look to sustainable alternative. We need to protect our community and way of life.</p>
December 18, 2020	<p>Upon reading version 1 draft of the new oil and gas regulations, I feel that there are many good ideas included. However, wildlife is only mentioned along with the environment and residents as a general category to be protected.</p> <p>I am asking the task force to include CPW's guidelines on raptor buffer zones in the new regulations. These guidelines can be found at https://cpw.state.co.us/Documents/WildlifeSpecies/LivingWithWildlife/Rap... It is recommended that these guidelines should be a 1/2 mile buffer from bald eagle, golden eagle, osprey, ferruginous hawk, red-tailed hawk, Swainson's hawk, peregrine falcon, prairie falcon and northern goshawk nests and roosts to best protect them from oil and gas activity. It should be stipulated that roads, pipelines, well pads, etc. would not be allowed in these buffer zones. Burrowing owls, which are listed as a threatened species in Colorado, should have no encroachment within 150' of the nest site from March 15 thru October 31, including no eradication of prairie dogs and their burrows in the nest area during this time.</p> <p>These protections will necessitate wildlife surveys which should be conducted by qualified independent wildlife consultants approved by the county using accepted protocols, and costs paid for by the applicant.</p> <p>Thank you for your consideration,</p>
December 29, 2019	<p>Larimer County should implement a moratorium on oil and gas extraction on account of the climate emergency that threatens humanity.</p>
January 2, 2020	<p>What are the Larimer county specific requirements for the installation and abandonment of temporary and permanent monitoring wells?</p>
January 10, 2020	<p>Regarding Version 2 draft regulations, section B, paragraph .3 a) and 3b). I believe the setback for both residential properties and high occupancy bldgs needs to be a non-negotiable minimum of 2,500 feet. Also paragraph 4.0 is too vague and will cause anxst and confusion.</p> <p>While I know how important oil & gas is to Colorado, the citizens that call this state home should be protected from all contaminants and dangers that can come from oil and gas development and drilling. That consideration should be priority over any other regulations decided upon.</p>
	<p>Please do not propose regulations that are unreasonable or unnecessary. Unreasonable regulation unfairly penalize the oil and natural gas industry, and could deprive property owners of their rights.</p> <p>SB 181 gives local governments significant new authority, but Colorado legislators limited this new authority to surface issues. Please do not attempt override the state's authority and regulate complicated subsurface issues beyond their legal and practical capabilities.</p> <p>SB 181 requires that regulations be "necessary and reasonable." Several proposed changes in the draft regulations, including arbitrary setback increases, vague approval criteria, and unclear public input and waiver processes push well beyond</p>

	<p>the intent of the law and qualify as both unnecessary and unreasonable.</p> <p>Colorado’s oil and natural gas industry supports at least 5,000 oil and natural gas workers in Northern Colorado alone with an economic output in the county of nearly \$1.5 billion annually.</p> <p>Less than one year ago Colorado residents voted against Proposition 112, which was an extreme measure intended on shutting down industry. It lost by an 18-point margin (41-59) with voters strongly opposed. Any new rules Larimer County considers should be thoughtful, balanced, and respect the voters’ will.</p> <p>Over regulation of the O&G industry will also have a significant chilling effect on the home building industry.</p> <p>Adopt regulations to reflect the realities of responsible oil and natural gas development.</p>
	<p>I find it unsettling that Larimer County planners and the so-called experts advising them are not familiar with the science relating to fracking, and the harm it does to air and water, and thus to all life in our county. With close-by world-class research institutions such as INSTARR, NCAR, and CSU available to us, is it too much to ask that the people in charge of our future health and welfare communicate with the internationally recognized scientists doing current air and water quality research at these institutions? It seems to me that a major flaw in the proposed oil and gas regulations so far is a lack of knowledge or interest in procuring CONTINUOUS state-of-the-art air monitoring equipment so that we can actually understand the extent of our air quality problem, which, by the way, was recently downgraded to an F for "serious non-compliance" by the EPA. Why would we want to add more toxic fumes to our air when what wafts over to Larimer County from Weld is already affecting the ability of vulnerable residents to breathe? Relying on the O&G industry to measure and report its own toxic pollution indicators is a classic case of "the fox guarding the hen house." We can and we must do better. Fossil fuels are not the answer as renewable energy sources get cheaper and more accepted. Banks know this as many have stopped lending money to frackers who never have and never will make a profit. They will just leave a toxic mess for taxpayers to clean up. It's time to wake up, smell the dirty air, and have the will to do something about it.</p>
<p>January 11, 2020</p>	<p>I was in attendance at the joint work session with the Planning Commission last Wednesday January 10th at the Larimer County Courthouse. I agree with your concern about monitoring of the pollutants. As you surmised, there is a profound paucity of data on pollution from these sites. This is very concerning based on the numbers of wells.</p> <p>I would think a very important process to project citizens is to increase the monitoring of pollutants.</p> <p>Professor Helmig (CU INSTAAR program) had been operating a continuous measuring site at the Boulder reservoir since 2017. His data can identify VOCs that come from O&G extraction by using isomer “fingerprinting”. The continuous monitoring is, in my opinion, the best method to determine if well sites (potentially many) are exceeding the regulations. He is a link to a</p>

	<p>presentation he did last year at a symposium at CSU: https://vimeo.com/351542843</p> <p>I hope you and the other commissioner agree that, at a minimum, we need to have more robust monitoring of fracking air pollutants, conducted by an unbiased expert. Ronald Reagan's famous statement "Trust but Verify" fits in this situation. I personally don't trust an industry to turn itself in when that will shut down their production and thus their profitability.</p> <p>Please consider regulations for Larimer County O&G permitting include a mechanism to include continuous monitoring for potential pollutants by a neutral source.</p> <p>Thanks for all of your great service to the citizens of Colorado.</p>
January 14, 2020	<p>After seeing the second draft O&G regs it is clear that Larimer County officials are Corrupt and put rich O&G polluters over the health and safety of citizens. They should ALL be fired! FOLLOW THE LOGIC/LARIMER ALLIANCE RECOMMENDATIONS - THEY REPRESENT THE INTERESTS OF CITIZENS/VOTERS !!!</p>
	<p>I want to register my opinion that the second draft of the new regulations regarding oil and gas drilling in our county need further teeth to ensure the health and safety of our residents.</p> <p>In particular, I worry about the safety of our drinking water, and the impacts on children in schools and all of us in our homes from the vibrations from drilling and the potential deterioration of our air quality.</p> <p>Please take the time to create regulations that will actually protect your constituents.</p>
	<p>This task force is a partisan sham. Ignoring the health and welfare of the citizenry of Larimer County is in the interest of only one entity: Oil and Gas.</p>
	<p>I do not have a depth on knowledge on this subject except that I am greatly concerned about many issues surrounding oil and gas development in our community and beyond. Commenting on a general basis, the need to protect health and safety, and in my case, the overall environment including wildlife is imperative.</p> <p>I urge very strong and well enforced regulations.</p>
	<p>Others with more technical expertise and experience than I possess have already commented on the many specific weaknesses in the current draft. See for example, the LOGIC/Larimer Alliance for health, safety and the environment comments. What is striking to me, overall, is the apparent disregard for the key reason for sb181 - prioritization of health, safety and the environment vs focus on O&G development. Weak measures that were proposed by you to regulate (even as permits continue to move ahead before rules are set) are NOT acceptable. Do your jobs for us taxpayers, wildlife and the environment and protect our collective future- not your continued half steps that clearly support ongoing O&G profit taking that hurts us, our children, wildlife and environment. You should be ashamed. This is not a serious effort.</p>
	<p>The second draft of Oil and Gas regulations for Larimer County is woefully flawed without stricter human health and safety regulations. I would urge everyone on the commission to read the investigative fracking report/book on the towns of Amity and</p>

	<p>Prosperity (Pennsylvania). The fracking wastes and pollution have rendered homes and large swaths of private historic homesteads uninhabitable. The second draft is woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as per SB-181.</p> <p>The draft does not assert right to deny, reject, nor condition any and all permit applications in order to prioritize protection. This is a continuation of the County's weak and outdated Waste and Takings legal stand.</p> <p>This draft has no comprehensive, transparent public process – throughout the regulations: no resident alerts, etc.</p> <p>Insufficient setback from homes. Every well-pad in Larimer County would subject nearby homes to carcinogenic emissions. By the way, the CDPHE study found significant short term health effects out to 2000 feet from well-pads; It is WRONG to say it didn't find long term effects as the study wasn't looking for long term effects. I urge the commission to require stricter standards. People must not sacrifice their health, clean air and water to benefit the welfare of the oil and gas industry. The economic gains produced by oil and gas are largely overrated and absolutely unsustainable. We must act now for the sake of the planet</p>
	<p>The second draft of the Oil and Gas Facilities Land Use Code regulations must be changed to delete a phrase in 17.1, A, Intent – “protects private property rights”. Likewise, a phrase in 17.1, C, 2, should be deleted – “...without unreasonably discriminating against oil and gas developers and operators, or mineral interests.” The language in both of these sections is clearly in conflict with the language in SB 19-181 and should be removed.</p> <p>Another section that needs amending is 17.6 - Fees and Security for Reclamation. There are no specifics proposed for the Security for Reclamation, such as a meaningful bond requirement. In addition, while Section 17.1, C. 8 says “confirm the financial, indemnification and insurance capacities of the oil and gas developer/ operator”, and Section 17.3, V, 2 -states that the applicant “must carry customary and usual environmental liability insurance”, there should be specific information on all of these requirements.</p>
	<p>I beg you to make the oil and gas regulations as strong as it is possible to do. The air in Northern Colorado is visibly terrible, and cutting back fracking is the only way to clear our air. Sadly, the worsening air quality is motivating me to look into leaving Colorado. We really need forward thinking leadership on this issue. We need tough regulations! The health of the citizens of Larimer County should be more important than the oil companies subsidized bottom line. Thank you</p>
	<p>I know you people want to rush ahead and implement your own version of O&G regulations before SB 19-181 is fully implemented, which will make it much harder for you. I, however, believe you owe the residents of Larimer County and surrounding areas the best regulations and the safest environment possible. It looks like you want Larimer County to turn into Weld--why would anyone want that? Get in your cars and drive the few miles over here and take a look. Don't make this only about money in your coffers and maybe in your pockets. Keep the people you work for in mind as you do your jobs.</p>
	<p>I write to express my fervent support for the objections raised by the Larimer Alliance for Health, Safety and the Environment to your craven pandering to the oil and gas lobby! Once again, you have scorned all public concern for the health and safety of your public in order to curry favor with the wealth and pressure of the fossil fuel industry! Let me be clear: You are POISONING your constituents, including the</p>

	<p>children of Bella Romero Elementary School, rather than confront powerful vested industrial interests. This would be shockingly indecent conduct in a pristine environment, but when the world is ON FIRE due to fossil-fuel-induced climate change, your conduct is nothing less than OBSCENE! Craven, spineless toadying at the expense of public health: SHAME ON YOU!!!!!!1</p>
	<p>Please wait to permit any wells until all the final rules have been published with regard to SB 181. I am sure that the same oil and gas will be in the same place for many months to come. They can stay in the ground quite safely until a later date. Don't let sob stories from drillers influence you. They would much prefer to get as much done before any more regulations are in place. Thanks for listening.</p>
	<p>The 2nd draft of O&G refs is insufficient and out of tolerance. This shall not pass until it is drafted to protect safety and environment and residents in its verbiage AND by appropriate setbacks. This is a rush job. Decisions need to be made thoughtfully with all legal ramifications and health considerations brought forth clearly in July. You are forcing this on nonconsenting constituents that have spoken loudly.</p>
	<p>Please place an immediate moratorium on any new hydraulic fracturing in Larimer County!</p>
	<p>My first question is why wells would be allowed in an area zoned residential or residential mixed use in the first place? Wells are industrial and should only be allowed in areas zoned for industry. Second-shy hasn't a moratorium been enacted until all the rules at both the County and State level are in place?</p> <p>My comments on the proposed regulations: Health, Safety, Welfare, Environment, and Wildlife should be the first priorities mentioned as per SB-181. Need to assert the right to deny, reject, or condition any and all permit applications in order to prioritize protection. Need a comprehensive, transparent public process – throughout the regulations: resident alerts, neighborhood meetings, etc. Delete language about "economically infeasible or practical" to allow developers to get around regulations Insufficient setback from homes, high occupancy buildings. Set backs should be set to 2000 feet. Also setbacks are insufficient from bodies of water-at least 1000 ft. No oil facilities should be allowed at all in the 100 yr flood plain-end of discussion. Baseline air samples prior to drilling should be required similar to water quality and noise requirements. No need for an administrative review process--neighbors have the right to be notified regarding changes. Would like the Larimer County Dept of Health and Environment to have robust air monitoring equipment.</p>
	<p>SB 19-181, requires the AQCD to establish continuous air monitoring of large emitting oil and gas facilities such as mega well pads, processing plants, compressor stations, and refineries, so as to ensure public health is being protected. It also requires continual monitoring of smaller facilities for the same reasons. Implementation of these laws must be integrated. Not only will integration save the public money, but it will speed implementation which thus far has been maddeningly slow to imperceptible.</p>

	<p>SB19-096 and HB19-1261 give primary regulatory power over GHGs to the Air Quality Control Commission (AQCC). While we appreciate the AQCC moving toward regulating hydrofluorocarbons (HFCs), we note that those two acts do not limit the AQCC’s scope to regulating HFCs. In fact, we would argue that SB 19-181 requires it, for HFCs are a public health and environmental issue. According to the 2019 draft Colorado GHG Inventory Report, HFCs and other fluorinated gases will constitute less than 1% of all GHG emissions this year. In order to start making real progress toward the 2025 goal, the State needs to move aggressively to limit the emissions of all significant GHGs, specifically carbon dioxide, methane, and nitrous oxide, in addition to fluorinated gases.</p> <p>Addressing methane emissions is particularly important, given the potency of that greenhouse gas and the large amounts of it emitted during the process of extracting fracked oil and gas. Other gasses such as benzene, a carcinogen, are ubiquitous hitchhikers, and from a public health perspective, must be strictly monitored. Additionally, there is a large body of research suggesting that estimates by the EPA of the amount of methane that leaks from those wells are too low. We believe that when the State develops its next GHG Inventory Report, this research should be taken into account, and better methods of estimating methane emissions – such as continuous ground-based monitoring at oil and gas wells and spot measurements from nearby homes, businesses, and recreation areas.</p>
	<p>Oil and Gas removal in residential areas should always be aware of what is happening in residential areas. The fumes are irritating to the respiratory track of all but even worse for people with illnesses like asthma. The vibrations from the drilling make all of our photos and art work slide. I never would have moved here if I would have known what happens.</p>
	<p>Regarding the 2nd draft of O&G Regulations: They are woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as per SB-181. Did not assert right to deny, reject, nor condition any and all permit applications in order to prioritize protection. This is a continuation of the County’s weak and outdated Waste and Takings legal stand. No comprehensive, transparent public process – throughout the regulations: no resident alerts, etc. Insufficient setback from homes. Every well-pad in Larimer County would subject nearby homes to carcinogenic emissions, as well as the side effects of nose bleeds, vomiting, etc. IN THEIR OWN HOMES. By the way, the CDPHE study found significant short term health effects out to 2000 feet from well-pads; It is WRONG to say it didn’t find long term effects as the study wasn’t looking for long term effects.</p>
	<p>After reading and hearing about the purported negative health effects of oil and gas drilling, development, and production, are there any studies of the groups of workers in the industry regarding their health? After eliminating smokers from such studies are there statistical negative health results from groups such as geologists, drillers, roughnecks, and service workers, people who spend much of their professional careers exposed to drilling and production operations? What about inhabitants in communities near or surrounding refineries: like Sinclair, Wyoming or south side of Cheyenne on north and south side of I-80, east of I-25?</p>
	<p>I am writing regarding the second draft of the proposed oil and gas regulations. These rules are woefully inadequate, and have not been written with the full intent of SB-181, which was to empower local communities to protect themselves from the</p>

	<p>harmful effects of the oil and gas industry. Would you please wake up and smell the coffee? Climate change is barreling down upon us, and you act as if business-as-usual is fine! We are going to rue the day very soon that we have not acted faster to mitigate the effects of climate change; and the regulations should be written with that in mind. We MUST begin to shift the energy basis of economy or else bear the consequences.</p> <p>Please strengthen these rules to lessen the harms of the oil and gas industry that are harming us all.</p>
January 15, 2020	<p>I am concerned that the new recommendations in regard to Oil and Gas development in Larimer County do not give enough protection to the health and well being of the citizens of Larimer County. The setbacks discussed are insufficient to protect homeowners.</p> <p>I feel the issue is being rushed as the state is still finalizing its recommendations in regard to legislation SB 181.</p> <p>In attending several of the task force meetings I came away with a feeling it was stacked with oil and gas developers and their employees and not enough experts on health and air quality.</p> <p>I think action should be delayed until further data on the impact on health and well being of our citizens is properly addressed. It also does not give enough power to those impacted to have a say in future developments.</p> <p>All oil and gas drilling permits should be frozen until a plan is finalized.</p>
	<p>While the version 2 draft of O&G regulations contain improvements, like the setback increases, there is one area that has not been addressed.</p> <p>SB 19-181 requires COGCC to protect wildlife and biological resources. Also, HB 07-1298, passed in 2007, states: "It is declared to be in the public interest to... PLAN AND MANAGE OIL AND GAS OPERATIONS IN A MANNER THAT BALANCES DEVELOPMENT WITH WILDLIFE CONSERVATION IN RECOGNITION OF THE STATE'S OBLIGATION TO PROTECT WILDLIFE RESOURCES AND THE HUNTING, FISHING, AND RECREATION TRADITIONS THEY SUPPORT, WHICH ARE AN IMPORTANT PART OF COLORADO'S ECONOMY AND CULTURE. " WILDLIFE ROURCES" MEANS FISH, WILDLIFE, AND THEIR AQUATIC AND TERRESTIAL HABITATS.</p> <p>I am aware that wildlife rulemaking will be done by COGCC later in 2020 or early 2021. However, I feel that Larimer County should show leadership on this issue and submit rules addressing wildlife protection. One easy way to accomplish this would be to address raptor protection by adopting CPW's buffers for raptors which can be found at https://cpw.state.co.us/Documents/Wildlife/LivingWithWildlifeSpecies/Rap...</p> <p>I appreciate your work and hope you will consider my suggestion.</p>
	<p>What is the rationale for not waiting until SB 19-181 rulemaking is completed? I think it would be most helpful to our community if the task force would address this question head on and offer up and explanation.</p>
	<p>The Second Draft of the Larimer County Oil and Gas Task Force proposed regulations is weak. Protection of health, safety , environment is not prioritized. There is insufficient setback from homes. I live in rural Larimer County and I see</p>

	<p>wells 1000 feet from homes with babies and children living in them. I feel the actual long term consequences of this kind of exposure is being ignored by the county. It is embarrassing that a county with such a high standard of living and with such a high concentration of adults with college and graduate degrees is even considering passing this draft. The exemptions, the statements that end in phrases such as "when able" or other loopholes is not acceptable. There is no public process allowing for alerts, etc.</p> <p>Please, consider what people want. We know we are dependent on oil and natural gas but we also know that this dependency is harming all of us. Please consider strict regulations on oil and gas drilling. Please help our county to make a stand on renewable energy for the betterment of all.</p>
<p>January 16,2020</p>	<p>I agree with the Larimer Alliance for Health, Safety, and Environment criticism of the County's draft oil and gas regulations:</p> <ol style="list-style-type: none"> 1. It is woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as per SB-181. 2. Does not assert right to deny, reject, nor condition any and all permit applications in order to prioritize protection. This is a continuation of the County's weak and outdated Waste and Takings legal stand. 3. No comprehensive, transparent public process – throughout the regulations: no resident alerts, etc. 4. Insufficient setback from homes. Every well-pad in Larimer County would subject nearby homes to carcinogenic emissions, as well as the side effects of nose bleeds, vomiting, etc. IN THEIR OWN HOMES. By the way, the CDPHE study found significant short term health effects out to 2000 feet from well-pads; It is WRONG to say it didn't find long term effects as the study wasn't looking for long term effects.
	<p>I have several concerns about the proposed regulations. It is woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as per SB-181. They do not assert right to deny, reject, nor condition any and all permit applications in order to prioritize protection. This is a continuation of the County's weak and outdated Waste and Takings legal stand. There is no comprehensive, transparent public process – throughout the regulations: no resident alerts, etc. There are insufficient setback from homes. Every well-pad in Larimer County would subject nearby homes to carcinogenic emissions, as well as the side effects of nose bleeds, vomiting, etc. IN THEIR OWN HOMES. By the way, the CDPHE study found significant short term health effects out to 2000 feet from well-pads; It is WRONG to say it didn't find long term effects as the study wasn't looking for long term effects.</p>
	<p>I'm a resident of Big Elk Meadows, my home is on the Larimer County side of the community. I believe we need STRONGER MEASURES to protect human life against the oil & gas industry. FULL STOP. I am, and two other members of my household are, registered voters. We are watching the behavior and actions of our elected officials, and hope they are operating in good faith to keep our community and county SAFE from this profit-over-human-health industry. Please consider these are particularly salient issues we have with the Second Draft:</p> <ol style="list-style-type: none"> 1) It is woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as per SB-181. 2) Did not assert right to deny, reject, nor condition any and all permit applications in order to prioritize protection. This is a continuation of the County's weak and outdated Waste and Takings legal stand.

	<p>3) No comprehensive, transparent public process – throughout the regulations: no resident alerts, etc. Insufficient setback from homes. Every well-pad in Larimer County would subject nearby homes to carcinogenic emissions, as well as the side effects of nose bleeds, vomiting, etc. IN THEIR OWN HOMES. By the way, the CDPHE study found significant short term health effects out to 2000 feet from well-pads; It is WRONG to say it didn't find long term effects as the study wasn't looking for long term effects. Thank you for your consideration!</p>
	<p>I am writing to express my opposition to the Second Draft of the Larimer County Oil & Gas Task Force proposed regulations, as written at this time.</p> <p>First of all, I believe that Larimer County should suspend ALL permits until SB 19-181 Rule Making is completed. To do anything else is to allow oil and gas companies to undermine the authority and autonomy that this Senate bill was designed to grant local governments.</p> <p>Additionally, the Second Draft of proposed regulations is WOEFULLY INSUFFICIENT in the following ways:</p> <ol style="list-style-type: none"> 1. It does NOT prioritize Health, Safety, Welfare, Environment, and Wildlife (as is required by SB 19-181). 2. It does NOT include the right to deny, reject, nor condition any and all permit applications in order to prioritize protection of the above public interests. 3. It does NOT include a comprehensive, transparent public process. Larimer County residents deserve ample and accurate notification when oil and gas extraction is planned for their backyards! 4. It does NOT ensure that oil and gas development will be sufficiently setback from private residences. Residents and property owners in Larimer County should not be put at risk just because greedy oil and gas companies want to pull fossil fuels out from underneath us! A recent CDPHE study found SIGNIFICANT short term health effects for those living within 2000 feet from well-pads; It is WRONG to assert that the study didn't find long term effects as the study wasn't looking for long term effects. <p>USE COMMON SENSE AND REMEMBER WHO YOU WORK FOR! The citizens of Larimer County, NOT oil and gas companies. Please go back to the drawing board and present a Third Draft that actually protects us.</p>
	<p>I support the stronger recommendations that were given in writing to Larimer County from LOGIC/Larimer Alliance as a response to the First Draft O&G Regulations. It would be totally irresponsible not to include these stronger recommendations. Please do the job you were elected to do and protect Larimer County residents health, safety, air and environment. If you don't do it the Oil & Gas Industry will take advantage of every loophole you leave them. One more thought. The Unicorn Pad is a disaster waiting to happen if approved. Being so close to wetlands, water supplies, residential homes and schools is just asking for problems.</p>
	<p>I just installed PV solar. You should be promoting wind and solar power, NOT dirty O&G! Larimer County officials put corrupt rich O&G interests over public health and safety! THEY SHOULD ALL BE FIRED !!! Implement the LOGIC and Larimer Alliance recommendations !!!</p>
	<p>You should be promoting wind and solar power, NOT dirty O&G! Larimer County officials put corrupt rich O&G interests over public health and safety! THEY</p>

	<p>SHOULD ALL BE FIRED !!! Implement the LOGIC and Larimer Alliance recommendations !!!</p>
	<p>News from the oil and gas sector shows a continuing decline in the profitability of extraction and development of resources. Industry experts project this decline to continue. As profitability decreases developers may be tempted to cut corners on public protection measures such as using older pollution control equipment and reducing maintenance and inspection.</p> <p>As such it may in the county's best interest to delay adoption of regulations, and to implement an oil and gas development moratorium, until state regulations are adopted concerning inspection and pollution control.</p> <p>It is certainly in the best interest of county residents to insure safety and adequate pollution control at any oil and gas development sites within the county's jurisdiction.</p>
	<p>The regulations you have drafted fall very short of protecting the health and safety of humans and wildlife in Larimer County.</p> <p>I call on a halt to the regulatory process until continuous air quality monitoring produces an accurate safety of our current exposure to toxins and methane releases.</p> <p>It is way past time to continue business as usual by being reasonable when our environment is being assaulted by this industry.</p> <p>My perception at this point is that the whole county regulatory process has been captured and controlled by the oil and gas industry by various means, including: direct employment and financial remuneration of task force members, indirect social or financial rewards for not passing REAL protections for public safety, and a control of agents and agencies mental perceptual framework so that real change in this industry does not take place.</p>
	<p>In your considerations of the Second Draft, please bear in mind the following items:</p> <p>The County refused the Larimer Alliance for Health, Safety, & the Environment's request for a suspension of permits until SB 19-181 Rule Making completed.</p> <p>The County refused the Larimer Alliance's request to wait to create Larimer County O&G Regulations until the state's rule making is (mostly) complete, slated for around July 2020.</p> <p>Here are particularly salient issues I have with the Second Draft:</p> <p>It is woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as per SB-181.</p> <p>It did not assert right to deny, reject, nor condition any and all permit applications in order to prioritize protection.</p> <p>There is no comprehensive, transparent public process – throughout the regulations: no resident alerts, etc.</p> <p>The setback from homes is catastrophically insufficient. Every well-pad in Larimer County would subject nearby homes to carcinogenic emissions, as well as the side effects of nose bleeds, vomiting, etc. IN THEIR OWN HOMES. By the way, the CDPHE study found significant short term health effects out to 2000 feet from well-pads; It is WRONG to say it didn't find long term effects as the study wasn't looking for long term effects.</p>

	<p>Finally, remember the Rule of the Four P's: PLEASE, PROTECT PEOPLE OVER PROFITS!</p>
	<p>We have a few key concerns about the Second Draft of proposed Oil and Gas Regulations for Larimer County.</p> <p>Under Section 17.3 B for Setbacks, we would propose a minimum of 2000 feet from residences, businesses, and high occupancy buildings. 2500 feet would be ideal. We frankly would suggest the same for any water body, critical wildlife corridors, and designated outdoor activity areas (ballparks, etc.) . County concerns about not prohibiting "access to mineral interests being sought" is based on an outdated interpretation of waste and takings law superseded by Colorado law 19 SB-181, which prioritizes health, safety, and environmental concerns over development of mineral resources. Company profitability is not the responsibility of Larimer County government. . . protection of its citizens and natural resources is.</p> <p>Regarding Section 17.3 C Number 4, regarding the use of electric-powered motors and equipment, it is still problematic if gasoline/diesel powered gear is permitted in remote areas because of lack of access to electrical service. Especially if this was near some public open space property. That would be disturbing to recreational uses and wildlife habitat. We should explore the use of solar powered electrical supply or equipment in such locations. That's the least we can do if we have to tolerate their continued exploitation of a fossil fuel source.</p> <p>Regarding Section 17.3 D Number 3 concerning leak detection and repair, continuous monitoring both on site and within the region is required for a truly accurate and comprehensive response to any leak. Continuous monitoring should make the report and response to any problem possible immediately, with repairs completed much sooner than 24 hours unless the situation is catastrophic. Regarding Number 6 of that section: a monthly inspection regime is called for.</p> <p>Regarding Section 17.3 F Number 2 concerning water quality and water bodies, the operator should be REQUIRED to post the relevant reports.</p> <p>Regarding Section 17.3 G Number 2 concerning an emergency response plan: This has to include hazardous material information being provided and on file with Emergency Service Departments for drilling fluids, etc. The common fiction that this is proprietary information can not be used to keep this from public agencies. Agreements about confidentiality of such information may be necessary, but emergency response crew do not have time to wait for a corporate response when dealing with any catastrophic incident regarding health, safety, or compromise of the environment requiring a clean up response. This also applies to Section 17.3 K concerning chemical handling. the previously included listing of chemicals in the First Draft should be in this Draft as well.</p> <p>We also have serious concerns regarding Flow Lines, Transfer Lines, and Gathering Lines as specified in Section 17.3 T. This section should be amended to read more like this:</p> <p>"Section 17.3 T. Flow Lines, Transfer Lines and Gathering Lines</p>

	<p>1. All operators of gathering lines located in Larimer County that are in place as of January ____, 2020 shall submit an inventory of those lines to the County Community Development Department. The inventory shall be submitted by April 30, 2020. The inventory shall include the following information: location of the line; size of the line; pressure in the line; depth of bury; age of the line; contents and daily flow rate; and for oil, estimated worst case spill volume, and for natural gas, estimated failure event impacted area; current contact information for the operator's designated emergency response person. The emergency response contact information shall be for a local person with 24/7 availability, and shall be updated quarterly.</p> <p>2. Installation of proposed gathering lines shall be reviewed as planning projects, and subject to the County's project application process. The operator of the proposed gathering line, as the project's applicant, shall submit the following information on the project: proposed location, size of and maximum operating pressure in the line, and contents of the line. Approval or denial of the project shall be based on the adequacy of the setback the proposed line has from existing or platted structures and areas of public use. This setback shall meet County standards for safety in the case of a failure event of the line."</p> <p>We also think more serious background checking of the financial soundness of any company seeking to engage in oil and gas operations in Larimer County is called for, given the poor record many of these operators seem to have, as reported in the industry press.</p> <p>The best solution for Larimer County would still be to put a hold on any permitting, and to let their regulations follow the standards of the Colorado Oil and Gas Conservation Commission when their new rules mandated by SB-181 are rolled out later this year. Thank you for your consideration.</p>
	<p>We need MUCH stronger O&G regulations than what is currently proposed in the 2nd Draft. Please use all of the local control authority in SB 181. Please work with the Larimer Alliance to greatly strengthen the regs so that our health, safety and environment are protected. We must not accept any new permits until the SB 181 rulemaking is complete. We must go beyond the provisions in SB181 to fully protect ourselves from this dangerous and harmful industrial activity. It has no place in neighborhoods - it needs to be 2000 feet or more away from occupied structures, hospitals, schools and water sources. This is our last opportunity to do the right thing for our community so that it does not become a polluted industrial wasteland.</p>
	<p>I am writing to express my opinion on the draft Larimer County O&G Regulations with hopes it may allow you, our County representatives, to see how concerning this process has been thus far for me and for many others in the community. I have watched this industry for the past twenty years grow in our area and it became clear to me from the considerable scientific research on this subject that this industry negatively impacts the health and safety of the residents in Northern Colorado.</p> <p>As an eight-year member of the City of Fort Collins Water Board and a member of the City's Oil and Gas Task Force, I became convinced this industry wasn't one we should have in populated areas due to the air quality problems we were dealing with even before this industry boomed locally. At the time, it seemed highly likely that our representatives would find the same result and limit or deny permits for the well being of the people and the environment. But, so far in the County's process to create Oil and Gas Regulations, common sense and a desire to protect human</p>

	<p>health of those who elected you appear to be losing over politics and greed. I don't want to be critical but this is how it looks and I will give you two of the most compelling reasons why.</p> <p>First, in a recent op-ed written by Commissioner Steve Johnson on this subject where he uses the failed Proposition 112 as justification that Coloradans don't want to limit fracking gives me the impression that he has already decided what he thinks we want. On the surface the failing of Prop. 112 might suggest this outcome but you need to consider that the Oil and Gas industry spent \$41 million campaigning against larger setbacks and the truth became mired in lies. Even with this amount of propaganda pouring in to cloud the issue and given the complexity of the subject almost half of Coloradans still saw through this and voted to increase setbacks. This is significant and a fact that requires a deeper and more thorough consideration than one this op-ed suggests.</p> <p>Second, the County's Oil and Gas Task Force appears to have a majority of people who are pro Oil and Gas. This isn't just my belief – most people that took the time to research it reached the same conclusion. You have, I'm sure, heard from many of them. An unbalanced Task Force will never lead to balanced decisions. It is simply not possible. I could spend hours detailing the numerous ways the County could do better than the current draft of the Oil and Gas Regulations but I'm not convinced it will make any difference.</p> <p>I'm asking our County representatives to please resist the temptation to promote this industry because it may be tempting. It promises jobs and who doesn't want them. But the science clearly shows this industry is harmful to our air quality, our water, and the most fragile and innocent of all, our children. Please tell us our lives matter to you and push to make these regulations as protective as humanly possible.</p>
	<p>Although I live in an area of Larimer County unaffected by oil and gas drilling, I am deeply concerned about the health and safety of my Larimer County fellow citizens, and concerned about health and safety of all people on earth who experience the effects of global warming; drilling for fossil fuels is inherently dangerous to everyone.</p>
	<p>The second draft of the Larimer Oil and Gas regulations is an insult to integrity. It inadequately addresses health, safety and the environment in the spirit of the new state regulation, SB181. It is also a waste of our tax money since you will have to re-do the regulations in the next 6 months to align with the new state law. I do wonder how the oil and gas industry bought you off! As a Weld County resident who's been learning about the very dangerous effects of fracking, I know that very nasty, killer stuff is released into our air & our water by the fracking process. The Earth becomes de-stabilized. Even if the air at the fracking well pads doesn't raise alarms, winds carry the nasty stuff down the I-25 corridor to sicken the folks south of us, or in whatever direction the wind blows. Air gets polluted; water gets polluted; Earth gets de-stabilized; accidental explosions endanger, injure & kill people & other living things; and the frackers usually take over-advantake of local infrastructures. Nobody WANTS fracking in their back yard, but underprivileged neighborhoods--such as the area around Bella Romero Academy in Greeley, CO--have little or no lobby to resist the O&G industry. So there is social injustice. For heavens sake, tighten up your community regulations over</p>

	O&G. They tend to take great advantage of a community until profits droop; then they skedaddle without cleaning up their killer messes.
	I'd like to add my voice to those requesting that Larimer officials deny drilling permits until all SB181 rulemaking is complete. I moved to Larimer County from Weld in the hopes of escaping the ubiquitous presence of oil wells around residential and educational areas. Please strengthen Larimer County's Oil and Gas Regulations, including those regulations around noise and odor mitigation and vibrations. I also believe that residents deserve basic transparency around oil and gas projects, including public notification process within one mile, public neighborhood meetings 30 days before well-pad hearings, and independent risk analyses. Please articulate clearly that the "Regulatory framework 'prioritize' public health, safety and general welfare..." And last, but perhaps most important, PLEASE consider increasing setbacks from homes and schools to at least 2000 feet. I've read too many scientific articles that draw correlations between proximity to wells and detrimental impacts on public health, and I have witnessed the anxiety of coworkers in Greeley who've been concerned that their health issues may have been worsened by the presence of so many wells in close proximity. Setbacks seem a basic precaution in the name of public health.
	<p>Regarding the 2nd Draft of the O&G Regulations for Larimer County:</p> <ul style="list-style-type: none"> - It is extremely insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as per SB-181. - It does not assert the right to deny, reject, nor condition any and all permit applications in order to prioritize protection. - No comprehensive, transparent public process – throughout the regulations. There is no means for resident alerts, etc! - It provides insufficient setback from homes. Every well-pad in Larimer County would subject nearby homes to carcinogenic emissions, as well as the side effects of nose bleeds, vomiting, etc. IN THEIR OWN HOMES. By the way, the CDPHE study found significant short term health effects out to 2000 feet from well-pads; It is WRONG to say it didn't find long term effects as the study wasn't looking for long term effects. <p>This draft provides enormously inadequate protections for the health and safety of our citizens. Further, you are destroying our beautiful land, all for greed and money. Shame on you for allowing this to happen and for not making the health and wellbeing of the citizens of Larimer County your TOP PRIORITY!!</p>
	I strongly object to the 2nd draft of the Larimer County O&G proposed regulations for the following reasons. They are insufficient to protect Health, Safety, Welfare, Environment & Wildlife. They did not assert the right to deny, reject or condition any and all permit applications in order to prioritize protection. It does NOT provide for a comprehensive or transparent public process. It does not provide for a sufficient set back from HOMES. These reasons alone are enough to stop passage of these proposed regulations now.
	I am a resident of Larimer County and am concerned at the lack of regulation on oil and gas drilling in our community. I am concerned about the potential effects on the health of residents and also the lack of urgency with which our government is responding to the climate crisis. I am asking that Larimer officials all drilling permits until SB181 rulemaking is complete. We need to protect our community first, not just look at profits.

January 17, 2020	<p>The second draft of the regulations doesn't even prioritize our community health or any protections that Senate Bill 181 addresses.</p> <p>We need to take immediate action to STOP all participation in any regulatory process until accurate air and water quality assessments are taken that provide a legal and medical basis for passing regulations that protect human health, wildlife health and the health of our increasingly endangered planet.</p>
	<p>Please take advantage of this opportunity to write regulations that fully protect the public from the known dangers of oil pad installation and operation. The setbacks are too close to homes. With more and more data available regarding unhealthy emissions from oil pad installations, the Commission should carefully consider the advantages of implementing strong protections for public health and safety.</p>
	<p>Please preserve the beauty and health of our wonderful Larimer county. You can't undo the damage you would cause. Thank you</p>
	<p>The second draft of the proposed oil and gas regulations are hardly better than the first draft, and still insufficient to protect public health or the environment. The proposals do not meet the requirements of SB 19-181. By not meeting those standards, your recommendations are largely invalid. If adopted, they will be struck down at the state level and/or challenged in court.</p> <p>I was very disappointed that the commission disregarded the excellent recommendations from LOGIC/Larimer Alliance concerning the first draft. It would appear that the enormous amount of work done by those citizen groups far exceeded and was far more comprehensive than any studies that might have been conducted for your commission.</p> <p>Counter to their recommendations, the proposed regulations do not address human health issues, or citizen input.</p> <p>By refusing to delay rulemaking until the process is complete at the state level, Larimer County will be demonstrating a cynical disregard for law and the health of the people and environment of the county.</p>
	<p>The Second Draft of the Larimer County Oil & Gas Task Force proposed regulations are still not strong enough to protect public health and safety. Any proposed regulations MUST PRIORITIZE Health, Safety, Welfare, Environment, and Wildlife, as dictated by SB-181. In the effort to properly and effectively prioritize the goals of SB-181, the regulations must clearly and firmly assert the responsibility to deny, reject, or condition any and all permit applications that threaten public health, safety, welfare, environment and wildlife.</p> <p>The regulations should also require a 2500' MINIMUM setback for any well, drilling, or fracking activity from residential areas, including schools. The CDPHE study found significant short term health effects at 2000 feet from well-pads, and peer-reviewed health studies indicate that health impacts are greatest within a half mile of a fracking site, with the majority citing 2500' as a MINIMUM setback to protect public health. Some studies indicate that a more appropriate minimum setback should be 1 mile, and the average evacuation distance for a well blowout is 0.8 miles, so 2500' is a conservative estimate to meet the bare minimum requirements for public health and safety, which must be safeguarded and given top priority, as per SB-181.</p> <p>Additionally, the regulations must specify a comprehensive and transparent public</p>

	<p>process, such as resident alerts and clear plans for action should public health and safety be in jeopardy.</p> <p>Please make these necessary revisions to the regulations, in order to be in compliance with SB-181, and to protect the lives and health of our citizens.</p>
	<p>The proposed regulations are insufficient to protect Health, Safety and Environment of the citizens of Larimer County. The regulations do not assure a sufficient setback from homes. CDPHE study found that even a 2000 foot setback compromises the short-term health of citizens</p>
<p>January 18, 2020</p>	<p>To the O&GTF: Please deny all permits until all SB181 rule-making is complete - this is the correct way forward. The proposed regulations need to be much stronger, as they clearly are not supporting public health. Specifically, there needs to be more sufficient setbacks, adequate noise and odor mitigation, rules for maximum vibrations and geo-mapping, a more transparent public process, better chemical handling plans and financial assurances. What is being suggested is simply inadequate to protect human life and environmental health, which is already being compromised. Please do the right thing, leave a legacy you can be proud of in your heart of hearts - vote people over profits. Thank you.</p>
<p>January 19, 2020</p>	<p>The proposed regulations for oil and gas extraction are clearly in violation of the state mandate set-out in SB181 to prioritize public health, safety, and the environment.</p> <p>As an example, in subsection A. entitled "Intent" the second draft states "The intent of this section of the Land Use Code is to establish a regulatory framework for new oil and gas facilities (O&GFs), including recompletions to be located in the unincorporated areas of Larimer County in a manner that protects the public health, safety and general welfare, protects private property rights, protects environment and wildlife, and minimizes adverse impacts." This last phrase negates the previous one. What does "minimize" mean? The word "minimize" which shows up repeatedly, is never defined. The regulations should read, consistently, in every section "assures against adverse impacts"?</p> <p>In section C. , item #7 under "Purpose" reads: "These regulations are necessary to: Minimize and mitigate the extent and severity of adverse impacts that cannot be avoided." This phrase is double speak. It is nonsense to refer to adverse impacts that cannot be avoided. Of course, they can be avoided! If mineral rights owners do not have the financial or technical means to extract their product without endangering the public or harming the environment, they have two choices: 1) they can sell those assets, 2) they can wait until a time when the technology has advanced in such a way as to allow them to proceed without causing risk to others. THE WAY THE REGULATIONS ARE CURRENTLY WORDED, THERE IS AN UNDERLYING ASSUMPTION THAT THERE WILL BE ADVERSE IMPACTS AND THAT THE REST OF US WILL BE EXPECTED TO BEAR THOSE COSTS.</p> <p>Our freedom as a society is built not just on Rights, but equally on Responsibilities. With this in mind, I would urge the commissioners to declare a moratorium on all further O&G extraction in Larimer County until the industry can demonstrate that it has the full capability not just to minimize, but to eliminate adverse impacts to the land, the air, the water, and the many lives that depend on these natural gifts for life itself.</p>

	<p>Fracking is known to cause seismic activity, contaminate ground water and emit toxic fumes. The jobs it creates are short lived. It is short sighted to encourage its development when renewable energy sources are abundant in Colorado and offer sustainable jobs.</p> <p>Once you have destroyed our water/air quality you can not get it back. Colorados greatest draw is its pristine landscapes. People are not coming to Colorado to see yet another gas pad. They are coming to for clean air and the beauty of wide open spaces.</p> <p>Look to the long term future of our economy. Electric cars, solar and wind powered businesses are already here. Don't allow yesterdays dirty oil and gas destroy our future.</p>
	<p>I'm old enough to remember at 71, how corporations have a history of lies about safety and health concerns.. we need more county and state independent inspectors in the field.</p>
	<p>Section B, Setbacks, setbacks should be 1000 ft. From water body, outside activity area or wet land. B: 3. There should never be reductions or case case by case decisions made for set backs. Section C: closed loop and pitiless drilling should be required for all sites. No exceptions. Section F: 4 Driling should never be permitted in FEMA 100 year flood plains. 6 why not be able to over rule CDPHE, EPA and Army Corp of Engineers about water quality and water bodies because of the way that EPA reg's are being gutted? Section G: 2, Spills. OGF's should provide local emergency management agencies with funding to ensure they can respond appropriately to and industrial emergency of the magnitude of the proposed OGF. Section F Recycle, reuse and disposal of fluids. 6, Once again why not be able to over rule CDPHE, EPA and AC of E? Section N: Well plugging & abandonment. This provision should be more extensive to prevent future incidents (explosions, leaks etc.) this is critical an the O & G industry should be responsible. Water testing should be required of all abandoned sites for reasonable amount of time on all sites. 17.5 Enforcement and inspection. B, Larimer county should have the right to inspect OGF's unannounced for compliance. Thank you for the opportunity to provide questions and feedback. These regulations are very important for the future generations in Larimer County. This should be taken very seriously and not bend to the industry influence.</p>
	<p>I live in a portion of Larimer County not affected by oil and gas drilling. But in a sense we're all affected by oil and gas drilling, the entire earth is affected. Please either find a way to reduce methane emissions that leak from drilling operations to absolute zero, or stop drilling altogether. Otherwise, you are violating state law, which states that health, safety and the environment are your first priorities.</p>
	<p>On p. 3, section 17.3.B "Setbacks," why is 3.c, (500-foot setback from a water body or designated outside activity area) only 500 feet? Water is necessary for life, and if it is contaminated it takes a lot of money and work to decontaminate it. I don't think 500 feet is far enough. The other setbacks are 1,000 feet or more.</p>
	<p>I became gravely ill when working as an Occupational Therapist within the densest fracking areas of Weld County. My symptoms included the following, that lasted for 5 months during this employment: spontaneous vomit, dizziness, Asthma symptoms much increased with exposure to frack sites, extremely sore throat, swollen and painful throat glands, pain with swallowing, sore eyes and malaise that worsened by the end of the 8 hour work day such that I could do nothing but lay down upon</p>

	<p>coming home from work. My patients' communities and homes were surrounded by these frack sites. As I entered these heavily fracked areas I lost my voice and all symptoms worsened. My friends asked why my voice was disappearing as I drove into this area while we talked on the phone. I had to discontinue social interactions after work as I was unable to get up. I didn't know what was wrong with me. I knew nothing about fracking at this point in my life. I went to a physician who prescribed 2 rounds of antibiotics that did nothing to stop these symptoms. I went to an ENT who prescribed the highest dose of steroids allowed and that did nothing to stop these symptoms. My son entered my bedroom and asked "Mom, do you have cancer?" He cried as he watched me vomit spontaneously into the kitchen sink. I had no energy to stand while treating patients. Instead, I used any activity that enabled me to treat my patients while seated on the floor. I am single and I had to work to support my 2 children. I was told by my physician that if it was environmental I should stay away from the area for several days and see if the symptoms abate. They did. I was gone for 4 days and the symptoms began to lessen. Yet, the very day I returned ALL symptoms returned immediately. Then, as I drove to work I opened my eyes to realize that where I was seeing my symptoms return was where there were hundreds of frack sites within a small area. I found out what fracking was and I researched the health impacts of fracking. This nightmare only ended when I left Colorado. I no longer have any of these symptoms. Yet, when I returned to CO for 5 days I became symptomatic again, and yes I was in fracking territory. I will never return to CO unless fracking is regulated or banned. The laws keep Oil & Gas exempt from having to reveal the secret ingredients they use to frack. This is preposterous. Protect the people who have elected you. Protect the environment that you are responsible to oversee. Stop the permits from being issued. Stop doubting the truthful allegations of health impact. Know that many of those in close proximity to frack sites have the following health impact: significant numbers of infants are now born with congenital heart defects, there are significantly higher numbers of premature infants born in these areas, children in Fort Collins now are seeing a significant factor of a rare cancer that occurs from emissions from cancer causing VOCs, children have leukemia, a well known surgeon in Greeley has reported a significant rise in Nasopharyngeal Cancer with a marked increase in surgeries for this, the Asthma rate for children and adults is SIGNIFICANTLY higher with greater proximity to fracking sites, and children waking up with bloody noses in the middle of the night with sheets bloody are a common phenomenon now near frack sites. Is it time to say no to more permits? Is it your duty to protect the people who elected you? Is it time to prepare for watershed damage and environmental leaks/spills as a result of increasing numbers of earth quakes in CO now? Is it time to consider Climate Change and the contribution that CO is making to the VOC emissions that increase the rate of Climate Change? Is it time to do your job and say no to the Halt Unicorn Permits? Yes, it is time. Do your duty and protect the health, safety and welfare of the people you serve. My wish for 2020 is that I may someday return to my home of 43 years. I miss my friends and I miss trail running at Horsetooth. Please, listen to the comments submitted, and know that people are praying for you to do the right thing. Follow the new law in SB181 and make the health of the people your first priority. I would want to protect you, please do the same for us.</p>
	<p>Set back provisions are weak and need to be extended. Fees for drilling must cover the cost of inspections by county or state staff twice a year. The permit process lacks transparency and should require public notification to comment on applications. Public notifications must be timely allowing for time for the public to</p>

	<p>comment. The county needs to assert the right to set conditions for the well in the permit process. The county must also reserve the right to reject and deny the well application if the conditions are not met. The bond for the well must be high enough to cover cost of cleanup and capping the well when abandon. Leak inspections should be conducted at least twice a year. I thought the purpose of the commission was to prioritize the public health and safety addressed in SB-181. Appears the commission failed to meet that goal. Hope they can make the suggested changes and do the right thing to improve the regulations to protect the public's health and the environment.</p>
<p>January 20, 2020</p>	<p>Fracking and oil extraction on Colorado's northern front range spew toxic chemicals and pollutants into the air and in to our ground waters. With our air standards already so far below the federal norms, why on earth would we encourage these industries to do even more damage to our once pristine home? Money? Of course. Quality of our citizens lives (including the freedom from illnesses that are a result of these toxins), should be paramount in any decision making within our local governments.</p> <p>Please look at the big picture. These industries will become antiquated within a few short decades. Please be courageous enough to guide us in to the future rather than condemning us to the poisons of the past.</p> <p>If Longmont can do it, why can't we?</p>
	<p>I have a number of concerns with the proposed draft.</p> <ol style="list-style-type: none"> 1) No new wells should be permitted until we have real time air quality monitoring for the county. The air quality has deteriorated significantly in my seventy plus years exposure to the air along the front range. 2) Health and well being need to be prioritized not just incidental to the regulations. 3) Any organization seeking to drill in the county should be required to post a surety bond to insure the cleanup of the site in the event that they abandon the well. 4) It seems inefficient and inappropriate to develop/finalize Larimer County regulations before the state has completed their regulations.
	<p>Under SB181, Larimer County has the express right to deny fracking applications to protect public health and safety. This draft does not take advantage of the County's clear authority to deny applications that are incompatible with protecting public health, safety, and welfare, the environment, and wildlife resources.</p> <p>The Draft states that the purpose of the regulations is, among other things, to "promote and protect the public health, safety and welfare, and protect the environment and wildlife by minimizing the adverse impacts of O&GFs."</p> <p>The primary goal of these regulations should be to avoid adverse impacts where possible, not just minimize them.</p> <p>The County needs to recognize their authority to deny applications that harm public health and safety.</p> <p>While it is a great step for the County to consider applying setbacks, the standards that they have applied in this draft are inadequate. LOGIC and other community members asked that the County adopt a 2,000' foot setback, but the County has only proposed a 2,000' setback from high occupancy buildings. This draft reduces the setback to 1,000' for homes and platted residential lots, and down to 500' for water resources.</p> <p>The CDPHE's most recent study showed that living within 2,000' of oil and gas facilities is associated with adverse public health impacts. The County needs to adopt at least a 2,000' setback for all homes, high occupancy buildings, and water resources.</p>

	<p>The draft allows oil and gas locations too close to water resources, and within floodplains, if no other viable locations are available. This is inconsistent with the SB181 mandate, and inconsistent with protecting public health and safety. If no viable locations are available, then the regulations need to allow the county to deny the application.</p> <p>The draft states that these new rules only apply to new locations. While that makes sense for some issues like siting and construction, it does not make sense for everything else during the operation phase of the location.</p> <p>Regulations covering issues like noise pollution, dust, chemical handling, waste disposal, plugging and abandonment, and leak detection and repair, must apply to all oil and gas facilities in the County.</p>
	<p>While the new draft of O/G regulations is a definite improvement, there is still room to make it better. The goal should be to avoid any public health problems, not must to minimize them. These problems are well documented and are chronic diseases. Children I will have them fore all their lives. Moreover, the setback must be 2000 ft, not just in some areas. The public health data are very clear on this as well. Within this radius, people are exposed to carcinogens, pulmonary irritants, nosebleeds. Please rethink these with the health and welfare of your citizens in mind.</p>
	<p>Isn't it possible to move forward on these issues rather than to continue to harm our land and our atmosphere?</p>
	<p>Stop drilling for poison that just destroys our future</p>
	<p>Our county, state, country, and planet are all being overwhelming sacrificed. Instead of new oil and gas projects, research into viable alternatives MUST occur. Soon it will be too late. Our very existence depends on change NOW. Under SB181, Larimer County has the express right to deny fracking applications to protect public health and safety. This draft does not take advantage of the County's clear authority to deny applications that are incompatible with protecting public health, safety, and welfare, the environment, and wildlife resources.</p> <p>The Draft states that the purpose of the regulations is, among other things, to "promote and protect the public health, safety and welfare, and protect the environment and wildlife by minimizing the adverse impacts of O&GFs."</p> <p>The primary goal of these regulations should be to avoid adverse impacts where possible, not just minimize them.</p> <p>The County needs to recognize their authority to deny applications that harm public health and safety.</p> <p>Setbacks</p> <p>While it is a great step for the County to consider applying setbacks, the standards that they have applied in this draft are inadequate. LOGIC and other community members asked that the County adopt a 2,000' foot setback, but the County has only proposed a 2,000' setback from high occupancy buildings. This draft reduces the setback to 1,000' for homes and platted residential lots, and down to 500' for water resources.</p> <p>The CDPHE's most recent study showed that living within 2,000' of oil and gas facilities is associated with adverse public health impacts. The County needs to adopt at least a 2,000' setback for all homes, high occupancy</p>

	<p>buildings, and water resources.</p> <p>Water Resource Protections The draft allows oil and gas locations too close to water resources, and within floodplains, if no other viable locations are available. This is inconsistent with the SB181 mandate, and inconsistent with protecting public health and safety. If no viable locations are available, then the regulations need to allow the county to deny the application.</p> <p>Applicability The draft states that these new rules only apply to new locations. While that makes sense for some issues like siting and construction, it does not make sense for everything else during the operation phase of the location. Regulations covering issues like noise pollution, dust, chemical handling, waste disposal, plugging and abandonment, and leak detection and repair, must apply to all oil and gas facilities in the County.</p>
	<p>Dear Commissioners, You have an opportunity at this time to permanently protect the beautiful landscape of Larimer County from being pillaged and polluted by oil and gas operations. You have an opportunity at this time to permanently protect the air quality, and thus promote the health of, your citizens and all creatures who suffer from ozone pollution. Please be mindful of enacting weak controls on this activity that will engender damage that will last generations. We, all of us, need to leave oil and gas in the ground and switch to clean energy. I encourage you to use the strong powers granted by SB 181 to set strict standards for oil and gas development and operation. Adopt standards that protect people, water and air quality and establish a legacy for beautiful Larimer County for future generations.</p>
	<p>After reading the draft regulations, these issues surface:</p> <p>Ability to Deny Applications</p> <ul style="list-style-type: none"> • Under SB181, Larimer County has the express right to deny fracking applications to protect public health and safety. This draft does not take advantage of the County’s clear authority to deny applications that are incompatible with protecting public health, safety, and welfare, the environment, and wildlife resources. • The Draft states that the purpose of the regulations is, among other things, to “promote and protect the public health, safety and welfare, and protect the environment and wildlife by minimizing the adverse impacts of O&GFs.” • The primary goal of these regulations should be to avoid adverse impacts where possible, not just minimize them. • The County needs to recognize their authority to deny applications that harm public health and safety. <p>Setbacks</p> <ul style="list-style-type: none"> • While it is a great step for the County to consider applying setbacks, the standards that they have applied in this draft are inadequate. LOGIC and other community members asked that the County adopt a 2,000’ foot setback, but the County has only proposed a 2,000’ setback from high occupancy buildings. This draft reduces the setback to 1,000’ for homes and platted residential lots, and down to 500’ for water resources. • The CDPHE’s most recent study showed that living within 2,000’ of oil and gas facilities is associated with adverse public health impacts. The County needs to adopt at least a 2,000’ setback for all homes, high occupancy buildings, and water

	<p>resources.</p> <p>Water Resource Protections</p> <ul style="list-style-type: none"> • The draft allows oil and gas locations too close to water resources, and within floodplains, if no other viable locations are available. This is inconsistent with the SB181 mandate, and inconsistent with protecting public health and safety. If no viable locations are available, then the regulations need to allow the county to deny the application. <p>Applicability</p> <ul style="list-style-type: none"> • The draft states that these new rules only apply to new locations. While that makes sense for some issues like siting and construction, it does not make sense for everything else during the operation phase of the location. • Regulations covering issues like noise pollution, dust, chemical handling, waste disposal, plugging and abandonment, and leak detection and repair, must apply to all oil and gas facilities in the County. <p>Please take action to modify the draft to include these considerations. These are public health issues and they clearly and definitely trump corporate profit concerns. Corporations are considered citizens by SCOTUS, so they must be held accountable for their bad actions just as other citizens are and come under laws/statutes that control their bad citizenship. OUR health as a nation depends on our taking action to protect us.</p>
	<p>We do not need more oil or gas exploration and drilling. We actually need to stop this and change over to solar and wind.</p>
	<p>Ability to Deny Applications : Under SB181, Larimer County has the express right to deny fracking applications to protect public health and safety. This draft does not take advantage of the County’s clear authority to deny applications that are incompatible with protecting public health, safety, and welfare, the environment, and wildlife resources.</p> <p>The Draft states that the purpose of the regulations is, among other things, to “promote and protect the public health, safety and welfare, and protect the environment and wildlife by minimizing the adverse impacts of O&GFs.”</p> <p>The primary goal of these regulations should be to avoid adverse impacts where possible, not just minimize them.</p> <p>The County needs to recognize their authority to deny applications that harm public health and safety.</p> <p>Setbacks: While it is a great step for the County to consider applying setbacks, the standards that they have applied in this draft are inadequate. LOGIC and other community members asked that the County adopt a 2,000 foot setback, but the County has only proposed a 2,000 foot setback from high occupancy buildings. This draft reduces the setback to 1,000 feet for homes and platted residential lots, and down to 500 feet for water resources.</p> <p>The CDPHE’s most recent study showed that living within 2,000 feet of oil and gas facilities is associated with adverse public health impacts. The County needs to adopt at least a 2,000 foot setback for all homes, high occupancy buildings, and water resources.</p> <p>Water Resource Protections: The draft allows oil and gas locations too close to water resources, and within floodplains, if no other viable locations are available. This is inconsistent with the SB181 mandate, and inconsistent with protecting public health and safety. If no viable locations are available, then the regulations need to allow the county to deny the application.</p> <p>Applicability: The draft states that these new rules only apply to new locations. While</p>

	<p>that makes sense for some issues like siting and construction, it does not make sense for everything else during the operation phase of the location. Regulations covering issues like noise pollution, dust, chemical handling, waste disposal, plugging and abandonment, and leak detection and repair, must apply to all oil and gas facilities in the County.</p>
	<p>LEAVE IT IN THE GROUND!</p>
	<p>No new fracking and drilling permits should be allowed until the front range minimum air quality standards are met.</p>
	<p>Under SB181, Larimer County has the express right to deny fracking applications to protect public health and safety. This draft does not take advantage of the County's clear authority to deny applications that are incompatible with protecting public health, safety, and welfare, the environment, and wildlife resources. The Draft states that the purpose of the regulations is, among other things, to "promote and protect the public health, safety and welfare, and protect the environment and wildlife by minimizing the adverse impacts of O&GFs." The primary goal of these regulations should be to avoid adverse impacts where possible, not just minimize them. The County needs to recognize their authority to deny applications that harm public health and safety.</p>
	<p>While it is a great step for the County to consider applying setbacks, the standards that they have applied in this draft are inadequate. The County should adopt a 2,000' foot setback, but the County has only proposed a 2,000' setback from high occupancy buildings. This draft reduces the setback to 1,000' for homes and platted residential lots, and down to 500' for water resources. The CDPHE's most recent study showed that living within 2,000' of oil and gas facilities is associated with adverse public health impacts. The County needs to adopt at least a 2,000' setback for all homes, high occupancy buildings, and water resources.</p> <p>The draft allows oil and gas locations too close to water resources, and within floodplains, if no other viable locations are available. This is inconsistent with the SB181 mandate, and inconsistent with protecting public health and safety.</p>
	<p>Larimer County regulations as proposed are inadequate. The safe distance from a fracking site is five miles, no less. Moreover, all fracking poses serious threats of earthquakes, which has been documented since 2015. Do your duty and protect the people of Larimer County from this threat. There is no safe fracking and we do not need it. Renewable energy is the only way to go in the current CLIMATE EMERGENCY.</p>
	<p>In reference to public comment on the Second Draft of the Larimer County Oil & Gas Task Force proposed regulations, to be written into County Land Use Code.</p> <p>The County refused the Larimer Alliance for Health, Safety, & the Environment's request for a suspension of permits until SB 19-181 Rule Making completed.</p>

	<p>The County refused the Larimer Alliance's request to wait to create Larimer County O&G Regulations until the state's rule making is (mostly) complete, slated for around July 2020.</p> <p>In regard to the Second Draft:</p> <p>It is woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as per SB-181.</p> <p>Did not assert right to deny, reject, nor condition any and all permit applications in order to prioritize protection. This is a continuation of the County's weak and outdated Waste and Takings legal stand.</p> <p>No comprehensive, transparent public process – throughout the regulations: no resident alerts, etc.</p> <p>Insufficient setback from homes. Every well-pad in Larimer County would subject nearby homes to carcinogenic emissions, as well as the side effects of nose bleeds, vomiting, etc. IN THEIR OWN HOMES. By the way, the CDPHE study found significant short term health effects out to 2000 feet from well-pads; It is WRONG to say it didn't find long term effects as the study wasn't looking for long term effects.</p>
	<p>Thank you for the opportunity to comment on the draft for the new regulations for oil and gas extraction in Larimer County. I am very concerned that this revised draft still has such low setbacks (1000 ft) from any building that is not designated "high occupancy." If 2000 ft setback is considered reasonable for human safety then single and double-family homes are just as important as offices and apartment buildings. Likewise a 500 foot setback from water sources is absurd if a proposed site is in a flood plain or if that water represents the only source of water for the adjacent residences. A revised draft should make it clear that the county has the right to deny applications, not merely minimize risks. Any small concession may be twisted to declare a risk to be minimized. We are talking about long term health degradation and perpetual loss of water sources here, not merely inconveniences. Please be a little stronger in your wording to fulfill your responsibility to the people of Larimer County. Thank you!</p>
	<p>I feel that in general fracking is a bad idea. We should be getting away from gas and oil not allowing it. If that cannot be done, Laimer County must do better and protecting our environment. Too many times oil and gas bring in their big bucks and ply politicians into doing the companies bidding and not what is good for the people who live in these areas.</p>
	<p>I am not affiliated with the Larimer Alliance for Health, Safety and the Environment, but I have just read their executive summary on the County's proposal for oil and gas regulations. I am in full support on this document and want to live in a state and be represented by leaders who put more immediate and urgent focus to the health and safety of our community members and our environment.</p>

	Oil & Gas regulations need more restrictions for peoples health.
	<p>I believe that I'm too late to really influence your deliberations with my comment, but...</p> <p>My concern is over the stated required siting distances from water sources. I appreciate the set-back requirements from dwellings. Those same distances should apply to community boundaries; communities, by definition, ARE high density!</p> <p>My second concern is set back from water sources. Water contamination is no less harmful to the health of humans than is distance measured in linear feet of ground surface. That contamination is even more impactful for our wild neighbors, especially those who live in our streams and rivers. (And some of whom we consume as food, with their contamination transferred into our systems).</p> <p>Thank you for your thoughtful response to other comments.</p>
	No fracking site should be within 2000' of any home or water resource. Even 2000' seems too close.
	What is the best way to protect the citizens from the pollution from oil and gas?
	Protecting the People comes first. Oil and gas should never jeopardize that fundamental right.
	<p>The draft states that these new rules only apply to new locations. While that makes sense for some issues like siting and construction, it does not make sense for everything else during the operation phase of the location.</p> <p>Regulations covering issues like noise pollution, dust, chemical handling, waste disposal, plugging and abandonment, and leak detection and repair, must apply to all oil and gas facilities in the County.</p>
	<p>While the new draft of the Larimer County oil and gas regulations are an improvement there a still major concerns with this new draft and a great need to improve them to protect the people, land, water, wildlife and public health in Larimer County. The improvement suggestions to the draft are:</p> <ol style="list-style-type: none"> 1. Under SB181 it states that Larimer County, as all counties in the state, has the authority to deny applications that do not protect public health and safety in regards to oil and gas extraction. Larimer County must heed this authority given under SB181 in the drafting and enforcement of regulations. 2. In regard to this authority listed above, setbacks currently listed are too lenient. If a 2,000 ft. setback is deemed adequate or necessary for high occupancy buildings why are those same setbacks not good enough for single family homes? Are high occupancy residents more important to protect than residents in single family residential homes? Studies have shown that exposures to gas and oil production sites within 2000 ft. have adverse affects on health. 3. A 500 ft. setback from water sources is also totally inadequate. Water resources and their environmental health integrity is crucial to healthy environments and public entities. A 1000 ft. setback from water sources and flood planes should be an absolute minimum and there should be no allowances for this setback limit even if there are no viable locations to drill or place infrastructure. Very special attention should be given to how close any waste injection well is allowed near any water source, both surface and underground. Our water resources are too valuable and

	<p>should not take a back seat to any oil and gas regulations, period!</p> <p>4. The draft states that these new regulations should only apply to new O&G sites. While some of the regulations may make sense in new cases of siting and construction most regulation should apply to all O&G locations when it comes to issues, such as, noise pollution, dust, chemical handling, waste disposal, plugging and abandonment, and leak detection and repair. There should also be strict requirements for the containment and capture of methane releases and leak prevention and repair.</p> <p>Thank you for you time and consideration with my concerns on this very important issue.</p>
	<p>Regarding the 2nd draft of the oil and gas regulations. This draft grossly underestimates the impact these well have not only on the environment but on public health. Having worked in the emergency spill response industry I KNOW the O&G industry is cutting corners when it comes to worker and public safety. In the span of two months I was called out to the same site THREE times for the same issue. Oil and gas needs to be held to a higher standard when it comes to considerations involving environmental and public safety and our local government needs the power to stop further development because of O&G's incompetence and lack of concern for our health. This current draft does nothing to curb the industry's already dangerous practices and ignores the scientific data regarding the impacts these sites have.</p>
	<p>After reviewing the second draft of the proposed regulations, I respectfully request that it is revised to include more specific and detailed information. While the proposal makes reference to a number of vital concerns, such as placement, air quality, and mitigation of potential consequences, it fails to explain specifically how these concerns will be addressed. It is important to not just recognize the issues at hand, we must also deliberately plan for the ways in which to address them. Ensuring the health and safety of people and our environment should be a top priority. Further, I believe we stand to lose more from inadequate planning than we gain for allowing for the expansion of the oil and gas industry. Thank you.</p>
	<p>I believe that fracking in general needs to have higher regulations and/or be discontinued indefinitely. Recent studies have show insane rising levels of methane due to oil and gas leaks at fracking sites. Many countries and states have banned fracking because of health and safety hazards. If we don't come as far as banning these terrible sites it's safe to say 1,000-2,00 feet away from a building is not nearly far enough to reduce these health risks either. Benzene levels and other health impacts are visible at 2,000 feet away. Also, what extent of monitoring will be in place of these wells? If more are to go up, there needs to be top-down monitoring in place at all times as well as ground-level monitoring. Leaks happen far too often and aren't noticed until long after they started. There in only one VOC monitor station North of Denver, which is ridiculous. There are over 80k wells here in CO. Which is already far too many, with leaks happening in 5% immediately and the rest experiencing leaks after 30 years. Not to mention the casting of these wells deteriorate over time... With the climate crisis where it is now, with no signs of getting better, we need to have SERIOUS regulations of all wells and/or BANNING any further well construction. Colorado needs to be at a net ZERO for Green House</p>

	gas production by 2035 and we aren't going to get there with adding more emissions of methane to our already F grade air.
	With the advancement of renewable energy technologies, more resources need to be put forward to increase our reliance on renewables, while decreasing our reliance on oil and gas. While we continue to rely on oil and gas, more resources need to be used to ensure our safety. The best way to do this is to expand monitoring of our air quality by monitoring on site as well as by plane. This would not only protect our environment, but also our health by determining where leaks are coming from before they turn into a bigger issue. The health and safety of the community should be at the forefront of this debate, especially in terms of current regulations and monitoring standards that do little to address concerns.
	It is imperative that oil and gas regulations aim primarily to protect citizens and wildlife from potential hazards and health effects. Additionally environmental damage must be mitigated at the highest concern
	As a resident of Larimer, County (Fort Collins) I have been to two commission meetings and the public presentation and I still have not seen an explanation as to why new regulation proposals are proceeding before the commission knows what the new minimum state regulations will be. It is my belief the commission needs to go into a hiatus until such time as the state completes the new minimum standards.
	I feel these regulations in version 2 draft oil and gas regulations are not outlined in a manner that will actually protect the environment. You may state that you wish to protect "the public health, safety and general welfare, protects private property rights, protects environment and wildlife, and minimizes adverse impacts." However these "regulations" serve only as lip service as far as I'm concerned. You do not call for continuous or top down monitoring of these fracking wells, but state that you will comply with AQCC regulations on air quality however you do not state the minimum requirements for how we will determine if a well is within regulation. I am also deeply concerned about the regulations on proximity to resident buildings, high occupancy buildings and bodies of water. I would like to see a minimum distance of 2500 ft from any water source, building or public area as well as mandatory continuous monitoring on all new wells within Larimer county. Oil and gas has already proven to be more financially and environmentally expensive than renewable alternatives, if you are not willing to sacrifice some profit for the public safety and health there should be no new fracking wells within Larimer county. Regards, a concerned citizen.
	I highly recommend that your regulations state that baseline testing of ground and surface water be done prior to any drilling activity. One chemical which has plagued many oil and gas sites is tert butyl alcohol. Testing for this man made organic should be done along with testing for many other more common organic and inorganic compounds. If baseline testing is not done and water shows contaminants down the road, the oil business will claim that the water was contaminated before drilling was done. This is an important step that should not be skipped if you want total transparency during and after drilling and production.
	Under SB181, Larimer County has the express right to deny fracking applications to protect public health and safety. This draft does not take advantage of the County's clear authority to deny applications that are incompatible with protecting public health, safety, and welfare, the environment, and wildlife resources. The CDPHE's most recent study showed that living within 2,000' of oil and gas facilities is associated with adverse public health impacts. The County needs to

	<p>adopt at least a 2,000' setback for all homes, high occupancy buildings, and water resources.</p> <p>Regulations covering issues like noise pollution, dust, chemical handling, waste disposal, plugging and abandonment, and leak detection and repair, must apply to all oil and gas facilities in the County.</p> <p>The draft allows oil and gas locations too close to water resources, and within floodplains, if no other viable locations are available. If no viable locations are available, then the regulations need to allow the county to deny the application.</p>
	<p>While the revised draft is an improvement, there is still progress to be made. Please accept my comments regarding regulations:</p> <p>Ability to Deny Applications Under SB181, Larimer County has the express right to deny fracking applications to protect public health and safety. This draft does not take advantage of the County's clear authority to deny applications that are incompatible with protecting public health, safety, and welfare, the environment, and wildlife resources. The Draft states that the purpose of the regulations is, among other things, to "promote and protect the public health, safety and welfare, and protect the environment and wildlife by minimizing the adverse impacts of O&GFs." The primary goal of these regulations should be to avoid adverse impacts where possible, not just minimize them. The County needs to recognize their authority to deny applications that harm public health and safety.</p> <p>Setbacks While it is a great step for the County to consider applying setbacks, the standards that they have applied in this draft are inadequate. LOGIC and other community members asked that the County adopt a 2,000' foot setback, but the County has only proposed a 2,000' setback from high occupancy buildings. This draft reduces the setback to 1,000' for homes and platted residential lots, and down to 500' for water resources. The CDPHE's most recent study showed that living within 2,000' of oil and gas facilities is associated with adverse public health impacts. The County needs to adopt at least a 2,000' setback for all homes, high occupancy buildings, and water resources.</p> <p>Water Resource Protections The draft allows oil and gas locations too close to water resources, and within floodplains, if no other viable locations are available. This is inconsistent with the SB181 mandate, and inconsistent with protecting public health and safety. If no viable locations are available, then the regulations need to allow the county to deny the application.</p> <p>Applicability The draft states that these new rules only apply to new locations. While that makes sense for some issues like siting and construction, it does not make sense for everything else during the operation phase of the location. Regulations covering issues like noise pollution, dust, chemical handling, waste disposal, plugging and abandonment, and leak detection and repair, must apply to all oil and gas facilities in the County.</p>
	<p>I am deeply concerned about the following issues. I would appreciate your consideration as well.</p>

	<p>Ability to Deny Applications Under SB181, Larimer County has the express right to deny fracking applications to protect public health and safety. This draft does not take advantage of the County's clear authority to deny applications that are incompatible with protecting public health, safety, and welfare, the environment, and wildlife resources. The Draft states that the purpose of the regulations is, among other things, to "promote and protect the public health, safety and welfare, and protect the environment and wildlife by minimizing the adverse impacts of O&GFs." The primary goal of these regulations should be to avoid adverse impacts where possible, not just minimize them. The County needs to recognize their authority to deny applications that harm public health and safety.</p> <p>Setbacks While it is a great step for the County to consider applying setbacks, the standards that they have applied in this draft are inadequate. LOGIC and other community members asked that the County adopt a 2,000' foot setback, but the County has only proposed a 2,000' setback from high occupancy buildings. This draft reduces the setback to 1,000' for homes and platted residential lots, and down to 500' for water resources. The CDPHE's most recent study showed that living within 2,000' of oil and gas facilities is associated with adverse public health impacts. The County needs to adopt at least a 2,000' setback for all homes, high occupancy buildings, and water resources.</p> <p>Water Resource Protections The draft allows oil and gas locations too close to water resources, and within floodplains, if no other viable locations are available. This is inconsistent with the SB181 mandate, and inconsistent with protecting public health and safety. If no viable locations are available, then the regulations need to allow the county to deny the application.</p> <p>Applicability The draft states that these new rules only apply to new locations. While that makes sense for some issues like siting and construction, it does not make sense for everything else during the operation phase of the location. Regulations covering issues like noise pollution, dust, chemical handling, waste disposal, plugging and abandonment, and leak detection and repair, must apply to all oil and gas facilities in the County.</p>
	<p>Please strengthen the current draft to include and/or stress the following:</p> <p>--Ability to Deny Applications:</p> <p>Under SB181, Larimer County has the express right to deny fracking applications to protect public health and safety. This draft does not take advantage of the County's clear authority to deny applications that are incompatible with protecting public health, safety, and welfare, the environment, and wildlife resources. The Draft states that the purpose of the regulations is, among other things, to "promote and protect the public health, safety and welfare, and protect the environment and wildlife by minimizing the adverse impacts of O&GFs." The primary goal of these regulations should be to avoid adverse impacts where possible, not just minimize them. The County needs to recognize their authority to deny applications that harm public</p>

	<p>health and safety.</p> <p>--Setbacks:</p> <p>While it is a great step for the County to consider applying setbacks, the standards that they have applied in this draft are inadequate. LOGIC and other community members asked that the County adopt a 2,000' foot setback, but the County has only proposed a 2,000' setback from high occupancy buildings. This draft reduces the setback to 1,000' for homes and platted residential lots, and down to 500' for water resources.</p> <p>The CDPHE's most recent study showed that living within 2,000' of oil and gas facilities is associated with adverse public health impacts. The County needs to adopt at least a 2,000' setback for all homes, high occupancy buildings, and water resources.</p> <p>--Water Resource Protections:</p> <p>The draft allows oil and gas locations too close to water resources, and within floodplains, if no other viable locations are available. This is inconsistent with the SB181 mandate, and inconsistent with protecting public health and safety. If no viable locations are available, then the regulations need to allow the county to deny the application.</p> <p>--Applicability:</p> <p>The draft states that these new rules only apply to new locations. While that makes sense for some issues like siting and construction, it does not make sense for everything else during the operation phase of the location. Regulations covering issues like noise pollution, dust, chemical handling, waste disposal, plugging and abandonment, and leak detection and repair, must apply to all oil and gas facilities in the County.</p> <p>Thank you for strong regulations that ensure long-term public health and water quality.</p>
	<p>Given our experience in Broomfield with supposed BMPs in place and having worked extensively on our regulations (still in process), I have some suggestions:</p> <ol style="list-style-type: none"> 1) Use CRS 29-20-104 language that "minimize adverse impacts means, to the extent necessary and reasonable, to protect public health, safety,, and welfare, and the environment by avoiding adverse impacts...and minimizing and mitigating the extent and severity of those impacts that cannot be avoided. Note specifically in your wording that you can deny permits when necessary and reasonable. (Let me know if you'd like some legal language for that.) Emphasize "avoiding" and your ability to deny operations that pose too much risk to public health and safety and the environment. Your wording seems to be pre-181 in its still protecting mineral interests and operators and it is clear that 181 allows regulation and protection of the public. It is no longer waste to leave minerals in the ground. 2) Use at least 2000' setbacks from all human and animal dwellings as the state found evidence for harmful effects at that distance and there are other studies and data (Broomfield is gathering) that show that impacts from chemical dispersion and noise go beyond 2000'. You would include the evidence in your introductory "whereas" statements so that it would be clear to courts that you are taking

	<p>reasonable and necessary measures.</p> <p>3) Insert language in "whereas" statements from co-sponsor Senator Mike Foote's statement on the floor re: the precautionary principle and place more onus on operators to provide data that show that their operations are indeed safe and protective.</p> <p>4) Do larger setbacks when it comes to protecting water, wetlands, and flood plains, and if structures are placed in 500 year floodplains make sure that they are anchored and won't contaminate soil and water if there is a flood. Remember the flood of 2013? With climate change, we can expect more drastic weather.</p> <p>5) Older infrastructure needs to be better monitored and regulated. In Broomfield, we've discovered soil contamination, 55% of older wells leaking, and a methane leak at a plugged and abandoned well in a new residential development. Older infrastructure and negligence led to the Firestone explosion. Workers who were measuring tank content have died or been badly burned. Operators change and given the complexity and lack of monitoring and regulation, all of these operations are potentially hazardous.</p> <p>6) Consider assuring that the emergency response plan is operable--e.g., that there are adequate evacuation routes and procedures in place before construction can begin.</p> <p>7) We have had to clamp down on noise production when people are sleeping--our new ordinance requires a fully enclosed structure of 4 walls and a roof for industrial uses in order to contain noise between 10 pm and 7 am unless operator can show operations will not exceed 40 dB(A) or 65 dB(C) at the nearest boundaries of other zones (where people live.) Your levels are way too high. Remember that noise grows exponentially per how the dB scales operate. Also, wildlife and domestic animals can be disturbed by noise. The so-called Liberty quiet frac fleet hasn't proven to be very quiet.</p> <p>8) You don't have any measures to protect people from silica dust.</p> <p>9) Re: L.2. I believe that it is technically feasible to recycle and reuse produced fluids, so you may want to remove that disclaimer and force recycling and reuse at the operator's expense.</p> <p>10) Re: plugging and abandonment and reclamation, make sure you require adequate bond (\$270,000 per well is average of wells on public land.) You don't want to be stuck with orphaned wells as the state doesn't have the funds. It is good to also require monitoring of old infrastructure and clean up before new drilling begins.</p> <p>11) Include general liability insurance, sudden and accidental pollution liability insurance, and gradual pollution liability insurance.</p> <p>12) Include provision for alternative site analyses and environmental impact studies. I'm sorry to load you with so many recommendations. Our experience with Extraction has been frustrating in terms of negotiations and actually being able to protect the public and the environment. Be strong in your code and think ahead of the possible loopholes regarding regulating and enforcing.</p>
	<p>Ability to Deny Applications Under SB181, Larimer County has the express right to deny fracking applications to protect public health and safety. This draft does not take advantage of the County's clear authority to deny applications that are incompatible with protecting public health, safety, and welfare, the environment, and wildlife resources. The Draft states that the purpose of the regulations is, among other things, to "promote and protect the public health, safety and welfare, and protect the environment and wildlife by minimizing the adverse impacts of O&Gs."</p>

	<p>The primary goal of these regulations should be to avoid adverse impacts where possible, not just minimize them. The County needs to recognize their authority to deny applications that harm public health and safety.</p> <p>Setbacks While it is a great step for the County to consider applying setbacks, the standards that they have applied in this draft are inadequate. LOGIC and other community members asked that the County adopt a 2,000' foot setback, but the County has only proposed a 2,000' setback from high occupancy buildings. This draft reduces the setback to 1,000' for homes and platted residential lots, and down to 500' for water resources. The CDPHE's most recent study showed that living within 2,000' of oil and gas facilities is associated with adverse public health impacts. The County needs to adopt at least a 2,000' setback for all homes, high occupancy buildings, and water resources.</p> <p>Water Resource Protections The draft allows oil and gas locations too close to water resources, and within floodplains, if no other viable locations are available. This is inconsistent with the SB181 mandate, and inconsistent with protecting public health and safety. If no viable locations are available, then the regulations need to allow the county to deny the application.</p> <p>Applicability The draft states that these new rules only apply to new locations. While that makes sense for some issues like siting and construction, it does not make sense for everything else during the operation phase of the location. Regulations covering issues like noise pollution, dust, chemical handling, waste disposal, plugging and abandonment, and leak detection and repair, must apply to all oil and gas facilities in the County.</p>
	<p>I am writing to urge you to consider passing the strongest and most stringent Oil and Gas regulations possible. I have been a resident of Larimer County for 16 years. What I love about our county is its pristine natural beauty and clean safe water and fishing. My family is originally from Pennsylvania. We have had to deal with the ravages of coal mining, steel milling and more recently oil and gas exploration. The land while beautiful is so contaminated by these industries that you can't drink water from the creek or ponds even after filtering and boiling because of spills and runoff. People have had to abandon property that was on well water because the fracking fluids have contaminated their wells making it necessary to bring water from the city just to use cabins out there. The Oil and Gas industries will promise that they are responsible and can make our county money but they always take what they can and then leave the residents deal with how little they cared about our community and our countryside.</p>
	<p>Draft must go further to protect public health.</p>
<p>January 21, 2020</p>	<p>My husband has stage 4 lung cancer. He has never smoked nor been exposed to hazardous chemicals. We can only conclude that the air quality in Larimer County contributes to his cancer. I get air quality alerts for our area almost daily during the summer.</p> <p>You need to adopt the strictest possible air quality regulations for the oil and gas industry so that your families--and possibly you--don't develop this deadly disease.</p>

	<p>I am writing about your proposed draft oil & gas regulations. The revisions to the first draft are good to see, yet I hope you'll consider additional modifications. Some areas with room for improvement include:</p> <p>- Ability to Deny Applications Under SB181, Larimer County has the express right to deny fracking applications to protect public health and safety. This draft does not take advantage of the County's clear authority to deny applications that are incompatible with protecting public health, safety, and welfare, the environment, and wildlife resources. The Draft states that the purpose of the regulations is, among other things, to "promote and protect the public health, safety and welfare, and protect the environment and wildlife by minimizing the adverse impacts of O&GFs." The primary goal of these regulations should be to avoid adverse impacts where possible, not just minimize them. The County needs to recognize their authority to deny applications that harm public health and safety.</p> <p>- Setbacks While it is a great step for the County to consider applying setbacks, the standards that they have applied in this draft are inadequate. LOGIC and other community members asked that the County adopt a 2,000' foot setback, but the County has only proposed a 2,000' setback from high occupancy buildings. This draft reduces the setback to 1,000' for homes and platted residential lots, and down to 500' for water resources. The CDPHE's most recent study showed that living within 2,000' of oil and gas facilities is associated with adverse public health impacts. The County needs to adopt at least a 2,000' setback for all homes, high occupancy buildings, and water resources.</p> <p>- Water Resource Protections The draft allows oil and gas locations too close to water resources, and within floodplains, if no other viable locations are available. This is inconsistent with the SB181 mandate, and inconsistent with protecting public health and safety. If no viable locations are available, then the regulations need to allow the county to deny the application.</p> <p>- Applicability The draft states that these new rules only apply to new locations. While that makes sense for some issues like siting and construction, it does not make sense for everything else during the operation phase of the location. Regulations covering issues like noise pollution, dust, chemical handling, waste disposal, plugging and abandonment, and leak detection and repair, must apply to all oil and gas facilities in the County.</p>
	<p>I have reviewed the County's oil and gas regulations and find them woefully inadequate to protect public health, safety, and environment which has been mandated by SB 19-181. Particularly, the setbacks are inadequate, thus putting the public health at risk. There has been no attempt to increase the setbacks for the obvious reason that if they were increased to align with the existing health studies assessment of the risk, the oil and gas companies could not drill. The setbacks were never based on public health in the first place and the old COGCC, which was</p>

	<p>dominated by the promotion of industry, only reluctantly increased them over time from 150'. But 500' is still not enough. Clearly our county regs have not implemented the law. Air quality concerns, as we get asthma and have other invasions of toxic VOC's, has not been addressed in the entire regulatory process. These are status quo regulations. Do better!</p>
	<p>Attention Larimer County Commissioners,</p> <p>As you continue to move forward on the review of drafts for oil and gas regulations in reference to Senate Bill 19-181 which was forced down citizens throats AFTER our communities fairly voted to end Prop 112, DO NOT forget about the families working in the oil and gas industry which generates over \$1 billion in taxes for our state and counties.... even as one of the most HEAVILY REGULATED in the nation. DO NOT forget about mineral owner families who have been in this area for many generations, are founding citizens of much of what makes up our counties and state today and have the RIGHT to the access and exploration of minerals we have invested in for 4 generations or more.</p> <p>Please keep the following important question in mind during your process. Are the state and counties of Colorado prepared to address the more than 600,000 mineral owners if access to minerals is lost or further limited and the investments made by generations of families disappear? Make no mistake, mineral owners will act.</p> <p>Additionally, how will we address the loss well in excess of \$230 million for our schools? Not to mention the losses for our parks and the chain effect it will have on businesses from car lots, to grocery stores, to daycare centers. No reason for anyone to live around here if the economy is trashed because we regulated safe prosperous industries out of our state. Let an industry with a better safety record than many other industries in the nation WORK!</p>
	<p>The new regulations are too weak. Stop worrying about lawsuits from the industry, and do what is right for the people and the environment of CO. Do the math, dual-cycle natgas at PRPA will reduce community CO2 emissions and help the COGCC meet its obligation to use the resource efficiently. County regulations should discourage in-home natgas and favor professionally maintained dual-cycle at the power plant(s). Carbon free PRPA sounds good, but is dangerous.</p> <p>The county must also eliminate barriers to rooftop solar. In Fort Collins I built a net-positive solar array for just \$0.0895/kwhr. The city's dirty coal rate is \$0.1122/kwhr, 25% more. The city's 100% renewable rate is \$0.1312/kwhr, 47% more. Rooftop solar can be backed up by dual-cycle natgas at the power plant, which is cleaner than coal. If we do not promote free market renewables for less, the socialist agenda will force their more expensive solution on us. Coal, in-home single-cycle natgas, and socialist renewables are a threat to the future. Free market rooftop solar doesn't need the delivery infrastructure and with a battery increases reliability.</p> <p>Natgas is an explosive and a hazmat issue. It does not belong in residential settings. Look at your land use code, look at what is banned in residential and school settings, rank fracking in that priority list and ask if fracking belongs in the banned or approved list. I don't have the county's code memorized, but in my experience,</p>

	<p>communities block alcohol and pot from school areas and rvs, trailers, and in-home music, video, and porn studios from residential areas. Is fracking really safer than a rv or a trailer? Is a music studio really more dangerous than fracking?</p> <p>Climate change is real and man made. Why is the temperature of Mercury only 801F while the temperature of Venus, almost double the distance from the sun is hotter at 864F? The answer, 96% CO2! We must stop fossil fuels, it begins by reducing. We cannot stop fracking or coal over night, but we can get close. We need all new buildings to be net-zero, if not net-positive, if not fossil fuel free. Make sure the code enables and encourages rather than prohibits such structures in residential, commercial, and industrial zones.</p> <p>Last, and most importantly, understand the COGCC authority and work within that structure. As every city that has challenged the COGCC has learned, don't waste your time fighting, you will lose. Find a path to success. Personally, I suggest encouraging people to buy memberships to my business, PruzLabs. The best way to combat the fossil fuel problem is to create free market green solutions for less and make the personal choice to reduce and boycott fossil fuel. Change takes work and money. The fossil fuel industry is willing to put in the money and work to promote their side. The climate enthusiasts must be willing to do the same.</p> <p>If this committee would like a tour of my house to see my solar array and how great rooftop solar really is, or learn more about home my business is trying to address the problem, please contact me.</p>
	<p>We must stop talking and start doing what we know is right for our environment and public health. We know what fracking can do and has done to the water, air and land around us. We must stop this reckless practice that has been only about making money for those who don't or won't show concern for the natural resources, we desperately need to protect. Not to mention our health and and the long term effects it will have on that.</p>
January 22, 2020	<p>Thank you for the opportunity to comment on the revised Oil and Gas regulations for Larimer County.</p> <p>The Task Force should, in accordance with SB-181, prioritize the protection of health, safety, the environment, and wildlife in these regulations. In addition, the regulations should state that Larimer County will not accept any permit application that does not prioritize these protections. The regulations should also detail how the public will be fully and transparently notified about nearby O&G facilities and issued alerts.</p> <p>The following comments address specific sections of the revised regulations:</p> <p>17.1 C6 needs revising by omitting "to locate." Revise to "Strategically locate O&Gs where adverse impacts from such operations can be avoided."</p> <p>17.1 C7 reads "Minimize and mitigate the extent and severity of adverse impacts that cannot be avoided."</p> <p>Adverse impacts CAN be avoided if the overriding consideration is health, safety, the environment, and wildlife. Any O&G development that has an adverse impact must</p>

not be allowed to proceed.

17.2, E, last sentence does not read clearly and omits “of.” Revise to the following: “Selection of a third-party expert or experts to review portions of the proposal will be at the discretion of the County.”

17.3, B, 3 & 5: Setbacks for all sites should be 2000 feet. A 500-foot setback for water sources is unacceptable. Water is a precious resource, especially in Colorado, and a reduced setback increases the chances of spills and contamination from O&GFs.

Section B5 is completely unacceptable in that it provides a loophole for O&G development in areas where mineral interests should NOT be sought at all, that is, within mandated setbacks. There should be NO exceptions to setback requirements because implementing these exceptions will endanger health, safety, the environment, and wildlife.

Section 17.3, D, 3, 4, & 5: There is no reason to use a hyphen here with 24 hours and 72 hours, or in subsequent sections with 30 days or 300 feet. The hyphen is used with descriptive information before nouns, such as 50-foot buffer.

A verified leak at an O&GF should be reported IMMEDIATELY. Leaks are hazardous to health, safety, the environment, and wildlife, so the O&GF should be shut down until the leak is repaired. In other words, the provisions of section 5 should be revised as follows to replace 3 & 4: “Equipment leaks pose a safety and health risk to persons, wildlife, and the environment and shall undergo emergency shut down and not be allowed to operate until the operator has provided evidence that the leak has been repaired.”

Leaks, like the spills and releases referred to in Section G, should be dealt with immediately.

Section 17.3, E, 5: The word after “control” should be “strategies.”

In subheading g, revise as “Wipe down drill pipes as they exit the well bore each time.” Or better yet: “Wipe down each drill pipe as it exits the well bore each time.”

Section 17.3, F, 4: Revise to “Locating O&GFs within a Federal Emergency Management Agency (FEMA) designated 100-year floodplain shall not be allowed.” Omit the rest of the sentence. O&GFs located in flood plains are a threat to health, safety, the environment and wildlife.

Section 17.3, F, 6: It is unclear what Section 17.4, D, refers to, and this section 6 seems to permit discharges that can jeopardize health, safety, the environment, and wildlife. Our water supplies must be protected.

Section 17.3, H, 2: The increased noise level allowed between 7:00 a.m. and the next 7:00 p.m., (10) db(A) for a single period of not to exceed fifteen minutes in any one-hour period, approaches and, in industrial settings, surpasses hazardous levels—a definite health and safety concern.

Section 17.3, J, 1: In the second sentence, is “proposed” needed twice?

Section 17.3, K, 3: Why should these dangerous chemicals be left onsite for up to two months after completion of drilling? For health, safety, and environmental and

	<p>wildlife considerations, removal of these chemicals should be an integral part of the shutdown of operations, not an afterthought.</p> <p>Section 17.3, L, 6: Allowing discharges of fracking fluids is hazardous to health, safety, the environment, and wildlife and should be strictly prohibited.</p> <p>Note reads as follows: Environmental and health advocacy groups would like the next section, Well Plugging and Abandonment, to be more extensive and address noticing requirements and inspections after removal. The industry groups noted that this is down hole regulation and therefore not included in the SB 19-181 granted authority.</p> <p>I agree completely with environmental and health advocacy groups.</p> <p>Section 17.3, N, e, reads: Question: Should we include water testing/monitoring for a certain amount of time post plugging/abandoned wells to monitor that they are in sound condition and not leaking into water. This could be a condition of approval for certain sites (e.g., nearing high occupancy buildings, water reservoirs, drinking water wells.)</p> <p>Water testing and monitoring should be required for all sites indefinitely. In Larimer County, the possibilities of future growth and new uses for land with abandoned or plugged wells cannot be ignored. Future owners or developers should have full knowledge of the presence and condition of any wells, no matter how isolated or how far from water sources when abandoned or plugged.</p>
	<p>The Larimer Alliance for Health, Safety and the Environment initially made the following pleas to Larimer County BOCC:</p> <ul style="list-style-type: none"> • Larimer Alliance for Health Safety and the Environment's request for a suspension of permits until SB 19-181 Rulemaking completed. The County Refused. • Larimer Alliance for Health, Safety, the Environment's request to wait to create Larimer County O&G Regulations until the majority of the state's rulemaking is complete, slated for July 2020. The County Refused. <p>As the County insisted on rushing the creation of oil and gas regulations, The Larimer Alliance for Health Safety and the Environment then made significant effort to inform, collaborate, bring expert information and implore that the County would make a sincere attempt to create protective regulations that prioritize health, safety, the environment and wildlife over oil and gas development and continued extraction. In my opinion, the county has not done so and the current draft is both woefully inadequate-threatening our health, safety and environment -- and does not abide by SB19-181.</p> <p>LOGIC and Larimer Alliance for Health, Safety and the Environment (LAHSE) provided the Larimer County Planning Department staff, Matt Lafferty & Lesli Ellis; the Larimer County BOCC, Tom Donnelley, Steve Johnson, and John Kefalas; and the Larimer County Health Department Director, Tom Gonzales strong, protective and very specific recommendations on the first draft of Larimer County Oil and Gas Regulations. In addition, LOGIC and LAHSE provided both a letter with legal direction on "waste and takings" and LAHSE provided a second letter, referencing Kevin Lynch, Esq. senate testimony & peer reviewed articles to the above referenced County Staff and officials, as well as, Larimer County attorneys, Frank</p>

Haug and Jeanine Haag.

The following comments result from a direct comparison of the above documents, as compared to this second draft of the Larimer County Oil and Gas Regulations. I will not retype the requested regulatory changes for each section, but instead refer you to the previously submitted recommendations:

See here: <https://www.larimeralliance.org/resources/logic-la-comments>

1. Did not assert right to deny, reject nor condition any and all permit applications in order to prioritize protection. (This is a continuation of the County's weak and outdated Waste and Takings legal stand.)

2. No comprehensive transparent public process -- throughout the regulations: no resident alerts, etc.

3. Insufficient setback from homes. Every well-pad in Larimer County would subject nearby homes to carcinogenic emissions, as well as the side effects of nose bleeds, vomiting, etc...IN THEIR OWN HOMES & YARDS. BTW: The CDPHE study, found significant short term health effects out to 2000 feet from well pads--. It is WRONG to say it didn't find Long Term effects, as study wasn't looking for long-term-effects.

4. Is woefully insufficient to protect Health Safety Welfare, Environment & Wildlife, does not prioritize as per SB-181.

A. Intent: Does not say "Prioritize." Instead says: "Regulatory framework...that protects public health, safety, and general welfare, protects property rights, protects environment and wildlife, and minimizes adverse effects." This is in direct violation of SB-181.

C. Purpose: Provides for the managed development, installation, maintenance, modification, reclamation and removal "without unnecessarily discriminating against O&G developers, operators or mineral owners." In essence prioritizing protection of O&G industry -- prohibited by SB-181.

Many significant problems persist throughout the regulations that minimize and reduce protections:

- Removal of the chemical disclosure list
- No regulations on vibrations
- No geo-mapping requirements
- weak financial requirements
- allowing well pads in 100 year flood plains
- only "avoids impacts to surface and ground water", instead of "no adverse impacts"
- applicability: draft states that new regulations only apply to new facilities, but spills and emissions and other major aspects of the operation phase of a well site location should be covered in the regulations
- opens the door to exploratory drilling!!!

NO regulations on VIBRATION LEVELS. Vibration is a significant issue for residents near wells.

Specific points of weakness:

17.2

- NO 2000 foot setbacks from homes
- NO Public process of notification of permit application within one mile
- NO Public disclosure of all documents submitted to county
- NO Independent Risk Analysis (except if "complex technical issues")

	<ul style="list-style-type: none"> • NO Public neighborhood meetings 30 days before well-pad hearing • NO Detailed process of submission of materials by operators <p>Leak Detection & Repair: Verified leaks must be reported in 24 hours (Not specified what qualifies. Later in regulations, says "25 gallons"-- Per Matt Lafferty, at Unicorn site ground water/wells is only 6 feet underground. Wouldn't 25 gallons seep down 6 feet & contaminate?</p> <p>Inspection and corrective action only reported to county upon request.</p> <p>Water: "Avoid impacts to surface and groundwater, instead of our recommended, "No adverse effects" allowed.</p> <p>100 year flood plain: "not allowed unless no other location is feasible."</p> <p>Spills and Releases: Only greater than 25 gallon spill must be reported.</p> <p>No requirement to notify public of spills.</p> <p>Noise and Mitigation Inadequate. "Light industrial Standard" can be used -- This is significant noise for residents; we recommended stronger protection for nearby residents.</p> <p>Chemical handling: Much weaker than first draft. Took out the chemical disclosure list that Task Force members had approved in first draft.</p> <p>Well Plugging and Abandonment: Did not require geo-mapping, which is now part of COGCC Flowline Rulemaking Regulations. Instead county regulations only require coordinates of locations for decommissioned wells and any associated gathering or flowlines.</p> <p>Locations of pipelines evaluated on a case-by-case basis. COGCC has specific regulations and more Alternative Siting regulations upcoming this spring.</p> <p>#3 Again, Only calls for Coordinates of all Flowlines, gathering lines, transfer lines, instead of geo-mapping.</p> <p>Public access to this information is obscured and difficult, if not impossible, to find.</p> <p>Financial Protection for County Residents: Very weak. There is only one source for Fees and Security for Reclamation. Unclear process for validating Operator financial foundation & stability.</p>
	<p>Larimer County, Colorado — In advance of a reconvening of the Larimer County Oil & Gas Task Force on Thursday, Jan. 23 in Fort Collins to review the second draft of proposed oil & gas regulations, the Larimer Alliance for Health, Safety & the Environment points to multiple concerns. The county proposes the regulations become part of its 20-year Land Use Plan. This draft shows lack of priority to protect humans, the environment and wildlife, as specified by mandate of the Colorado legislature in SB-181. !In December the Larimer Alliance provided county staff and attorneys with information from multiple legal sources to clarify the definitions of "waste" and "takings". The information supports leaving oil and gas in the ground if public health and safety, the environment, or wildlife would be impacted — each of which are prioritized over oil and gas development. Precedent shows that to produce during a glut is also waste. !</p> <p>The county has not provided citizens with a revenue assessment relating to oil and gas production. This would include figures such as the operators' forecast of royalties, property tax and application fees, along with the cost for independent monitoring of air and water quality, and costs to clean-up existing or future releases of poison. Citizens should not be responsible for these costs. !"It's reasonable to shift some of these costs to industry at the application phase," said Sonia Koetting with the Larimer Alliance. "If our commissioners decide we must do this, it's fair that Larimer County taxpayers know the true picture of allowing this industry to develop here." !Along with a lack of a revenue assessment, the county has not weighed the</p>

	<p>amount of volatile organic compounds that each well represents in light of the overall serious non-attainment of air quality recently assigned to our region by the US Environmental Protection Agency. Each application represents roughly 50 tons more VOCs added to our atmosphere. !Cory D. Carroll, M.D., Chairman of Physicians for Social Responsibility of Colorado, said,!“The air quality on the front range continues to pose hazard to all, especially those with respiratory and cardiac conditions... Fracking rigs in Northern Colorado are a major contributor to local air pollution and ozone on the Front Range. We need to stop the expansion of this industry and clean up emissions from active and inactive well sites via third party monitoring and enforceable regulations.” !The county has not offered how it would be certain that neighborhoods near proposed oil & gas projects are notified. There is also no acceptable plan to notify neighbors of releases and spills. When Extraction Oil recently applied to build the Unicorn well pad, Larimer Alliance canvassed nearby neighborhoods and found very few people were aware of the application.!Also, Larimer Alliance asks that reverse setbacks be included for the sake of transparency in future real estate transactions. Without them, new homeowners would not know a developer chose to build near oil & gas. This transparency should include data on location of existing oil and gas gathering lines. Gathering lines should require a more specific application to verify adequate setbacks from potential explosions. !The county’s proposed rules focus on new locations, but regulations covering issues like noise pollution, vibration, dust, chemical handling, waste disposal, plugging and abandonment, leak detection and repair, and millions of gallons of contaminated water from each well must apply to#all!oil and gas facilities in the county.#!Sara Loflin, Director of the League of Oil & Gas Impacted Coloradans (LOGIC), said, “The primary goal of these regulations should be to#avoid#adverse impacts where possible, not just minimize them. Larimer County needs to recognize their authority to deny applications that harm public health and safety.” !Deadline for the public to comment on the new regulations is Jan. 24 at the county’s website. !For more information or interview, please respond to press@larimeralliance.org. !# # #!</p>
<p>January 23, 2020</p>	<p>THINK ABOUT THIS BEFORE PASSING REGULATIONS THAT HARM PEOPLE, THE ENVIRONMENT AND WILDLIFE: LARIMER COUNTY CITIZENS AND ORGANIZATIONS WILL BE LINING UP TO SUE YOU. THE ONLY QUESTION IS HOW HIGH THE CORRUPTION GOES</p>
	<p>I fully and completely raise in support of a moratorium on drilling and fracking in larimer county.</p>
	<p>The county's recent proposed regulations are woefully inadequate, failing to address health concerns, as well as environmental climate concerns. I find it insulting that this website has beautiful pictures of Larimer County, and yet the county commissioners are failing to protect that landscape and its people. We the citizens must refuse to accept the commission’s blatant disregard for our safety and that of our planet.</p>
	<p>I am writing as a concerned citizen south of Larimer County in unincorporated Boulder County. All Larimer County proposed regulations MUST comply with SB19-181 and put the health and safety of Colorado's citizens, the environment and wildlife above the interests of the Oil and Gas industry. We can no longer afford to foster the development of fossil fuel resources, and the economic interests of such development rarely outweigh the risks to the public during development. The industry is notorious for operating according to business models that rely on regulatory frameworks which do not hinder development and extraction, profit taking followed by selling of assets, bankruptcy, reorganization, and abandonment of wells,</p>

leaving the public to pay for industry waste clean up.

Our fresh water resources are precious, and limited. The team of scientists and researchers at Air Water Gas have provided clear and irrefutable evidence that a percentage of water resources used by the oil and gas industry for hydraulic fracturing are polluted beyond any ability to return the water to the earth's hydrologic cycle, literally removing precious water resources out of an already depleted hydrologic system in Colorado.

Reference: <https://www.airwatergas.org/publications/#quality>

We simply cannot afford to waste water this way. As you may have heard from the oil and gas industry lobby and their lawyers, farmers use many times the water, but the water is naturally returned to the earth and recycled through the biological systems of the farm. Similarly, domestic and other commercial uses of fresh water are returned to the hydrologic cycle through our sewer and septic systems. Not so with the the oil and gas industry's use of hydraulic fracturing "technologies." This technology permanently pollutes much of the water it extracts from our water systems, as flowback from the unconventional extraction process leaves the industry with a liquid that cannot be treated (up to 30% of the water used cannot be treated) and must otherwise be disposed. See National Geographic's excellent article about this

problem: <https://webcache.googleusercontent.com/search?q=cache:7Hl8IA8Of7wJ:h ttps...>

The industry will tell you that they "recycle" much of their water, but as drilling in our region increases, regardless of new technologies to reuse flowback wastewater, we are seeing an intensification of water resource depletion (reference The Intensification of the Water Footprint of Hydraulic Fracturing, Science Advances, August 2018 at <https://advances.sciencemag.org/content/4/8/eaar5982>). And keep top of mind that even as wastewater is "reused" during the drilling process, the industry still lacks the technology to fully return it to the hydrologic cycle, requiring problematic disposal of wastewater and downstream effects such as as seismic events associated with deep well wastewater injection.

Finally, our air quality along the Front Range is abhorrent, in large part due to the astronomical increase over the last decade of oil and gas extraction north and northeast of Boulder County. The Boulder County INSTAAR and CDPHE project collaboration at Boulder Reservoir has been tracking air quality for 3 years and uses near real-time data to determine sources of air pollution experienced in Boulder County. It is clear from the data that the oil and gas industry is a major contributor to Front Range air pollution. Please reference and study: http://instaar.colorado.edu/ar/boulder_reservoir.html

The science is clear, and Larimer County economic interests must not outweigh the risks to human health, and the health of the environment and wildlife, water resource depletion, and air pollution that the Oil and Gas industry presents. The Oil and Gas industry use excellent scientific and engineering technologies to extract resources, leaving your taxpayers with industrial cleanup, and Colorado citizens to cope with health and environmental impacts. Please use all available science and the means afforded Larimer County by SB19-181 to deny any and all applications that harm public health and irreversibly pollute our air and water.

	<p>I would like to ask Larimer officials to deny drilling permits until all SB181 rulemaking is complete.</p> <p>I would like to see stronger protections for public health and natural areas. Currently there are insufficient setbacks, inadequate noise/odor mitigation, no geo-mapping, no vibration rules, non-transparent public process, poor chemical handling plans, and too week financial assurances. I agree with the letter you received from the League of Oil and Gas Impacted Coloradans. We need to prioritize people and nature over oil and gas. The way of the future is renewable energy, so we should be moving funds to creating infrastructure that supports clean air and water.</p>
	<p>I urge my lawmakers to put people and our environment before profits. Personally, I would like to see a ban on all fracking.</p>
	<p>Thank you for the revisions that have been made to the proposed regulations. However, I am particularly concerned that these four issues are continue to be missing from the proposed regulations:</p> <ol style="list-style-type: none"> 1. They are woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as required by State law (SB-181). 2. They do not assert the County's right to deny, reject, nor condition any and all permit applications in order to prioritize these protections. This is a continuation of the County's fear of an industry lawsuit (none of which have been successful since SB-181 was passed). 3. There is no comprehensive, transparent public process – the regulations do not provide for notifications or alerts for families living nearby. When canvassing the neighborhood adjacent to the new proposed 15-well Unicorn Pad near Timnath, we did not find a single homeowner who was aware of development. 4. Insufficient setback from homes. Every well-pad in Larimer County would potentially subject nearby families to carcinogenic emissions, as well as the side effects of nose bleeds, vomiting, etc. in their own homes. A recent CDPHE study found significant short term health effects out as far as 2000 feet from well-pads. (see also the PSR Compendiumof health effects of O&G Development).
	<p>I am a retired nurse and Larimer County resident. I am concerned about the proposed oil/gas regulations for the following reasons:</p> <ul style="list-style-type: none"> • Since a CDPE study found serious short term health effects at 2000 feet from well-pads, these regulations require insufficient setback from homes • The regulations should require a transparent public input process, especially for families living nearby. They do not. • The regulations are extremely insufficient in providing protections for health, safety, welfare, environment, and wildlife. To meet state law, these protections must be prioritized. They are not.
	<p>I have reviewed the second draft of the proposed oil & gas regulations for the County and have significant concerns with it in its current state, based on what SB-181 was very clearly put into place to accomplish. I would appreciate a formal response that indicates how the proposed regulations map to the senate bill and its requirements related to: Protecting Health, Safety, Welfare, Environment, and Wildlife.</p> <p>The draft simply does not offer comprehension of this objective and putting its residents first, nor does it accomplish the similar goals which the public very clearly defined at the onset of the process creating these regulations. These again indicated the same set of priorities (per the many direct responses from Larimer County public). I am not clear where there is a disparity between what the bill has required,</p>

	<p>what residents have very specifically asked for, and what this second draft contains. Whose interests are being prioritized? I suspect it is an industry minority, but again, ask you to please kindly include these details in your formal response.</p> <p>At the highest level, the current language in the proposed regulations is weak and offers many "outs", which defeat the purpose of having any language in place at all.</p> <p>I am also concerned that there is no comprehensive, transparent public process which brings potentially impacted or directly impacted residents into the process. Based on what is being regulated here and the stakes, this is a failure in what thoughtful regulation of such activities should look like. This will certainly result in residents believe the county (its staff & commissioners) has failed them and their families.</p> <p>The ever increasing and improving datasets & modeling available about the impacts of oil & gas activities has made many things clear and actionable, including the impacts on those in close proximity of such activities. The lack of adequate setbacks from homes and even high occupancy buildings, including schools is again a failure of the draft regulations (CHILDREN occupancy in this case). It is irresponsible for the County, with such data available, including the known effects of resultant emissions on health, has not created appropriate setbacks. Please also include in your formal response how this not taking its responsibility seriously with this known data, will not impact the county's financials over time based on lawsuits from residents impacted by the county's negligence.</p> <p>I am looking forward to your responses on the above points, and further revisions to the draft regulations in line with your responsibilities to County residents on this important subject.</p>
	<p>The regulations should require a comprehensive, transparent public process. Right now, they do not provide for notifications or alerts for families living nearby. Setbacks for residential houses should be 2,000 feet, matched with high-occupancy buildings.</p> <p>Due to the above issues, the regulations fail to protect public health as require in CO senate bill 181</p>
<p>January 24, 2020</p>	<p>Reflections on the final O&G Task Force meeting: I would imagine that this has been a fairly disheartening experience for the task force members, as it has been for the public at large. It has been clear from the beginning, and was especially apparent at last night's session, that the county is intent on carrying out its own agenda regardless of public input.</p> <p>We began with a task force that is highly skewed toward participants closely tied to the oil and gas industry. Each session has been rushed, kept on an inflexible schedule geared to completing a sham process in order to meet preset deadlines that are unrealistic for the supposed goal of creating comprehensive and well-considered regulations that meet the specific needs of Larimer County.</p> <p>One of the things that most struck me in last night's meeting was the fact that both industry supporters and public health supporters repeatedly made reference to the need for more specificity in the regulations. The vague language, which once created giant loopholes for the industry to march through, has now, under increased public scrutiny, become a troubling source of uncertainty as operators are no longer able to hide the damage and costs inflicted upon the public and as profit margins are becoming more and more restrictive. And in regards to public health and safety, it is</p>

	<p>clear that these values are not being prioritized. We are stuck with “minimizing negative impacts” rather than “eliminating negative impacts.”</p> <p>For the county, vague language and deference to state standards and mandates, provides a way to cover up both a lack of expertise in a risky (both financially and in terms of health and safety) and complex industrial operation and to presumably minimize political damage.</p> <p>The underlying flaw is that this process has been guided by outdated paradigms. There needs to be recognition that Larimer County is increasingly urban, not the place for dangerous industrial facilities and, thanks largely to the oil and gas operations in Weld County, already afflicted with serious air contamination. We need courageous leadership that recognizes these local changes that should inform our local regulations, and that also acknowledges the fact that at the global level the fossil fuel industry must be phased out as quickly as possible. In the 21st century, we need leaders who are willing to work toward a speedy and just transition away from 20th century energy. We should be talking about how to protect the people, the environment, wildlife and the planet and how to provide compensation to mineral rights owners.</p>
	<p>The "Larimer Task Force's" regulation proposals are totally inadequate and incomplete. They do not protect the public health and welfare. The Task Force should stand down until the State of Colorado formalizes their regulations. At that point, a new task force, with real public input, should rewrite the County's regulations completely.</p>
	<ul style="list-style-type: none"> • The regulations are woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as required by State law (SB-181). • The regulations do not assert the County's right to deny, reject, nor condition any and all permit applications in order to prioritize these protections. This is a continuation of the County’s fear of an industry lawsuit (none of which have been successful since SB-181 was passed). • The regulations require no comprehensive, transparent public process – the regulations do not provide for notifications or alerts for families living nearby. When canvassing the neighborhood adjacent to the new proposed 15-well Unicorn Pad near Timnath, we did not find a single homeowner who was aware of development. • The regulations require insufficient setback from homes. Every well-pad in Larimer County would potentially subject nearby families to carcinogenic emissions, as well as the side effects of nose bleeds, vomiting, etc. in their own homes. A recent CDPHE study found significant short term health effects out as far as 2000 feet from well-pads.
	<p>These new regulations for oil and gas development in Colorado are unacceptable and inadequate. We as citizens are going to require setbacks from homes and schools. Research confirms that there are negative health effects from having oil-and-gas developments near where people live, work and go to school. It is time for you to put some TEETH into these regulations, instead of giving a rubber stamp to the oil and gas industry.</p>
	<p>county they must do much more to protect the health and safety of Larimer residents and the environment.</p>
	<p>The revised regulation looks GOOD. Is this another attempt by the liberal Denverite's to halt oil and gas production BEFORE they have a safe, reliable, affordable method of heating our homes and powering our automobiles?</p>

	The proposed regulations are woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as required by State law (SB-181).
	As a longtime CO resident and visitor of your lovely county: Please slow this process down; make this process transparent with REAL public input; and STOP negotiating away the health and safety of Larimer residents! Stay strong on oil & gas regulations.
	Protecting the health and safety of one's constituents is the primary responsibility of every "public servant". The regulations being proposed don't seem to have that as a priority. Please ensure that the public has an adequate opportunity to comment on regulatory proposals, especially those regarding residents' long-term health concerns.
	The proposed oil and gas regulations are very inadequate. You must consider the rulings in SB-181, provide for adequate public input and, most important, mandate 2000 ft setbacks from homes and occupied buildings. The adverse health effects of drilling are directly related to the distance of people from the well site.
	You can't drink oil, you can't eat gas, once it's all gone and getting it has ruined everything else, then what? Please don't frack Larimer County, I love to have clean water, and I am a big fan of not having earthquakes. Why not build a solar farm instead?
	I have lived and worked near fracking pads, and they do have effects on those near them. A natural gas smell permeates the air, you suffer from constant headaches, and it is something that should be nowhere near our homes and schools.
	SLOW THE PROCESS DOWN! And protect the people who live in the communities, which includes my family, and the environment! Make this process transparent with REAL public input, which is NOT happening. You are acting in the interest of big corporations who could care less about our community. AND STOP negotiating the health and safety of Larimer residents! Period. I agree with the following: 1. The proposed regulations are woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as required by State law (SB-181). 2. The proposed regulations do not assert the County's right to deny, reject, nor condition any and all permit applications in order to prioritize these protections. This is a continuation of the County's fear of an industry lawsuit (none of which have been successful since SB-181 was passed). 3. The proposed regulations require no comprehensive, transparent public process – the regulations do not provide for notifications or alerts for families living nearby. When canvassing the neighborhood adjacent to the new proposed 15-well Unicorn Pad near Timnath, we did not find a single homeowner who was aware of development. 4. The proposed regulations fail to address or provide any public process on Larimer County open space! 5. The proposed regulations fail to address any setback from homes, schools, or playgrounds. A recent CDPHE study found significant short term health effects out as far as 2000 feet from well-pads, and prior to that study, Tri-County Health recommended to the Adams County Commission at least a quarter-mile setback from all homes and at least 2,500 feet from sensitive populations.

	<p>It is time to put public and environmental health first. I urge public officials making these decisions to consider the permanent and devastating effects they will be creating for residents health, property values, water and air quality as well as wildlife and environmental effects. It is time to stand up to the fracking industry.</p>
	<p>The proposed regulations that you are considering adopting are woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as they do not prioritize those protections as required by State law (SB-181).</p> <p>The proposed regulations do not assert the County's right to deny, reject, nor condition any and all permit applications in order to prioritize these protections. This is a continuation of the County's fear of an industry lawsuit (none of which have been successful since SB-181 was passed).</p> <p>The proposed regulations require no comprehensive, transparent public process – the regulations do not provide for notifications or alerts for families living nearby. When canvassing the neighborhood adjacent to the new proposed 15-well Unicorn Pad near Timnath, we did not find a single homeowner who was aware of development.</p> <p>The proposed regulations fail to address or provide any public process on Larimer County open space!</p> <p>Apparently the proposed regulations fail to address any setback from homes, schools, or playgrounds. A recent CDPHE study found significant short term health effects out as far as 2000 feet from well-pads, and prior to that study, Tri-County Health recommended to the Adams County Commission at least a quarter-mile setback from all homes and at least 2,500 feet from sensitive populations.</p> <p>As protectors of Larimer County people and wildlife, and as stewards of the future of this beautiful land, I urge you to courageously adopt strong and positive protective measures for your county. Never again will elected officials have such a good chance to defend your county from the pillaging and polluting oil and gas companies. Please use this time wisely and protect the land for the future. We need to leave the fossil fuels in the ground if our grandchildren are to have a livable future. This is the time to take such action for your county. We are counting on your wise stewardship.</p>
	<p>The proposed regulations are woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as required by State law (SB-181).</p> <p>The proposed regulations do not assert the County's right to deny, reject, nor condition any and all permit applications in order to prioritize these protections. This is a continuation of the County's fear of an industry lawsuit (none of which have been successful since SB-181 was passed).</p> <p>The proposed regulations require no comprehensive, transparent public process – the regulations do not provide for notifications or alerts for families living nearby. When canvassing the neighborhood adjacent to the new proposed 15-well Unicorn Pad near Timnath, we did not find a single homeowner who was aware of development.</p> <p>The proposed regulations fail to address or provide any public process on Larimer County open space!</p> <p>As of last night the proposed regulations fail to address any setback from homes, schools, or playgrounds. A recent CDPHE study found significant short term health</p>

	effects out as far as 2000 feet from well-pads, and prior to that study, Tri-County Health recommended to the Adams County Commission at least a quarter-mile setback from all homes and at least 2,500 feet from sensitive populations.
	<p>I am adamantly opposed to any regulation that doesn't include setbacks of at least 1000 feet from schools, parks, medical facilities and residential neighborhoods. I actually would prefer setbacks of at least 2000 feet.</p> <p>Truth be told, I would like to see all drilling/fracking banned in Larimer County but realize this is just a pipe dream.</p> <p>This board is disregarding the health and well-being of the citizens of Larimer county and instead are merely rubber stamping the will of the oil and gas industry with these proposals.</p>
	<p>Colorado must move as quickly as possible toward 100% renewable energy to reverse the effects of climate change, before our planet is uninhabitable. All new fracking wells must be banned. Period. There is no such thing as negotiating with oil and gas companies, who are only concerned with their bottom line, and not with the health and safety of Colorado residents. Oil and gas companies must look toward the future and invest in renewable energy, so we will no longer need oil and gas! The technology is available, we just need to invest in it, at both the government and private, corporate level. Shut the oil and gas companies down, if they are not willing to invest in renewable energy. Coloradans want to live with clean air and water. I guarantee that none of these oil and gas company executives live near fracked wells.</p>
	The health and safety of Larimer County residents should be your priority. Your "regulations" seem inadequate.
	<p>I am very concerned that public safety is being ignored, and that all of our health is at risk.</p> <p>The proposed regulations are woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as required by State law (SB-181).</p> <p>The proposed regulations do not assert the County's right to deny, reject, nor condition any and all permit applications in order to prioritize these protections. This is a continuation of the County's fear of an industry lawsuit (none of which have been successful since SB-181 was passed).</p> <p>As of last night the proposed regulations fail to address any setback from homes, schools, or playgrounds. A recent CDPHE study found significant short term health effects out as far as 2000 feet from well-pads, and prior to that study, Tri-County Health recommended to the Adams County Commission at least a quarter-mile setback from all homes and at least 2,500 feet from sensitive populations.</p>
	<ul style="list-style-type: none"> - The proposed regulations are woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as required by State law (SB-181). - The proposed regulations do not assert the County's right to deny, reject, nor condition any and all permit applications in order to prioritize these protections. This is a continuation of the County's fear of an industry lawsuit (none of which have been successful since SB-181 was passed). - The proposed regulations require no comprehensive, transparent public process – the regulations do not provide for notifications or alerts for families living nearby.

	<p>When canvassing the neighborhood adjacent to the new proposed 15-well Unicorn Pad near Timnath, we did not find a single homeowner who was aware of development.</p> <ul style="list-style-type: none"> - The proposed regulations fail to address or provide any public process on Larimer County open space! - As of last night the proposed regulations fail to address any setback from homes, schools, or playgrounds. A recent CDPHE study found significant short term health effects out as far as 2000 feet from well-pads, and prior to that study, Tri-County Health recommended to the Adams County Commission at least a quarter-mile setback from all homes and at least 2,500 feet from sensitive populations. - I may not live in Larimer County, but the last time I checked, it's on the same planet I live on!
	<p>New question or comment submitted on to Oil and Gas Planning on Friday, January 24, 2020 - 8:28am</p> <p>Information Submitted:</p> <p>Name Marge Norskog Address / Parcel Number 900 whalers way Email marge.norskog@gmail.com Phone 970-690-6122 Question/Comment</p> <p>As of last night the proposed regulations fail to address any setback from homes, schools, or playgrounds. A recent CDPHE study found significant short term health effects out as far as 2000 feet from well-pads, and prior to that study, Tri-County Health recommended to the Adams County Commission at least a quarter-mile setback from all homes and at least 2,500 feet from sensitive populations.</p> <p>Commissioners — please slow this process down; make this process transparent with REAL public input; and STOP negotiating the health and safety of Larimer residents! The daily air advisories for northern Colorado report significantly poorer air in Weld County on a regular basis — we are stretched for water already without considering the demands to fracking — oil and gas just looks at their maps to decide where to place wells, we depend on our county leadership to temper their requests with other considerations. Please — show leadership and puzzle out a way to be responsible ... like you are with every other commercial request. O&G shouldn't get a pass.</p>
	<p>Larimer County should slow this process down; make this process transparent with REAL public input; and STOP negotiating the health and safety of Larimer residents!</p> <p>The proposed regulations are woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as required by State law (SB-181).</p> <p>The proposed regulations do not assert the County's right to deny, reject, nor condition any and all permit applications in order to prioritize these protections. This</p>

	<p>is a continuation of the County’s fear of an industry lawsuit (none of which have been successful since SB-181 was passed).</p> <p>The proposed regulations require no comprehensive, transparent public process – the regulations do not provide for notifications or alerts for families living nearby. When canvassing the neighborhood adjacent to the new proposed 15-well Unicorn Pad near Timnath, we did not find a single homeowner who was aware of development.</p> <p>The proposed regulations fail to address or provide any public process on Larimer County open space!</p> <p>As of last night the proposed regulations fail to address any setback from homes, schools, or playgrounds. A recent CDPHE study found significant short term health effects out as far as 2000 feet from well-pads, and prior to that study, Tri-County Health recommended to the Adams County Commission at least a quarter-mile setback from all homes and at least 2,500 feet from sensitive populations.</p> <p>the proposed regulations are inadequate and endanger the citizens of Larimer county who should be its first priority, not the gas companies that are ruining our health, quality of life and who devastate our infrastructure for their profit whithout paying their fair share.</p>
	<p>I believe I remember that the citizens of Fort Collins voted against any drilling in the town area. Now they should have the right to vote on whether they want any drilling in the entire county. If the government of the cities, towns, counties and states will no longer protect the health of our communities against oil and gas drilling then I guess the people must take a stand. This city builds schools, courts, and lets large apartment complexes be built with out including solar as a requirement , that is unacceptable. I am not sorry that I am older and not able to march, and get out to meetings where I may have to stand and wait but I wish for my voice to be heard. I have children and grandchildren who live here.</p>
	<p>The proposed regulations are woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as required by State law (SB-181).</p> <p>The proposed regulations do not assert the County's right to deny, reject, nor condition any and all permit applications in order to prioritize these protections. This is a continuation of the County’s fear of an industry lawsuit (none of which have been successful since SB-181 was passed).</p> <p>The proposed regulations require no comprehensive, transparent public process – the regulations do not provide for notifications or alerts for families living nearby. When canvassing the neighborhood adjacent to the new proposed 15-well Unicorn Pad near Timnath, we did not find a single homeowner who was aware of development.</p> <p>The proposed regulations fail to address or provide any public process on Larimer County open space!</p> <p>As of last night the proposed regulations fail to address any setback from homes, schools, or playgrounds. A recent CDPHE study found significant short term health effects out as far as 2000 feet from well-pads, and prior to that study, Tri-County Health recommended to the Adams County Commission at least a quarter-mile setback from all homes and at least 2,500 feet from sensitive populations.</p> <p>BAN FRACKING</p>
	<p>The proposed regulations are woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as required by</p>

	<p>State law (SB-181). The proposed regulations do not assert the County's right to deny, reject, nor condition any and all permit applications in order to prioritize these protections. This is a continuation of the County's fear of an industry lawsuit (none of which have been successful since SB-181 was passed). The proposed regulations require no comprehensive, transparent public process – the regulations do not provide for notifications or alerts for families living nearby. When canvassing the neighborhood adjacent to the new proposed 15-well Unicorn Pad near Timnath, we did not find a single homeowner who was aware of development. The proposed regulations fail to address or provide any public process on Larimer County open space! As of last night the proposed regulations fail to address any setback from homes, schools, or playgrounds. A recent CDPHE study found significant short term health effects out as far as 2000 feet from well-pads, and prior to that study, Tri-County Health recommended to the Adams County Commission at least a quarter-mile setback from all homes and at least 2,500 feet from sensitive populations.</p>
	<p>I am deeply concerned about the effects of fracking on all our Front Range communities, and especially in Larimer County, where drilling is most rampant. Residents of the area, and Coloradans in general, are the true stakeholders here, and protecting the health and well-being of all living things, including those of the future, is of utmost important. There are many reasons why fracking is deeply embedded into our energy sourcing, but we all know that we can't continue to jeopardize our precious environment and endanger the health of its residents. Please take care, and develop regulations that will ensure a healthy and thriving life for all.</p>
	<p>The proposed regulations are woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as required by State law (SB-181). The proposed regulations do not assert the County's right to deny, reject, nor condition any and all permit applications in order to prioritize these protections. This is a continuation of the County's fear of an industry lawsuit (none of which have been successful since SB-181 was passed). The proposed regulations require no comprehensive, transparent public process – the regulations do not provide for notifications or alerts for families living nearby. When canvassing the neighborhood adjacent to the new proposed 15-well Unicorn Pad near Timnath, we did not find a single homeowner who was aware of development. The proposed regulations fail to address or provide any public process on Larimer County open space! As of last night the proposed regulations fail to address any setback from homes, schools, or playgrounds. A recent CDPHE study found significant short term health effects out as far as 2000 feet from well-pads, and prior to that study, Tri-County Health recommended to the Adams County Commission at least a quarter-mile setback from all homes and at least 2,500 feet from sensitive populations.</p>
	<p>People's safety first</p>
	<p>I would like to comment on the oil and gas regulations. The proposed regulations are grossly inadequate to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as required by State law (SB-181).</p>

	<p>The proposed regulations do not assert the County's right to deny, reject, nor condition any and all permit applications in order to prioritize these protections. This is critical.</p> <p>The proposed regulations require no comprehensive, transparent public process – the regulations do not provide for notifications or alerts for families living nearby. When canvassing the neighborhood adjacent to the new proposed 15-well Unicorn Pad near Timnath, we did not find a single homeowner who was aware of development. This is unacceptable!</p> <p>The proposed regulations fail to address or provide any public process on Larimer County open space! Again, unacceptable.</p> <p>There is still nothing in the proposed regulations about failing to address any setback from homes, schools, or playgrounds. A recent CDPHE study found significant short term health effects out as far as 2000 feet from well-pads, and prior to that study, Tri-County Health recommended to the Adams County Commission at least a quarter-mile setback from all homes and at least 2,500 feet from sensitive populations.</p> <p>Larimer County must slow this process down; make this process transparent with REAL public input; and STOP negotiating the health and safety of Larimer residents!</p>
	<p>The oil and gas regulations under current consideration by the Larimer County Commissioners are obviously favorable to oil and gas development in Larimer County and do not meet the mandate of SB-181 to protect the environment, wildlife and public health. First, the setbacks are not sufficient to protect residents, school children, and water resources. The setbacks should be 2-fold higher than what is being proposed. There is no air monitoring by an independent organization and no mention of how it is to be funded. Specifically, there is no mention of continuous monitoring of methane, a potent greenhouse gas, by an independent agency or contractor throughout all aspects of the infrastructure including gathering lines, flow lines and all other pipelines in the system. There is no consideration of monitoring the release of radionuclides such as radium or radon gas. The circumventing of the setback to protect mineral rights is unacceptable. Additionally, there is no mention of where the funding for new infrastructure (roads, water pipelines) is coming from and the cost to oil and gas companies for the enormous amount of water they are taking out of the hydrogeologic cycle and turning into toxic waste. Independent assessment of the chemicals they are using in the drilling process and in the flowback is also not mentioned and we are expecting oil and gas companies to be forthright and honest in their reporting. Public health and wildlife welfare require independent chemical analyses of the fracking fluid used and the flowback liquid returning to the surface. There should be specific regulations addressing the fate of the fracking waste, i.e., whether it can be transported to landfills and how it can be transported. Oil and gas is a dying industry. Colorado does not want to be left with an enormous number of leaking, abandoned wells requiring massive clean-up paid for by the taxpayers of this state. We have a climate crisis, expansion of oil and gas is a reckless and irresponsible approach to protecting the future of this planet.</p>
	<p>It is an empirical truth that to be healthy humans need a healthy environment. Therefore, it is inherently immoral to risk damaging the environment by callously regulating hydraulic fracturing, especially if only to provide profit for a few. Err on the side of health in the battle of people over profits</p>
	<p>I understand that the oil and gas lobby is very strong and well-funded, but the only entity capable of protecting the public from unsafe and destructive extraction is the government. We rely on you. I rely on you. I wish oil and gas extraction would be</p>

	stopped, but I know this is not a realistic short term goal. What I want is for you to regulate effectively, regulate methane leaks, levy fines sufficient to change industry behavior when extraction goes wrong, and most of all to ensure that extraction is not allowed in areas that will harm people and wildlife
	Suggestion: Take a drive over near Timnath and roll down your window. We considered moving to the area and were completely horrified by the smell of the chemicals in the air. Despite Bethke being a great school, my heart goes out to those families who are raising children in that air. Study the health effects of that area, you've got a perfect case study before you move forward into a blind spot. Air quality lacks on the Front Range. Jobs for our economy? Who is getting these jobs? Mostly oil guys from out of state. Think about public health. In the future, it will be your tax dollars paying for the public's illnesses.
	Please do not frack! It has caused many people and animals to get sick. We know that it has caused animals to die and people to get very ill. It contaminates the air, the land, and water. It must STOP if we want a clean environment!
	Why is there no proper consideration being given for protection of residences, schools, and other groups who may be adversely affected by fracking?
	I am very alarmed at the disregard for public safety by the fracking industry. It is horrible that you are ignoring the will of the voting public, to protect our health and safety, by setting back the fracking wells 2500 feet. This is very bad. We voted to keep fracking out of our communities, and away from our schools and residential areas. Colorado is a huge state. There is absolutely no reason for you to allow the fracking industry to DICTATE to our community. This is not Russia!!!! I am opposed to any fracking wells anywhere in our community, especially when they threaten the health and safety of our citizens!!!!
	Remember the Rule of the Four P's: Please Put People over Profits!! Include at least a 2500' Setback!!
	Regulations need to be stronger to protect our beautiful county. The health of its citizens should be first concern!
	How many health problems is your reelection worth?
	<p>As a long-time resident who is now experiencing asthma AND lymphoma, I implore Larimer County to strengthen protection. Protect our lands and mostly our children. Our votes are watching.</p> <p>The proposed regulations are woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as required by State law (SB-181).</p> <p>The proposed regulations do not assert the County's right to deny, reject, nor condition any and all permit applications in order to prioritize these protections. This is a continuation of the County's fear of an industry lawsuit (none of which have been successful since SB-181 was passed).</p> <p>The proposed regulations require no comprehensive, transparent public process – the regulations do not provide for notifications or alerts for families living nearby. When canvassing the neighborhood adjacent to the new proposed 15-well Unicorn Pad near Timnath, we did not find a single homeowner who was aware of the development.</p> <p>The proposed regulations fail to address or provide any public process on Larimer County open space!</p> <p>As of last night, the proposed regulations fail to address any setback from homes, schools, or playgrounds. A recent CDPHE study found significant short term health</p>

	effects out as far as 2000 feet from well-pads, and prior to that study, Tri-County Health recommended to the Adams County Commission at least a quarter-mile setback from all homes and at least 2,500 feet from sensitive populations.
	As of last night the proposed regulations fail to address any setback from homes, schools, or playgrounds. A recent CDPHE study found significant short term health effects out as far as 2000 feet from well-pads, and prior to that study, Tri-County Health recommended to the Adams County Commission at least a quarter-mile setback from all homes and at least 2,500 feet from sensitive populations
	I feel it is so very important that our land, our water and our air should remain clean! I work in the health field and have heard numerous stories of people with lung dysfunctions who are close to the fracking and Weld County. This is serious stuff folks for ALL of our health and well-beinf, so do something about it!!
	<p>I am commenting on the Larimer County proposed draft regarding Oil and Gas on operators. Here are my reasons:</p> <p>The proposed regulations are woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as required by State law (SB-181).</p> <p>The proposed regulations do not assert the County's right to deny, reject, nor condition any and all permit applications in order to prioritize these protections. This is a continuation of the County's fear of an industry lawsuit (none of which have been successful since SB-181 was passed).</p> <p>The proposed regulations require no comprehensive, transparent public process – the regulations do not provide for notifications or alerts for families living nearby. When canvassing the neighborhood adjacent to the new proposed 15-well Unicorn Pad near Timnath, we did not find a single homeowner who was aware of development.</p> <p>The proposed regulations fail to address or provide any public process on Larimer County open space!</p> <p>As of last night the proposed regulations fail to address any setback from homes, schools, or playgrounds. A recent CDPHE study found significant short term health effects out as far as 2000 feet from well-pads, and prior to that study, Tri-County Health recommended to the Adams County Commission at least a quarter-mile setback from all homes and at least 2,500 feet from sensitive populations.</p>
	<p>I live in Larimer County (Windsor, Co) about 150 yards from the Larimer/Weld County line. When we moved here, we had no idea that in a few years O&G development would impact our neighborhood. The first operation was about 1500 feet from our home, the next was about 2,000 feet away, and then a third operation was planned about 1,000 feet away. The third one would have been 28 wells and about 45 tanks. After the residents of several adjacent subdivisions spent thousands of dollars on legal assistance, met with public officials from the governor on down, and held negotiations with the O&G company and a local developer/mineral owner, that third site was moved. Those of us in the neighborhoods along the Weld/Larimer line know what it is like to live in close proximity to O&G development. When the afore-mentioned wells were drilled, I would sit in my office at home and the pictures would vibrate on the wall. We could hear, feel the rigs day and night for weeks. At times (usually nights) we would have foul smells hanging over our neighborhood. Hundreds and hundreds of trucks filled County Road 13 day and night. That road became very rough and had to be repaved. More wells are underway in Windsor - we still have the trucks, we still have the smells and the fear of how close will the next one be.</p>

	<p>Two years ago last December, we were in our kitchen visiting with guests when I heard/felt something that caused me to go out into the garage thinking a shelf had collapsed. I didn't find anything askew, but the next morning the news reported that the Stromberger well had exploded, severely injuring a worker and the fire burned for many hours. That well was 4 miles away! These facilities don't belong in residential areas.</p> <p>I don't know if any of the Commissioners or the Task Force have lived in close proximity to O&G development - if not, I hope they are getting input from residents who have first hand experience living near O&G facilities. It is unpleasant. These rules must be drafted to protect the public. There must be improved notification of where O&G development can, or may, occur so that people can have the knowledge to avoid living in those areas. And there must be setbacks to keep these facilities at least 2,000 away from homes, schools and other human occupied spaces. Conversely, homes should not be built within 2,000 feet from existing O&G facilities. I hope drilling in Larimer County will be suspended until rules can be adopted that adequately protect the health, safety, and welfare of the people in the County.</p>
	<p>The proposed regulations are woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as required by State law (SB-181).</p> <p>As of last night the proposed regulations fail to address any setback from homes, schools, or playgrounds. A recent CDPHE study found significant short term health effects out as far as 2000 feet from well-pads, and prior to that study, Tri-County Health recommended to the Adams County Commission at least a quarter-mile setback from all homes and at least 2,500 feet from sensitive populations.</p> <p>Larimer County must slow this process down; make this process transparent with REAL public input; and STOP negotiating the health and safety of Larimer residents!</p>
	<p>Public safety should come first not the oil and gas companies in our beautiful Colorado. We need to regulate them to keep the public safe and Colorado pristine.</p>
	<p>The people most impacted are not to have a say! Whose logic is this? Of course there need to be reasonable set-backs to avoid homes, schools and businesses. We have all seen the terrible consequences of non-regulation in other states. Is Colorado going to be the next with rampant pollution and illness?</p>
	<p>There are so many reasons to deny these permits it is difficult to begin, or comment, without writing an essay: the ever faster approaching climate disaster threatening all life on Earth; and, the immediate health and water quality detriments to people and animals living in proximity to these proposed developments should be enough to stop them. But, no, governments are so addicted to the taxes and other monies derived from these developments that, like a drug pusher or prostitute on our streets, it is willing to take the risks that such addictive profits reap that it is willing to kill itself, and us with it, for those profits. This addictive, threatening behavior can no longer be tolerated. Unfortunately, it will be up to us, the effected citizens, to put a stop to it in one way or another. Our very lives are in dire threat to the monster that is the fossil fuel industry, and by those who run and our governments who are</p>

	entrusted to manage it. If government cannot, or will not, perform with the best interests of posterity as its supreme goal then we need a new government which can and will!
	The first concern should be the health of the county residents. This process should be thorough not hurried, transparent not veiled, truth filled not lobbyist led. Otherwise it's a failure of government to protect.
	The draft regulations do not protect public health or property owners rights based on the current science. Set back distances are insufficient to prevent the negative health outcomes identified in affected communities, the notification process and timeline is insufficient, and the recourse for property owners whose land will be impacted by oil and gas access to mineral rights are insufficient.
	<p>I am concerned that the county is not complying with the State law (SB-181). The regulations are insufficient to protect Health, Safety, Welfare, Environment and Wildlife as the regulations do not prioritize these protections as required by the law. The proposed regulations do not stand up for the County's right to deny, reject, nor condition any and all permit applications in order to prioritize these protections. The county should stand up to the threat of an industry lawsuit! (The county has the law on its side)</p> <p>The proposed regulations do not contain comprehensive and transparent public process as they do not provide for notifications or alerts for families living nearby. The regulations regarding setback from homes is insufficient, subjecting nearby families to carcinogenic emissions, nose bleeds, vomiting and more symptoms. The county needs to develop regulations that truly follow SB-181. The county needs to protect its citizens' health and safety. The county needs to protect our environment and wildlife. These are the priorities as stated in the law.</p>
	<p>The Larimer Alliance and local residents are extremely concerned about the draft regulations and oil and gas operators plans to frack Larimer County:</p> <p>The proposed regulations are woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as required by State law (SB-181).</p> <p>The proposed regulations do not assert the County's right to deny, reject, nor condition any and all permit applications in order to prioritize these protections. This is a continuation of the County's fear of an industry lawsuit (none of which have been successful since SB-181 was passed).</p> <p>The proposed regulations require no comprehensive, transparent public process – the regulations do not provide for notifications or alerts for families living nearby. When canvassing the neighborhood adjacent to the new proposed 15-well Unicorn Pad near Timnath, we did not find a single homeowner who was aware of development.</p> <p>The proposed regulations fail to address or provide any public process on Larimer County open space!</p> <p>As of last night the proposed regulations fail to address any setback from homes, schools, or playgrounds. A recent CDPHE study found significant short term health effects out as far as 2000 feet from well-pads, and prior to that study, Tri-County Health recommended to the Adams County Commission at least a quarter-mile setback from all homes and at least 2,500 feet from sensitive populations.</p>
	It has LONG been know with the nature of horizontal fracking that the casings will fail. That leads to contamination of the soil and water. PLEASE consider this as you buy the story from oil and gas that it is all safe. In addition, there are new reports (though the American Petroleum Institute warned about this in 1982) that the

	<p>radioactivity that the workers are exposed to is extremely harmful. NO JOB IS WORTH BONE CANCER.</p> <p>This toxic water is allowed not only to have worker exposure but is trucked on the roads of our county now and has been witnesses leaking onto the roads.</p> <p>This is a great concern and should seriously be addressed. They take the solid waste to UNLINED LANDFILLS. (North Weld Landfill near Ault) That is not the way it should be. There will be leaching into the ground over a period of time.</p> <p>See articles below as this is a true issue that workers and citizens face.</p>
	<p>It is now clear that better regulation and control of leaking methane is vitally important to human health and the limiting of global warming. Keep the brakes on in Colorado!</p>
	<p>Thank you for considering public comments and giving me the opportunity to add my concerns regarding the 2nd draft of LC Oil and Gas Regulations.</p> <p>The oil and gas industry needs and can be held to a higher standard to stop accidents and toxic air and water releases. Yes, it will cost more time and money, and maybe some inventions but it can be done with increased vigilance, inspections, research and problem solving. I ask you to set the standards high and perhaps inspire new technology to truly protect public health, the environment, and wildlife.</p> <p>One thing not addressed in this document is the need to the radioactivity in the brime. This is especially important for the health of the workers.</p> <p>Section A. 17. INTENT:</p> <p>1. Right off at the get go in 17.1.A . Intent reads " ...minimizes adverse impacts," which means to me that some adverse impacts will be allowed. More must be asked of the Oil & Gas (O&G) industry to ensure that public health, safety, wildlife, and the environment must be protected.</p> <p>I suggest the removal of "minimizes adverse impacts" and ending the sentence after "wildlife."</p> <p>Adverse impacts qualify for rejecting any O&GF project under SB181 since they are incompatible with protecting health, safety, welfare, wildlife and the environment.</p> <p>PURPOSE:</p> <p>2. 17.C.1. Transparency in all O&G development in necessary and welcomed. Please consider a process that includes press releases by both the O&GF and Larimer County. Also include emails to affected and interested parties.</p> <p>3. 17.C.2. Drop "without unreasonable discriminating against oil and gas developers and operators, or mineral interest owners," as it is unnecessary and implies that discrimination exists.</p> <p>4. 17.C.4. Again, remove "minimizing the adverse impacts of O&GF". Hold O&GF to a higher more protective standard for safety and health.</p> <p>17.2. - Review Procedures and Required Permits.</p> <p>5. 17.2.C. Should not permits for water sources be required?</p> <p>17.3. - Standards Required for all Oil and Gas Facilities.</p> <p>6. 17.3.B.3.a. The minimum setbacks to residential buildings need to be at lease</p>

	<p>2,500 feet.</p> <p>*The CDPHE’s most recent study found living within 2,000 feet of O&GF are associated with adverse health impacts. Multiple other studies support greater setbacks, including:</p> <p>* The CHEM Trust Fracking Report reports one preliminary study has demonstrated an increased incidence of low birth weight in mothers living within 2.5km (8,200 ft.) of oil or gas fracking operations in Pennsylvania.</p> <p>* Low birth weight, pre-term birth and restricted growth rate in the womb are all problems linked to air pollution. Particulate matter, benzene, nitrogen oxides and ozone are all pollutants produced through fracking operations.</p> <p>* An epidemiological study in a gas-producing area of Colorado has also found an increased risk of congenital heart and neural tube defects for mothers living within ten miles of a gas well. https://chemtrust.org/frackingreport/</p> <p>7. 7.3.B.3.c. A greater setback should be set for water wells.</p> <p>8. 7.3.C Air Quality: Base line air quality assessment need to be established before any O&G development. I urge and support the County purchasing an infrared camera altho this should be standard operating procedure for O&GF for their survelience and inspections. I urge the County to collaborate with Front Range County cities to establish 24 hour, 7 day continuous air monitoring.</p> <p>9. 7.3.C.6. O&GF operations should cease on posted Air QualityAction Advisory Days by CDPHE. Fort Collins ozone ratings are the highest in the state. The Front Range has been out of Federal compliance for many years. Ozone is associated with adverse health outcome, including mortality and morbidity. It damages lungs and is found to contribute to strokes and heart attacks.</p> <p>10. 7.3.C.6.g. Cease operations with high potential to emit VOCs and NOx. Again, hold O&GF to a strict standard.</p> <p>11. 7.3.D.4. Verified leaks shall be repaired within 12 hours of detection. If not repaired within 24 hours O&GF shall shut down. O&GF must be held to a higher and reachable standard.</p> <p>12. 7.3.G. Spills and Releases: Very good.</p> <p>13. 7.3.D.6. An established monthly leak inspections schedule routine with notification to LCDHE and LGD should they wish to observe.</p>
	<p>After attending the January 23rd Oil and Gas Task Force meeting, my third meeting to attend, I feel I need to make specific comments on the proposal and on the meeting process. This is our community’s opportunity to protect our friends and neighbors. There should be no need to rush. The objective should be to get it done right not just done by a certain artificial deadline.</p> <p>Section 17.1, C, 7-Minimize and mitigate the extent and severity of adverse impacts that cannot be avoided. [If there are adverse impacts, the permit should be denied.</p>

	<p>Do not allow this wiggle room for a well site to adversely impact our community.]</p> <p>Section 17.3, B, 3-To achieve the intent and purpose of this Section 17, the following minimum setbacks for O&GFs shall be required, unless more restrictive setbacks are required by the rules of the COGCC:</p> <p>A. 1,000 ft. setback from a residential building or platted residential lot.[This should be greater, 2,500 ft. for the safety of our county residents]</p> <p>B. 2,000 ft. setback from a high occupancy building including schools, registered day cares and nursing homes. [This should be greater, 2,500 ft. for the safety of our county residents]</p> <p>C. 500 ft setback from a water body or designated outside activity area. [This should be greater, 1000 ft. for the safety of our watershed]</p> <p>Section 17.3, C, This section has no mention of monitoring of air quality. This should be done regularly by an independent firm. How will we confirm compliance without this?</p> <p>As with previous meetings I attended, I felt that the whole process was rushed. Members of the committee were not allowed enough time to comment on sections before being asked to vote. If you run out of time you need to schedule another meeting or plan for a longer session. I wonder what the point of a citizen committee that is not allowed enough time to voice their opinions.</p>
	<p>Oh, make unavailable for discussion the current most important threat to the citizens? Dumb</p>
	<p>I am concerned that the Oil and Gas Taskforce rules for new applications does not include a public comment or notification process. Also there is no indication that public health and safety, and protection of wildlife and the environment are set as priorities when deciding whether the proposed plans will be accepted. This is the reason for the Task Force meeting to make new rules and should be stated as the number 1 priority. I do not see the setback limits, but they should be more than 2000 ft. from any occupied space.</p> <p>Please take time to clearly outline these aspects in the rules!!</p>
	<p>The Oil and Gas Task Force must do much more to protect the health and safety of Larimer residents and the environment.</p>
	<p>Please do not miss this opportunity to really serve the people in Larimer County and protect their health and well-being--2500 feet should be the closest any well pad is ever put near someone's house, a school, or anywhere else. What good is a job for some, while so many others' lives are devastated? Put people first, not corporations. Please take much stronger action that your draft proposal.</p>
	<p>The proposed regulations are woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as required by State law (SB-181).</p>
	<p>I am submitting the following comments regarding Larimer County's Revised Regulations because this issue is important to me as well as to millions of our fellow Coloradans.</p> <p>Firstly, I believe the proposed regulations are woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as required by State law (SB-181).</p> <p>Second, the proposed regulations do not assert the County's right to deny, reject,</p>

	<p>nor condition any and all permit applications in order to prioritize these protections. This is a continuation of the County’s fear of an industry lawsuit (none of which have been successful since SB-181 was passed).</p> <p>Also, the proposed regulations require no comprehensive, transparent public process – the regulations do not provide for notifications or alerts for families living nearby. When canvassing the neighborhood adjacent to the new proposed 15-well Unicorn Pad near Timnath, we did not find a single homeowner who was aware of development.</p> <p>Also important, the proposed regulations fail to address or provide any public process on Larimer County open space.</p> <p>Finally, as of last night the proposed regulations fail to address any setback from homes, schools, or playgrounds. A recent CDPHE study found significant short term health effects out as far as 2000 feet from well-pads, and prior to that study, Tri-County Health recommended to the Adams County Commission at least a quarter-mile setback from all homes and at least 2,500 feet from sensitive populations.</p>
	<p>Please make the right decisions as they impact the environment which people and animals are a part of.</p>
	<p>I have always considered Larimer County a healthier place to live then the rest of Colorado, because it has been able to keep drilling/fracking at bay. But in the last couple of years it seems drilling/fracking is becoming more prevalent and closer to home. These company's think they are hiding the damage they are doing with their walls, but all their doing is not letting people see what we already know. They are polluting our water and resources. Many of these sites are on farms. Do you want to eat the food grown on these farms? I don't! If the water is tainted, so is the food grown there. My friend that lives in Thompson River Ranch on just the East side of I-25, only drinks and cooks with bottled water. She feels her water is not safe to drink, do to all the drilling /fracking on that side of I-25. I feel the same about drinking water on the East side of I-25. We can't trust that it is safe, because the public has been lied to so often about their safety, when it comes to drilling/fracking. That's just very sad. I hope that Larimer County will protect it citizens and really think about how drilling/fracking is ruining its resources for our community and in the long run, it would hinder the popularity and growth of Larimer County. Please protect your Larimer County resources and citizens!</p>
	<p>Transparency is essential and citizens and their elected officials should have a say in decisions that effect their community</p>
	<p>As currently written, the regulations do not meet the requirements of SB-181 to prioritize health & environmental risks. This is an oversight that can be corrected. Also, it's critical that the County Commissioners be able to allow, disallow, or modify any and all permit applications to meet the health, safety, & environmental priorities of the County and its citizens. For example, people living near, schools and businesses in place near, and downstream water users from drilling and operations be notified that such actions are proposed, and educate them on what that means for their air, water, and sounds should these plans move forward. If someone wanted to place a pig farm, a dairy, or a chemical plant nearby, they would require this level of tranparency and notification and allow local comments to be considered before being allowed to proceed. According to Physicians for Public Responsibility, there are significant health dangers to people (especially children) within 2000' of active</p>

	<p>well activity (https://www.psr.org/blog/resource/compendium-of-scientific-medical-and-m...). Greater distances must be considered to minimize (if not entirely eliminate) exposure to the chemicals and noise produced by drilling. The bottom line is, the people of the County need to have a greater voice in the presence of developments in their neighborhoods that are dangerous to their families. We have a right to know and to be offered the opportunity to sell our properties to the Oil & Gas companies (at market prices) so we can move to a safer location. We have the right to safer locations to which to move.</p>
	<p>Colorado Rising for Communities is a 501(c)(3) nonprofit organization dedicated to protecting our communities and our environment from fossil fuel extraction. Please allow this letter to serve as our public comment on your Second Draft of the proposed oil and gas regulations.</p> <p>A review of your proposed regulations demonstrates that the Commission misapprehends the mandates of SB 19-181, and appears to favor the oil and gas industry’s interests over that of its residents. This argument is not without support.</p> <p>First, it is noted that input for these regulations comes from the Larimer County Oil & Gas Task Force. This task force is heavily influenced by members with interests in the fossil fuel industry. You, as commissioners, have received complaints from community members about the heavily industry-influenced task force. It is astounding that despite these complaints, the Commission has allowed this task force to continue in its present form.</p> <p>Second, the task force’s charter, adopted on March 20, 2019, is out of compliance with state law. In the Purpose and Authority section of the charter, it states: “The County recognizes that oil and gas has been determined to be a matter of statewide concern and that the Colorado Oil and Gas Conservation Commission (‘COGCC’), along with other state agencies, is responsible for the regulation of oil and gas development and operations at the state level.”</p> <p>Indeed, with the passage of SB 19-181, the task force charter is not in compliance with state law, the charter has not been changed, and it appears as though the task force abdicated its responsibility to meaningfully consider the effects of SB 19-181 after it became law on April 16, 2019. Any recommendations coming from this industry-laden task force should be viewed as suspect, at best.</p> <p>In fact, the heavy industry influence is seen in your second draft of regulations. For example, while the second draft mentions public health, safety, “general” welfare, private property rights, protects environment and welfare, and minimizes adverse impacts, there is no mention of cumulative impacts. It is unfortunate that such respected elected bodies, such as this Commission, fail/refuse to understand that oil and gas operations have a cumulative, disastrous impact on our environment and communities. These proposed rules must abide by the new protective changes in state law, but also reflect the scientific understanding that fossil fuel extraction is harming our planet to the point that we are at an existential crisis.</p> <p>With that said, and coming from a position of truly protecting our environment and the public, we offer the following comments related to the second draft of proposed rules.</p>

Proposed Rule 17.2(E)

With respect to Proposed Rule 17.2(E), this proposed regulation allows for a biased third-party to be retained by the Commission for technical expert review. We invite the Commission to change the language to an “neutral third-party” who has the technical knowledge about oil and gas operations, but will honor the mandates of SB 19-181, which protects public health, safety, welfare, environment, and wildlife resources above the interests of the industry.

Proposed Rule 17.3(B)

Proposed Rule 17.3 wholly fails to protect community and the environment. One of our functions as an environmental protection nonprofit is to litigate cases to protect communities from the hazards of fossil fuel extraction. One such case involves a community organization we represented in Broomfield, Colorado. At the beginning of 2019, and in the course of litigating this case against an oil and gas operator in front of the COGCC, we sought and received discovery from the operator related to public health and safety. To our surprise, the operator had numerous documents that discussed health impacts and an academic study on Colorado’s setback rules. A copy of those documents can be accessed via the following Dropbox link: <https://www.dropbox.com/sh/zbuuw8ktunv5wf0/AADP7Omnex-nZOk4zoX572wca?dl=0>.

Setback Study:

The setback study focused on three states: Colorado, Texas, and Pennsylvania. The purpose of the study was to catalogue the numerous oil and gas accidents occurring in each state, the radius of the accident, and whether the state’s setback rules were sufficiently protective of human populations. The study examined: 1) Blowouts and Evacuations; 2) Thermal Modeling; 3) Vapor Dispersion; and 4) Air Pollution. It should be noted that the study was published in 2016. Since that time there literally have been dozens of oil and gas accidents in Colorado, some leading to fatalities and evacuations of communities. The conclusion of the study was that Colorado’s setback regulations are not nearly protective of communities. A copy of the study is provided for your convenience.

The proposed setbacks in the second draft are woeful. The setbacks appear to be from actual structures and not from property boundary lines. Many properties not only have buildings situated on their properties, but also playgrounds, sports fields, or other similar areas where children play and community congregate. Your rules literally allow oil and gas operations to exist feet away from these areas simply because you are measuring from the building and not the property line. Such setbacks are entirely anathema to public health, safety, welfare, environment, and wildlife resources.

Risk Assessment:

Also received from the oil and gas operator was a risk assessment of oil and gas drilling within the City and County of Broomfield published in August 2017. As you may be aware, Broomfield has had significant problems with one oil and gas operator. The risk assessment commissioned by Broomfield looked at accidents

throughout the nation and in Colorado involving oil and gas activities. Some of the accidents resulted in a loss of hundreds of millions of dollars and a loss in life. The conclusion of the risk assessment was as follows:

Onshore oil and gas drilling operations present significant risk exposure, whether it is potential harm to the environment, citizens, contractors, or property. This requires higher limits of insurance and robust mitigations. Broomfield is a special case, as it faces the abovementioned risks, while having drilling operations in close proximity to residential areas with growing density. This adds a new layer of risk to citizens, their property, and quality of life and makes comparisons to existing loss data challenging.

At first glance, the insurance and bonding recommendations herein may seem high, but after analyzing loss data and the special circumstances faced, we are convinced that they are necessary. These requirements not only serve Broomfield and its citizens, but also the operators and their contractors and subcontractors by requiring higher coverage to finance losses in an increasingly risky environment for which they may not otherwise have given consideration.

It should not escape your attention that oil and gas operators have been penalized numerous times over the past couple of years for safety violations. Such information should weigh heavily on your decision making process.

Environment and Health Studies:

Additionally, the Dropbox file provides a number of climate and health studies for your review. These studies are as recent as 2018. Of course, many other studies have come out since the initial litigation, and demonstrate the adverse climate and health consequences related to fracking operations. For example, the University of Colorado School of Public Health published a study in July 2019 linking oil and gas operations and child heart defects. Larimer County has a lot of young ones and a lot of families looking to have children. You can draw your own conclusions about how Larimer County families might feel with fracking operations 1,000 feet from their neighborhoods, and knowing that Larimer County was aware of this concerning study. The bottom line is that the overwhelming evidence demonstrates that fracking is having a dire effect on our environment and on the health of our communities.

Colorado Rising cannot underscore how every fracking operation is a catastrophic accident waiting to happen. Having served as an elected official, I understand the importance of balancing interests. However, I know that the environment and the health of our communities outweighs all other interests. The proposed setbacks are not sufficient to protect Larimer County's communities and, sadly, the first big accident will prove my point if the Commission does not listen to reason and the evidence.

Proposed Rule 17.3(C)(3)(b), (4) and (6)

It appears by the proposed language of these rules, the Commission wishes to continue under the old regime of the Colorado Oil and Gas Conservation Act (the "Act"), instead of adhering to the changes made by SB 19-181. Flaring is not acceptable. It is wasteful. It has adverse impacts on the environment. Your proposed

rule allows for flaring in emergencies or “upset conditions.” There is no definition provided or guardrails related to such language. At any given point, the oil and gas industry will use the terms “emergency” or “upset conditions” to justify flaring. The Commission need to be unambiguous as to what these terms mean.

Also, the Commission uses the term “technically infeasible.” This language was specifically taken out of the Act. Your attempts to place the language in your proposed rules is a violation of SB 19-181. As local governments have been advised, SB 19-181 establishes a floor of protection. Larimer County does not have the authority to go below the floor or to create a basement. The “technically feasible” language must be removed from the proposed regulations.

Along the same vein of ambiguous language, Proposed Rule 17.3(C)(3)(b)(6)(a)-(g) is rife with terminology that is vague and ambiguous. Exactly what is meant by “minimizing,” “reducing,” and “delaying”? Are there baselines by which you can measure whether something was minimized, reduced, or delayed? What exactly are the enforcement mechanisms? Vague and ambiguous language is not tolerated by Colorado courts. We would recommend that the Commission rework this language so that violations can be measured and enforcement be implemented.

Proposed Rule 17.3(F)

This proposed rule fails to take into account the cumulative impacts on water supply and those effects on public health, safety, welfare, environment, and wildlife resources. At least one court has taken notice that one well requires approximately 10 million gallons of water for fracking operations. That does not take into account the multiple wells on one pad and the number of times one well might be fracked. Obviously, such an enormous amount of water takes from the public water supply, from the environment, and from wildlife resources. In many, if not all cases, the water used in fracking operations cannot be safely returned to our natural cycle. Larimer County does not have the right to ignore these impacts. Water is a precious property right in the state of Colorado. But, no property right can be used in a manner that harms community. *Keystone Bituminous Coal Assoc. v. DeBenedictis*, 480 U.S. 470, 491-92 (1987) (“Long ago it was recognized that ‘all property in this country is held under the implied obligation that the owner’s use of it shall not be injurious to the community.’”).

Thus, the County must include a provision that addresses not only water quality, but also water supply.

Additionally, this proposed rule fails to take into account radioactive brine and toxic waste produced by oil and gas activities. In a stunning Rolling Stones report issued just three days ago, it was found that the oil and gas industry, specifically involving fracking, produced a trillion gallons of toxic waste per year.

Public health, safety, welfare, environment, and wildlife resource protections must include some regulation surrounding the safe storage and removal of radioactive and toxic materials produced as a result of oil and gas activities. A failure to proposed such regulations is a detriment to Larimer County and its residents.

Proposed Rule 17.3(V)

This proposed language simply is unacceptable. Larimer County, if only to protect public welfare, must require that oil and gas operators provide detailed financial information about the health of their respective companies. Such information should include, but is not limited to: 1) assets; debts; revenues; stock market information; and loans. The information provided should be more than the general information found in SEC filings.

As the Commission must be aware, there is a dramatic increase in oil and gas bankruptcy filings. Colorado has suffered the bust of this industry several times over, and at least once within the past decade. Without adequate financial assurances, Larimer County runs the risk of granting permit applications to an oil and gas producer who begins operations, files for bankruptcy and leaves local and state taxpayers to foot the bill for its messes. You, as Commissioners, have a fiduciary duty to protect Larimer County and its residents from having to foot the bill of an operator that is not financially capable of responsibly engaging in fossil fuel extraction.

With respect to bonding, in Colorado, an oil and gas operator is required to place a \$10,000-\$20,000 bond on individual wells, depending on depth; a \$60,000 state-wide blanket bond for less than 100 wells, or \$100,000 state-wide blanket bond for more than 100 wells.

There are several purposes for the bond, but one being to plug abandon wells and to remediate damages caused by oil and gas operations. In addition, operators are required to maintain general liability insurance of \$1 million per occurrence to cover property damage and bodily injury to third parties. The problem with these bonding and insurance rates is that they are utterly inadequate for what is required.

In a Denver Post report, COGCC estimated that each abandoned vertical well in Colorado would cost \$82,500 to plug and reclaim. In 2018, then-Governor Hickenlooper signed an executive order directing COGCC to categorize each orphaned well site and aim to clean up high and medium priority sites by July 2023. In the Executive Order, it was estimated that the total cost to plug, remediate, and reclaim these orphaned wells and sites is over \$25 million. A striking fact is that the Commission's data showed "the average cost to plug an orphaned well is six times greater than the amount of financial assurance held by the State."

In 2018, the Colorado Legislature changed the law to allow the COGCC to spend more money on plugging and remediating orphaned wells and sites. The previous annual limit was just \$445,000, and it was increased to \$5 million. The legislature's appropriation was for 263 orphaned wells and 365 associated orphaned identified sites. This \$5 million figure represents taxpayer dollars being spent to clean up the mess left by the oil and gas industry. Yet, what is missing from the equation is that Colorado is home to approximately 60,000 active oil and gas wells and over 20,000 abandoned wells. The abysmally low bonding amount means that taxpayers will be shouldering additional hundreds of millions of dollars to clean up after this industry for decades to come.

	<p>On a national level, a study commissioned by the Center for Western Priorities finds that reclaiming oil and gas wells on U.S. public lands could cost a potential \$6.1 billion, which is far more than the \$162 million in reclamation bonds paid by oil and gas operators.</p> <p>With this said, and along the lines of your honoring your fiduciary duties, Larimer County must require each operator to provide a minimum bond of \$270,000 per well, which is the average cost the federal government is spending to plug and remediate each abandoned horizontal well. Your failure to require adequate bonding, financial assurances, and insurance will violate the mandate that public health, safety, and welfare must be paramount concerns over industry interests.</p> <p>In sum, Commissioners, I understand the great amount of work required to draft these regulations. This second draft falls short of the mandates of SB 19-181. In fact, to truly protect the public health, safety, welfare, environment, and wildlife resources from the cumulative adverse effects of fossil fuel extraction, a ban or moratoria should be debated rather than regulations allowing further fossil fuel extraction. SB 19-181 gives local governments the power to enact bans and moratoria.</p>
	<p>2000 foot setback could be crippling. Max setback should be 1000 feet.</p>
	<p>Local residents in Larimer county are extremely concerned about the draft regulations and oil and gas operators plans to frack Larimer County. The proposed regulations require no comprehensive, transparent public process – the regulations do not provide for notifications or alerts for families living nearby. When canvassing the neighborhood adjacent to the new proposed 15-well Unicorn Pad near Timnath. We have ample evidence of the damage that fracking does to the water supply. Plus, fracking is not where the future is. At best a few people will make a lot of money, while the rest of us, the public, pays for the damage they do to the environment. It's time to shift towards the future and stop fracking.</p>
	<p>The proposed regulations are woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as required by State law (SB-181).</p> <p>The proposed regulations do not assert the County's right to deny, reject, nor condition any and all permit applications in order to prioritize these protections. This is a continuation of the County's fear of an industry lawsuit (none of which have been successful since SB-181 was passed).</p> <p>The proposed regulations require no comprehensive, transparent public process – the regulations do not provide for notifications or alerts for families living nearby. When canvassing the neighborhood adjacent to the new proposed 15-well Unicorn Pad near Timnath, we did not find a single homeowner who was aware of development.</p> <p>The proposed regulations fail to address or provide any public process on Larimer County open space!</p>
	<p>The version 2 draft of the Larimer County Oil and Gas Regulations does not prioritize the protection of public health, safety, and our environment as required by the Colorado legislature in SB-181. The draft's allowed distance from an O&G site to water source of 500 ft is completely unacceptable. Fracking can pollute surface water supplies at this distance. Even worse, fracking can contaminate the</p>

	<p>groundwater and cause a much larger problem. The setback should be increased to 2500 ft from all waterbodies, residences, schools, and offices to fully protect humans and the environment.</p> <p>The current draft inappropriately allows an exception to the restricted floodplain area in item 17.3 F4. If such an exception were granted it would not prioritize human health and the environment as required by SF-181. The exception should be removed. In addition, the draft's 100-year floodplain distance should be expanded to the 500-year floodplain. Climate change is making floods more intense and frequent. The historic 100-year floodplain no longer provides enough risk protection. Item 17.3 F4 should be changed to read "Locating O&GFs within a Federal Emergency Management Agency (FEMA) designated 500-year floodplain shall not be allowed."</p> <p>I agree that "New wastewater injection wells shall not be allowed." I would add that no additional produced water should be allowed to be injected into current wells. Even permitting more contaminated water to be placed in existing wells increases the risk of a future leak of heavily polluted water.</p> <p>Item 17.3 N(e) posed a question regarding water testing of abandoned wells. The negative effects of O&GFs continue well beyond the active phase of the project. Water quality monitoring should be continued for 50 years after a site is abandoned. This should be a condition of approval for all sites, not just selected areas. Also, if a company has failed to continue water quality monitoring at its existing plugged sites, all new permits for that company should be denied.</p> <p>Companies tend to declare bankruptcy when faced with environmental cleanup costs, leaving the government and its citizens on the hook to pay. It is not worth risking the health of Larimer County citizens or assuming the financial risk of a water quality remediation effort. The O&G permitting fees need to be increased to a level which would cover the costs of companies defaulting on their obligations to plug abandoned wells or remediate contamination.</p> <p>Please strengthen the protections for humans, wildlife, and the environment in your next draft.</p>
	<p>Comments on the second draft or recommendations for O&G regulations</p> <p>The second draft of the regulations for Oil and Gas drilling in Larimer County remains woefully insufficient and appears to be a minimal effort to appear to be in compliance with the protections mandated by the newly passed Colorado Law SB 19-181.</p> <p>Protections for Health, Safety, Welfare, Environment, and Wildlife are not prioritized as is now mandated by law. All permit applications should be subject to and expect to be rejected unless they comply and show how they propose to comply.</p> <p>They must be made to show that they have fiscal means to properly conclude their operations with adequate clean up following conclusion of operations or in case of accidental leak or contamination. It seems the most fiscally responsible way for the legislative bodies to assure public safety is to require a substantial bond adequate to cover likely expenses and refundable only when approved clean up has occurred and the operation has been concluded.</p> <p>The permit requesters must also be made to prove they possess the expertise to comply with this law mandating the protection of health and the environment. All</p>

permit requests must be viewed with these considerations as a priority, not only in words, but with actions to be taken prior to the issue of permits to assure compliance with the newly legislated SB 19-181 law. Laws are meaningless unless those responsible for enacting and enforcing them are cognizant of their intent and are determined to assure the intent and ability of the permit seekers to comply. Unless these regulations make clear the regulatory bodies right and responsibility to deny, reject, and/or condition any and all permit applications in order to prioritize protection, they will remain inadequate in guiding those responsible in faithfully executing their obligations and responsibilities to assure these protections now mandated by law. Continuation of the County's weak and outdated approach to permitting is no longer legally acceptable. New regulations must be stringent in upholding the law and show the ability and intent to enforce the priority of health and environment over economic considerations.

This entire process has lacked a transparent public process – the public has not been adequately alerted to the process, and for those few who are aware and do attend hearings and meetings, no provision has been made to determine that the citizens attending can hear the proceedings. Participants speak into mics that may be adequate for recording the proceedings, but they are not sufficient or perhaps even intended, to amplify their comments for those who are not directly participating.

It is also a problem that citizens closely affected by the newly proposed drilling are even aware of the permits being considered for approval. All citizens whose neighborhoods, businesses, churches, schools and other gathering places such as gymnasiums and public parks, are within a mile of the sites being proposed should have adequate notification as should those whose water supplies may be threatened or affected.

I propose one mile, for the setbacks are insufficient to protect the public. While we know because of EPA studies and conclusions that the entire Front Range, including Larimer County is seriously out of compliance with air quality standards, there is no provision to force the industry to provide adequate air quality monitoring. The benefactors should have provision and maintenance of air quality as a cost of doing business, but the quality of the monitoring equipment and the monitoring of the results should not be left to the industry. This must be done by those with the public interests and health of the community and not profits as their priority, and it must be done by those with the expertise to properly interpret the results and the authority to control drilling if it is found to be causing health and environmental threats and adverse conditions.

I am concerned that the CDPHE study found significant short term health effects as far as 2000 feet from well-pads, which shows that the currently proposed setbacks are not adequate. I am also concerned that the draft states that it did not find long term effects as the study wasn't looking for long term effects. This is misleading as it suggests that one might consider that there are no long term effects. A study does not find effects it is not look for, but it does not mean that they are not there. Also, there are increased cases of congenital heart defects in the vicinity of wells. I suggest that a congenital heart defect is a very long term effect. While the statistics seem to show only some effects of this magnitude, statistics become meaningless to those who suffer these consequences. While SB-19-181 states that health and the environment must be prioritized over economic considerations, I propose that there are also hugely significant economic consequences when these are damaged and

	<p>endangered, and those economic costs must also be borne by those causing the harm, and should not be borne by taxpayers and individual sufferers.</p>
	<p>The most recent draft of the Larimer County Oil and Gas Regulations, version 2, must be revised to ensure proper protection of the environment, public health, and safety. SB-181 mandates this protection, and county regulations should meet or exceed the standard set by the law. In particular, every fracking site should be set back at least 2500 ft from all residences, schools, offices, and waterbodies to ensure human health is not at risk.</p> <p>Fracking operations frequently leak volatile organic compounds (VOCs). Health concerns due to these leaks include benzene exposure and air quality issues. Each O&G application represents roughly 50 tons more VOCs added to our atmosphere.</p> <p>VOC leaks are a major contributor to our ozone non-attainment problem. People like me who don't own a car are required to be outside riding our bikes, walking or waiting at bus stops even on days with dangerous ozone levels. This includes children who are most at risk of health problems. We can't escape toxic fracking emissions once they are dispersed in the atmosphere. But we can stop the expansion of this industry, and force fracking operators to clean up their active and inactive well sites.</p> <p>Finally, as you know, climate change is an incredibly important issue affecting our entire planet. Fossil fuel extraction must ramp down rapidly to avoid catastrophic consequences for everyone on Earth. We cannot allow fracking to continue its expansion.</p> <p>Please increase setbacks and strengthen air quality standards in your next draft.</p>
	<p>It is unacceptable to potentially harm the area where the citizens reside without their vote. To completely dismiss their concerns shows a lack of respect.</p>
	<p>Our partner, the Larimer Alliance and local residents are extremely concerned about the draft regulations and oil and gas operators plans to frack Larimer County: The proposed regulations are woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as required by State law (SB-181).</p> <p>The proposed regulations do not assert the County's right to deny, reject, nor condition any and all permit applications in order to prioritize these protections. This is a continuation of the County's fear of an industry lawsuit (none of which have been successful since SB-181 was passed).</p> <p>The proposed regulations require no comprehensive, transparent public process – the regulations do not provide for notifications or alerts for families living nearby. When canvassing the neighborhood adjacent to the new proposed 15-well Unicorn Pad near Timnath, we did not find a single homeowner who was aware of development.</p> <p>The proposed regulations fail to address or provide any public process on Larimer County open space!</p> <p>As of last night the proposed regulations fail to address any setback from homes, schools, or playgrounds. A recent CDPHE study found significant short term health effects out as far as 2000 feet from well-pads, and prior to that study, Tri-County Health recommended to the Adams County Commission at least a quarter-mile setback from all homes and at least 2,500 feet from sensitive populations.</p>

	<p>We need to protect people and the planet first. Please do the right thing - do NOT put profit above all else! Do any of you live near fracking sites? They are harmful to us. There is proof of this!</p>
	<p>Wellington Operating Company and King Operating have jointly submitted their comments on Version 2 of the Oil and Gas Rules by email.</p>
	<p>The League of Oil and Gas Impacted Coloradans (LOGIC) and groups aligned under the Larimer Alliance for Health, Safety and the Environment (Larimer Alliance) appreciates the opportunity to submit the following comments regarding Larimer County’s second draft of its regulations for Oil and Gas Facilities.</p> <p>LOGIC and the Larimer Alliance submitted extensive comments on the original draft of these regulations. While we appreciate that County staff has made some attempt to incorporate some of these comments into this second draft, it is still woefully inadequate. The second draft fails to protect public health and safety, the environment, and wildlife resources. It fails to comply with SB181’s mandates and standards, and it leaves Larimer County’s residents vulnerable to adverse impacts from the oil and gas industry.</p> <p>SB181 made it abundantly clear that local governments have the authority to deny applications that adversely impact public health and safety. Larimer County can enact any regulation that is designed to protect public health and safety, yet this draft is riddled with loopholes and weak language designed to let oil and gas development take priority over people.</p> <p>This draft fails to take advantage of the County’s authority to deny applications. We understand that the County believes that denying an application would leave it vulnerable to a lawsuit from industry applicants. However, LOGIC has already submitted a letter to Larimer County outlining the legal authority to deny applications without fear of litigation. Takings lawsuits are extremely rare, and almost never successful. Even after the state of New York banned fracking entirely, there were no successful takings claims brought against the state. We strongly encourage the County to re-read our letter on takings, and embrace its denial authority to protect its residents.</p> <p>Compliance with the Act is crucial. SB19-181 removed the economically viable and technically feasible language from the Act. The current draft of the Larimer County regulations is still reliant on the pre-181 paradigm, and as such would likely not have any meaningful impact. SB181 allows local governments to regulate above and beyond the state floor. The way these regulations are currently drafted, they do not rise above that floor. The second draft includes some variation on “when possible,” “when available,” or “if feasible” on nearly a dozen occasions. This language is unacceptable, and inconsistent with SB181, and must be stricken.</p> <p>Even worse, County staff has made it clear that the County has no intention of actually enacting setbacks that could actually protect residents. The health impact study released by CDPHE makes it clear that living within 2,000’ of oil and gas facilities is hazardous to human health. Other studies have shown adverse health impacts at even greater distances.</p> <p>There are numerous other issues with this draft. It fails to provide notice to residents of development near their homes or schools, it fails to establish a public process for</p>

leasing county-owned minerals or development on open spaces, and lacks any meaningful public accountability mechanisms.

LOGIC and the Larimer Alliance submit the following redline suggestions to address issues with the purpose and intent sections, the authority to deny applications, and health and safety-based setbacks. We have also gone through the entire draft rules and removed every example of the “where possible” and “technically feasible” language and replaced it with more protective language where appropriate.

We are deeply disappointed that the County is not taking the recommendations of its residents seriously. We respectfully request that you reassess the comments submitted on the previous draft and adopt the reasonable suggestions provided by the community.

17.1.A - INTENT

Issue: Public Health, Safety, and Welfare, the Environment, and Wildlife Resources(PHSWEW) are not properly prioritized.

Suggested Redline:

The intent of this section of the Land Use Code is to protect public health, safety, and general welfare, the environment, and wildlife resources, protect private property rights, and minimize adverse impacts, by establishing a regulatory framework for new oil and gas facilities (O&GFs), including recompletions to be located in the unincorporated areas of Larimer County. in a manner that protects the public health, safety and general welfare, protects private property rights, protects environment and wildlife, and minimizes adverse impacts.

Rationale: This simple change reorders the intent section of the draft regulations to reflect the SB19-181 mandate.

17.1.C - PURPOSE

Issue: PHSWEW is not properly prioritized.

Suggested Redline:

Purpose: These regulations are necessary to:

1. Promote and protect the public health, safety and welfare, and protect the environment and wildlife by avoiding and minimizing the adverse impacts of O&GFs.
2. Incorporate the power to deny oil applications, for O&GFs where necessary to protect public health safety, and welfare, the environment, and wildlife resources as granted by the State of Colorado in the Colorado Oil and Gas Act into these Larimer County Land Use Code Regulations.
3. 3. Ensure a comprehensive land use process and transparent public process for the development of new O&GFs, including recompletions, in the unincorporated areas of the County.
2. 4. Provide for the managed development, installation, maintenance, modification, reclamation and removal of O&GFs. without unreasonably discriminating against oil and gas developers and operators, or mineral interest owners.
3. 5. Minimize to the maximum extent possible the nuisance effects of O&GFs through the application of best available techniques and technologies.
4. Promote and protect the public health, safety and welfare, and protect the environment and wildlife by minimizing the adverse impacts of O&GFs.
5. 6. Maximize protection of natural and cultural resources and public facilities.

6. 7. Strategically locate O&GFs to locate where adverse impacts from such operations can be avoided.

7. 9. Minimize and mitigate the extent and severity of adverse impacts that cannot be avoided.

8. 10. Confirm the financial, indemnification and insurance capacities of the oil and gas developer/operator to ensure timely and effective construction, production, removal and reclamation of O&GFs and infrastructure.

Rationale for Suggested Redline: The second draft of these regulations are not aligned with current state law. SB19-181 amended the Colorado Oil and Gas Act to clearly prioritize protection of PHSWEW over oil and gas development. It also changed the definition of waste to exclude the non-production of oil and gas to PHSWEW. The proposed redline above moves the PHSWEW concept to the top of the list, and adds the word protect. This change is necessary to reflect the new paradigm at the state.

This suggested redline also adds the concept of denying applications where necessary to protect PHSWEW to the purpose section. This addition does not require the denial of any specific applications at this point, it simply acknowledges the fact that the state of Colorado has granted local governments the authority to deny applications were necessary to protect PHSWEW. Adding this concept to the purpose section is necessary to lay the framework for more specific regulations later in the Code.

17.2.B COUNTY REVIEW (DENIAL)

Issue: The current draft does not contemplate the ability to deny applications that would adversely impact PHSWEW.

Proposed Redline:

17.2. – Review Procedures and Required Permits

B. County Review Process:

1. All new O&GFs, including recompletions, in the unincorporated portions of Larimer County shall require approval of a Special Review application for the proposed facility as set forth in Section 4.5 of this Code. In addition to the requirements and review procedure laid out in Section 4.5 of this Code, the following review criteria will apply specifically to all O&G facilities applications:

a. If an applicant cannot demonstrate an ability to comply with all relevant requirements in this code, the Commissioners will deny the application.

b. If the applicant cannot mitigate the impacts to public health, safety, and general welfare, the environment, and wildlife as required by this code, the Commissioners will deny the application.

2. Application and submittal requirements for O&GFs are specified in the following Community Development Department application handouts:

a. Sketch Plan Review Application and Submittal Requirements for Oil and Gas Facilities.

b. Neighborhood Meeting Submittal Requirements and Guidelines for Oil and Gas Facilities.

c. Special Review Application and Submittal Requirements for Oil and Gas Facilities

Rationale for Suggested Redline: The ability to deny a permit is an absolutely necessary tool for a local government to protect PHSWEW, and Larimer County has the unambiguous authority to deny applications that are not protective of PHSWEW.

However, Larimer County has expressed concerns about exercising this authority based on fear of running afoul of regulatory takings laws. In the most basic sense, a

“regulatory taking” is when a regulation destroys the value of private property.

Larimer County’s fear is unwarranted in this case. Baked into the law on regulatory takings is a broad exception for regulations with a legitimate public purpose, such as protecting public health and safety, or the environment. SB19-181 made the ability to deny an application even more clear by changing the definition of waste to expressly exclude the non-production of oil and gas resources if necessary to protect PHSWEW. That essentially means that as long as the County is denying an application to protect PHSWEW, then it is not a taking.

The County must establish clear denial criteria in order to protect their residents from adverse impacts from oil and gas development. SB19-181 did not say that the state and local governments should protect PHSWEW when convenient for operators. It clearly states that PHSWEW is the priority, and production is secondary. This current draft is inconsistent with this state law.

17.3.B - SETBACKS

Issue: The second draft of the oil and gas regulations DO include setback from homes, high occupancy buildings (like schools, nursing homes, etc), and water bodies. Unfortunately, they propose a set of tiered setback distances that are not adequately protective, and do not account for health impact data from the State and other reliable sources. They also allow for variances and exceptions that further reduce protections.

Proposed Redline:

B. Setbacks:

1. The minimum required setbacks for buildings and structures set forth in the applicable zoning district shall apply to the proposed O&GF.
2. In addition to the setbacks in paragraph 3 below, the setbacks set forth in Section 4.9 of this Code shall apply to proposed O&GFs to minimize their impacts on public health, safety, welfare, the environment, and agricultural operations.
3. To achieve the intent and purpose of this Section 17, the following minimum setbacks for O&GFs shall be required, unless more restrictive setbacks are required by the rules of the COGCC:
 - a. 1,000-2,000-foot setback from a residential building or platted residential lot
 - b. 2,000-foot setback from a high occupancy building including schools, registered day cares, nursing homes.
 - c. 5002,000-foot setback from a water body or designated outside activity area
4. To achieve the objectives of Section 17.1.C., the Board of County Commissioners may, on a case by case basis, require an increase to these minimum setbacks.
5. The Board of County Commissioners may allow a reduction of the minimum setbacks when it has been determined that the applicant has adequately demonstrated that the setbacks prohibit access to the mineral interests being sought, and the reduced setbacks will achieve to the extent practicable the objectives of this code.

Rationale for Proposed Redline: According to the most recent health impact data from the Colorado Department of Public Health and the Environment (CDPHE), living within 2,000 feet of an oil and gas facility is hazardous to our health. At the very least, Larimer County’s setback for all residences/residential structures should be 2,000 feet to address this fact. There is no point in adopting setbacks that do not accomplish the basic goals of the regulations.

17.3.C - AIR QUALITY

3. Reduced Emission Completions shall be used for all completions and well workovers following hydraulic fracturing. Such completions shall include the use of Best Management Practices including, when available, the following unless an equal or better system exists:

4. O&GFs shall be equipped with electric-powered engines for motors, compressors, drilling and production equipment, and pumping systems unless no adequate electricity source is available or it is technically infeasible.

Other Air Quality Recommendations

- Larimer County should strongly consider enacting 24/7 monitoring requirements for emissions and air quality data, with regular reporting periods to protect public health and safety.
- Larimer County should develop a fee and penalty framework for operators violating air quality standards

17.3.E - ODORS

3. The Odor Mitigation Plan shall include control strategic which shall be implemented upon receipt of an odor complaint(s) or as required by the County. These Odor control strategies may shall include the following, along with any other site-specific requirements recommended by staff to mitigate impacts:

17.3.F - WATER QUALITY AND WATER BODIES

Issue: The current draft is not adequately protective of surface and groundwater resources. In addition to the too-low setbacks discussed above, the current draft also allows development within the FEMA 100-year floodplain and does not require public disclosure of water quality test results.

Proposed Redline:

1. A Water Quality Report/Plan shall be submitted with all O&GF applications. The report/plan shall demonstrate how the development and operations of the facility will avoid impacts to surface and ground waters in Larimer County, and demonstrate compliance with and implementation of standards in Sections 17.3.D. and 8.12 of this Code.
2. Baseline and subsequent water source tests, as typically required by and submitted to the COGCC and CDPHE, shall be provided to the LCDHE and the LGD for the life of the facility and any post-closure assessments, if approved by the owner(s) of the water well. It is recommended that the operator also post these reports online for public/access transparency. For greater transparency, the operator will make these reports available online for public access.
3. The application shall provide documentation indicating how the COGCC water quality protection standards are being implemented.
4. Locating O&GFs within a Federal Emergency Management Agency (FEMA) designated 100-year floodplain shall not be allowed. unless no other location is feasible, and all other appropriate permissions are obtained.
5. New wastewater injection wells shall not be allowed.
6. The requirements of this Section 17.4.D shall not prevent discharges reviewed and permitted by the CDPHE Water Quality Control Division, the EPA, and the Army Corps of Engineers.

Rationale for Proposed Redline: With the adoption of the increased 2,000-foot setback for surface water resources, the water quality and water resources section of the draft regulations is much stronger, and requires significantly less revision. The

one significant change proposed here is that no exceptions be made for O&G facilities in floodplains. This is based, once again, on the concepts enshrined in SB19-181 that require prioritization of PHSWEW over extraction of oil and gas resources. The lack of acceptable locations outside the floodplain is not a good enough reason to allow development inside the floodplain. This is the prime case of denial of an application. If no protective locations are possible, then the County must deny the application, not grant exceptions to rules designed to protect PHSWEW.

17.3.L - RECYCLE, REUSE, and DISPOSAL OF FLUIDS

2. Drilling, completion flowback, and produced fluids shall be recycled or reused whenever technically feasible.

4. Produced water shall be recycled or reused or shall be transported by pipeline, unless easements are not available. If easements for pipelines cannot be obtained, applicant must prove to County staff and Commissioners that an alternative transportation plan will not adversely impact the health and safety of Larimer County residents and the environment.

17.3.O WELL LIQUIDS UNLOADING

1. Best management practices, including artificial lift, automated plunger lifts and at least 98% emission reductions when utilizing combustion to control venting shall be employed at all facilities. unless technically infeasible

Drilling in Open Spaces

Issue: Nothing in the oil and gas regulations specifically protects open spaces from oil and gas development.

Proposed Redlines:

17.1.C.5 - Maximize protection of natural and cultural resources, and public facilities, and Larimer County Open Spaces.

17.2.B.3.d - 500-foot setback from Larimer County Open Spaces

Other Proposed Suggestions:

Larimer County must amend the land use regulations to prevent oil and gas development in open spaces.

Rationale for Proposed Redlines: Preserving the rural character of open space, and unincorporated Larimer County in general is a concept enshrined throughout the Larimer County Land Use Code. Oil and gas development is not consistent with that concept. Therefore, the County must reconsider the allowed activities within its open spaces. Preserving the open spaces themselves is a good first step, and protecting them with a 500-foot setback is necessary to ensure that oil and gas development does not encroach upon these important resources.

PUBLIC PROCESS FOR LEASING COUNTY-OWNED MINERALS

Issue: Decisions around the management of county-owned minerals must be made in view of the public, the same as any other major decision. Currently, decisions around leasing these minerals are not made during public meetings, but rather at an administrative matter meeting.

Suggest Amendment: (somewhere in the county code) xx.xx.xThe County shall not sell, lease, or dispose of county-owned buildings or real property in use for public purposes without first obtaining the approval of a majority of the commissioners. Any real property acquired or maintained by the County as open space is deemed to be in use for a public purpose.

	<p>I responded in great detail to the first draft. I do not see that either my comments, nor LOGIC's comments, nor the Larimer Alliance for Health and Environment, were addressed in any significant or substantial way. The bottom line is that these regulations are not consistent with SB-181, and will not in fact protect human health and the environment from the dangerous impacts and risks from fracking locally, regionally, and globally. The only interests these regulations serve are the short-term profits of the oil and gas industry. You are supposed to represent the public interest above narrow corporate oil and gas interests. These regulations will go down in history as yet another example of elected representatives being deaf, dumb and blind to the science, facts, legitimate democratic process, and the public good. The next elections will be our remedy, but will not undo your complicity in the harm that supporting these rushed, un-timely, and ill-advised regulations will cause to our communities, our environment, our health, our quality of life, and a sustainable future.</p>
	<p>My biggest concern with existing and new oil/gas development is air quality, the contribution to greenhouse gas emissions and the potential for other environmental pollution as well as public health and safety. What I would like to see in the regulations:</p> <ul style="list-style-type: none"> Require high standards for operators that address air quality, water quality, odor, light, noise, and traffic. Monitor air quality 24/7 with INSTAAR equipment (used in Boulder County) Create accountability so that Larimer County taxpayers are not responsible for costs of any impacts of oil and gas development Create land use code that protects public health, safety, welfare, and environmental resources of Larimer County. Require a 2,000 foot setback from all residential, high occupancy buildings, outdoor parks, water bodies, and other environmentally sensitive areas. Remove loophole language from the draft to avoid unnecessary risk to public health, safety, welfare, and the environment. Create a transparent and timely public process regarding oil and gas development in the county. Hold off on all oil and gas permitting decisions until the COGCC has completed its rule making and Larimer County has had a chance to develop a system for addressing oil and gas.
	<p>I wish to comment on Larimer County's 2nd draft Oil and Gas regulations. My comments here follow on months of good-faith effort by me to participate in and contribute to the County's policy-making process, along with dozens of other Larimer residents, and local organizations representing many thousands of Larimer residents, all of whom are concerned about oil and gas development in our county.</p> <p>The proposed regulations are woefully inadequate to protect public health, safety, and the environment, and as such, conflict with state law SB-181: in intent and purpose, in specific proposed regulations, and in failure to address many substantial issues necessary to protect public health, safety, and the environment.</p> <p>The proposed regulations read like a wish-list from the Colorado Oil and Gas Association, rather than a genuine effort by Larimer County to protect the County's current and future residents, natural resources and environmental values, private and public finances, and foreseeable future settlement and land use patterns. The heavy bias toward oil & gas development interests in the Oil & Gas Task Force,</p>

	<p>undisclosed conflicts of interest in the Task Force, the County's track record in steering and managing the policy-making process, and the County's tin ear toward extensive public input (which is a matter of public record), all point to a deeply flawed policy-making process for formulating the proposed regulations. The proposed regulations appear to aim to set a low bar for local governance of oil & gas development, which undoubtedly pleases oil & gas interests but fails to uphold state law or serve the interests of County residents.</p> <p>The County has on several occasions incorporated recommendations from the Task Force and the public, only to subsequently remove them. In doing so, the County has violated trust, failed to engage in good-faith conduct, expressed disdain for the Task Force and the public, and effectively weakened the draft regulations. The most recent illustration was at the final meeting of the Task Force on January 23rd, when the County staff informed the Task Force that all setbacks from homes or schools had been summarily removed from the draft regulations – the draft document provided to the Task Force and to the public was changed without informing either to the Task Force and to the public. By what standard would this be considered good policy-making? And were these changes made with the aim of protecting Larimer County residents, public health, safety, and the environment?</p> <p>The proposed regulations are thoroughly flawed, and the County's policy-making process has been deeply flawed. The County needs to revise the entire draft set of regulations, starting with 17.1.A Intent. SB19-181 provides local governments with authority to regulate oil and gas in a manner consistent with protection of public health, safety, welfare, the environment, and wildlife. Inclusion of language in 17.1.A regarding “protects private property rights” poses the possibility of conflict between SB19-181 and protecting private property rights, thereby exposing the County to legal vulnerability. What is meant by “general” welfare? This terminology is ambiguous and undefined in the 2nd draft, and also potentially in conflict between SB19-181, exposing the County to legal vulnerability. Section 17.1.A should be revised to align with state law SB19-181 as follows:</p> <p>The intent...is to establish a regulatory framework for new oil and gas facilities (O&GFs), including recompletions, to be located in the unincorporated areas of Larimer County in a manner that protects public health, safety, welfare, environment and wildlife, and minimizes adverse impacts.</p> <p>Every subsequent section and specific regulation needs to be reviewed and revised to uphold intent of SB19-181. The County has received extensive recommendations (in public record), many of which are highly specific, regarding methods and standards for adequate protection of public health, safety, welfare, environment and wildlife.</p> <p>As a resident and taxpayer in Larimer County, I encourage the County to thoroughly revise the proposed regulations, to meet and uphold the intent of SB19-181. To do otherwise puts the County at risk of being in conflict with state law, as well as not serving the best interests of our County's residents.</p>
	<p>The second draft still has several problems with language towing toward industry. It seems the county believes this to be a negotiation, rather than health as a priority. The process seems ill conceived. At the meeting of the</p>

	<p>task force, only half of the document was covered, and then the participants were asked to simply make margin notes and turn them in so everyone could go home on time. This also happened at a previous meeting. Margin notes are not public record. Why must the task force rush to get home at the expense of transparency on important rules?</p> <p>There does not appear to be a system of checks for industry notification of well applications. With the Unicorn wellpad as example, Larimer Alliance canvassers were the first people to reach nearby neighborhoods. They had not heard anything from the industry. How would the county know if operators cheat this? Does the county have its own plan in place to verify neighbors received plenty notice of activities and risks?</p> <p>Air and water quality seem suspiciously absent in this. Both will require county money for independent verification. The county has not proven that anticipated royalties and application fees are enough to offset monitoring, reclamation of existing and future incidents, and diminished property values. We need transparency on the math.</p> <p>Why does the county feel they must be compelled to risk our health without even sharing the financial benefit? After all, that is the only incentive.</p> <p>I continue to be disturbed by our county's lack of vision for the region. If we want to add pollution, we must be looking across the border to the east to negotiate how we will address regional ozone non-attainment issues. It is not even discussed in this draft.</p> <p>I think the county has let us down on prioritizing citizen health. So how much is it being sold for?? Or are you giving it away?</p>
	<p>Stop negotiating the health and safety of Larimer residents!</p>
	<p>I have read the comments from LOGIC and Larimer Alliance and have read the proposed regulations draft. I can only agree that the proposed draft has serious ambiguities regarding health and safety and the intent of SB 181. Further, I have read the proposed changes from LOGIC and find them to be both fair and concise to both the industry's and the public's welfare. As your fellow citizen and constituent I urge you to reconsider the proposed regulations and adopt all of the proposed changes to the draft.</p>
	<p>The counties 2nd draft of the O&G regulations are woefully inadequate to protect the Public Health, Safety, and Welfare, the Environment & Wildlife Resources per new State law SB-181. Additionally, at the O&G Task Force (TF) meeting on 1/23/20 section 17.3 (B) Setbacks was eliminated which should trigger an automatic extension to the Public Comment period that ends today, 1/24/20. Transparency, fairness and actually protecting the public health, safety ... of the citizens of Larimer County are a few of the main reasons for the proposed and needed extension. Setbacks are key to insuring public health. Giving the public (1) day to respond if they attended the O&G TF meeting and very little if any notice if they didn't, to last minute critical change(s) to the 2nd Draft proposed regs, is simply unacceptable and</p>

contrary to protecting the public's health, safety....

17.2 (B) The 2nd Draft regs don't even give Larimer County the ability to deny O&G applications if they don't meet the intent of SB-181 to protect the public's health, safety ... The O&G regulations should make it abundantly clear that there are clearly defined criteria to be followed to obtain approval and when it's not the application WILL & MUST be denied.

17.3 (B) Setbacks – A 2000' setback is not only reasonable but scientifically supported which should be the requirement for all situations: residential buildings..., high occupancy buildings (schools ...) & water bodies or outside activity areas. Deviating from 2000' setbacks is contrary to protecting public health, safety ... mandated by SB-181. I would hope the precautionary principle would be applied to setbacks and protecting the citizens of Larimer County. O&G activities add greatly to the formation of ozone which has many adverse health effects to humans and the health of wildlife and plants, consequently 2000' setbacks and continuous Air Quality monitoring should be mandated by the regs.

17.3 (C) Continuous Air Quality (AQ) monitoring completely paid for by the O&G industry would help protect the public's health and safety and is consistent with SB-181. No other industry that I know of is allowed to pollute with impunity and not pay for it in any way! The O&G industry should want to demonstrate how safe it is like it advertises and the County should safeguard the public's health with mandatory continuous AQ monitoring as part of the 2nd draft regs. Of course, allowable threshold AQ levels should be included in the regs with penalties and the ability for Larimer County to shut down operators and facilities that don't or won't comply. This monitoring should be real time reporting to the county for the public to access in real time.

17.3 (V) This section is ambiguous and lacks necessary information to be enforceable to protect the public health and safety. Financial capability thresholds need to be defined and set and due diligence needs to be done to ensure that O&G operators ... meet these necessary standards. These detailed public disclosures are just that open to the public for review and copying. Failure to prove these financial capabilities should mandate and necessitate an applicant or application be denied. Larimer County residents should not have to bear the burden of subsidizing O&G development by paying for reclamation costs because the county isn't requiring necessary financial capabilities from the industry or providing due diligence to insure the O&G industries financial disclosures are true and accurate.

Drilling and developing O&G resources in public areas and open spaces should be off limits and illegal. No one should have to state this obvious point but I feel I need to because the O&G regs don't prohibit it. This is a king size hole in the regs and suggests the regs are not well thought out or in the public's interest.

There are terms sprinkled in the regs like economically viable, technically infeasible which are against the language and intent of SB-181. All of them should be removed.

I would hope the final version of the O&G regs are substantially better and are genuinely about protecting Public Health, Safety and Welfare, the Environment, &

	<p>Wildlife Resources and not trying to balance O&G development with Public Health, Safety ... which is contrary to SB-181 and what the 2nd draft regs appear to be wanting to do!</p>
<p>January 25, 2020</p>	<p>The primary goal of oil and gas regulations should be to avoid negative impacts where possible, not just minimize them. The county has the authority to deny applications for new wells, especially fracking wells, that harm public health and safety. Moreover, the county's proposed regulations focus on new locations, but issues like noise pollution, dust, waste disposal, plugging and abandonment, leak detection and repair, methane release, and the millions of gallons of contaminated water from each well must be regulated for all oil and gas facilities in Larimer County. Our citizens deserve better than what we see on a daily basis in Weld County.</p>
	<p>This is nothing more than pure greed at the expense of the people. How about we set up a fracking well next to their mansions and see how fast that gets blocked? Oh wait...It all ready has, and its on record. Not to mention the environmental impacts we are already fighting for the very survival of our planet and the human race. But more money in the hands of people who already have enough money to keep their families in limos and leer jets for the next millennium. are too shortsighted to realize their greed will be the end of us all. Why dont they put their money into clean energy instead? Then they can have the corner on that market just like they do on the one thats GOING to kill the only known life in the universe currently. Climate change is real, the SCIENTIFIC evidence is irrefutable . The real conspiracy is actually the fossil fuel industry KNOWING about climate change for the last 40 years and have lying to the people in the name of profits. Are we going to cave to corporate greed at the expense of our children and grandchildren who are going to grow up and live in a dying world. Then they will ask you why you didnt do anything when you had the chance.... Imagine a societal breakdown where they will have to fight and kill for the limited resources that are left. Before they have to live underground, until it gets to the point we become another Venus, and then it will all be over. How can we be so cruel to them, in the name of profits for a few who dont care about us or our kids at all? As PROVED by the FACT the head of the fracking industry refused to let them frack anywhere near his house. What does he know he is not telling us? All i hear is how "Safe " and " clean" its is with thousands of accident and spills a year. The Koch brothers say its cheaper to pay the lawsuits and clean ups than to maintain the pipelines. (also on record. look it up) They burned 2 teens alive in Texas when they drove over a canal bridge full of leaked natural gas. What makes you think they will give us any more consideration when we start dying of cancer? This regime is removing regulations allowing these greedy billionaires to pollute our skies and water even more in the name of greed and profits. They are taking our public lands that FDR declared to be untouched so we can ALL enjoy them. Make no mistake this is not even CLOSE to the best interests of the people who</p>

	<p>have to live here. As a matter of fact, it is the exact opposite of what we SHOULD be doing.</p> <p>We are almost out of time and this is not the conversation we should be having . Climate change is the biggest threat to humanity because if we dont do something and do it fast it will be the end of us all.</p> <p>Remember.... They have MOTIVE to lie to you (its called profits)</p> <p>We have no motive or anything to gain by accepting established irrefutable science, except our very lives and the lives of what few future generations we will have left. Please read this one to their faces and see their reaction.... it will tell you all you need to know. hint They dont care and will lie to your face.</p> <p>Ive done my homework, and can back EVERYTHING i have told you. Please check my facts and see for yourself before you decide our kids are an acceptable loss in the name of corporate greed.</p> <p>sincerely, someone who is too old to be around to see the devastation we have bequeathed to our children</p>
	<p>No More Gas!</p>
	<p>The proposed regulations are woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as required by State law (SB-181).</p>
	<p>The proposed regulations are woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as required by State law (SB-181).</p> <p>The proposed regulations do not assert the County's right to deny, reject, nor condition any and all permit applications in order to prioritize these protections. This is a continuation of the County's fear of an industry lawsuit (none of which have been successful since SB-181 was passed).</p> <p>The proposed regulations require no comprehensive, transparent public process – the regulations do not provide for notifications or alerts for families living nearby. When canvassing the neighborhood adjacent to the new proposed 15-well Unicorn Pad near Timnath, we did not find a single homeowner who was aware of development.</p> <p>The proposed regulations fail to address or provide any public process on Larimer County open space!</p> <p>The proposed regulations fail to address any setback from homes, schools, or playgrounds. A recent CDPHE study found significant short term health effects out as far as 2000 feet from well-pads, and prior to that study, Tri-County Health recommended to the Adams County Commission at least a quarter-mile setback from all homes and at least 2,500 feet from sensitive populations.</p> <p>I ask that you slow this process down; make this process transparent with REAL public input; and STOP negotiating the health and safety of Larimer residents!</p>
	<p>Our partner, the Larimer Alliance and local residents are extremely concerned about the draft regulations and oil and gas operators plans to frack Larimer County:</p> <p>The proposed regulations are woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as required by State law (SB-181).</p> <p>The proposed regulations do not assert the County's right to deny, reject, nor condition any and all permit applications in order to prioritize these protections. This is a continuation of the County's fear of an industry lawsuit (none of which have</p>

	<p>been successful since SB-181 was passed). The proposed regulations require no comprehensive, transparent public process....</p>
	<p>Larimer County Planning; just once, do something for the health and well-being of county residents rather than kowtowing to the profit interests of the gas and oil industries that compromise our safety. Remember, elections are on the horizon and we will hold you accountable where ever possible.</p>
	<p>You have to do much more to protect the health and safety of Larimer residents and the environment. What you're currently proposing is junk. Thank you.</p>
	<p>The health and safety of Colorado residents is not a valid area to make compromises. The regulation of extraction of materials from the earth, such as oil and gas must be thorough, complete, and the process must be transparent, made by people with no interest in profit or political power, only in the interest of human beings who reside in and near Larimer County.</p>
	<p>the proposed regulations are woefully insufficient to protect Health, Safety, Welfare, Environment, and Wildlife as it does not prioritize those protections as required by State law (SB-181). The proposed regulations do not assert the County's right to deny, reject, nor condition any and all permit applications in order to prioritize these protections. This is a continuation of the County's fear of an industry lawsuit (none of which have been successful since SB-181 was passed). The proposed regulations require no comprehensive, transparent public process – the regulations do not provide for notifications or alerts for families living nearby. When canvassing the neighborhood adjacent to the new proposed 15-well Unicorn Pad near Timnath, we did not find a single homeowner who was aware of development. The proposed regulations fail to address or provide any public process on Larimer County open space! As of last night the proposed regulations fail to address any setback from homes, schools, or playgrounds. A recent CDPHE study found significant short term health effects out as far as 2000 feet from well-pads, and prior to that study, Tri-County Health recommended to the Adams County Commission at least a quarter-mile setback from all homes and at least 2,500 feet from sensitive populations.</p>
	<p>I think every person has a right to protect their home and land from any "attack" on that property's healthy integrity. This may include any form of pollution: air, land, noise, water and general scenic environment. The people of Larimer deserve to have a majority of input in the decision about what is done in the entire area of their homes.</p>
	<p>I am a long time Greeley resident who has witnessed how the power of the oil and gas industry can dramatically change a community. Yes, the industry injected badly needed revenue into our city. Their new employees spent their dollars locally at stores, supermarkets and restaurants. New hotels were built to house some of those employees and downtown Greeley started to flourish again. However, many of us soon experienced the predatory nature of oil and gas. This industry wasted no time working to influence Greeley and Weld County politics at all levels. The school district, UNC leadership, city council and county commissioners quickly abdicated their obligation to protect the public's welfare in favor of the fracking industry. Greeley homeowners received letters offering small sums for their mineral rights and unfortunately, many sold those rights ignorant that those rights were worth more. For those of us who didn't want to sell or lease our mineral rights, we were force pooled through state law and the cooperation of larger landowners like the school district</p>

	<p>and the university. Drugs and prostitution also became a problem. Then the industry applied for permits to build in close proximity to schools and homes. In one instance, the fracking company planned to build within 250 feet of a large apartment complex. At this same site, a drive-through coffee shop was denied a building permit, because the city council thought the increased traffic would be unsafe. However, the COGCC approved the permit even though semis carrying heavy equipment and volatile cargo would be regularly visiting the site. The COGCC also seemed unconcerned about possible explosions at the facility. Of course there have been several examples since then of explosions in Weld and elsewhere on the Front Range.</p> <p>Soon after oil and gas arrived, the 2013 floods occurred, and gas wells could be seen partly submerged in the flood waters. At least one gas tank was observed floating in the Platte river. Many, many spills have been documented since then, adding more pollution to our environment. Greeley also experienced an earthquake, the result of fracking fluid being injected into the ground in southern Weld county. Despite the early flash of cash, the streets on my side of town are still a mess, the school district begs for more money at election time and the air quality is worse. I've also never heard any plans for how these wells - both oil/gas and injection - will be maintained in the long run. Will these wells negatively impact our water supply in the future? I expect the fracking industry will be long gone by the time the consequences of fracking in Weld county are realized. And of course it will be the taxpayer who will foot the bill.</p> <p>All of this is to say that Larimer county has the opportunity to learn from Weld county's negligence. The costs of oil and gas drilling far outweigh the short monetary gain. The best option is to deny all permits and take another leap forward into a fossil fuel free future.</p> <p>All the best to you.</p>
January 26, 2019	<p>It appears to my wife and I that the proposed regulations do not prioritize the the Health and Safety of the environment and the residents of our County as required by State Law SB-181. Please do your job without the influence of the Oil and Gas industry. Their profits and jobs are not more important than the health and safety of people and the environment and also our wildlife.</p>
	<p>Thank you for the update. I am confused in that I thought with the passage of SB 181 that communities could chose not to be invaded by oil and gas companies poisoning their water and affecting their health. Why don't they have to follow the law?</p> <p>Respectfully inquiring,</p>
	<p>The deleterious 'benefits' to neighbors off fracking sites are now incontrovertible: lower birth weights, breathing complications for children; severe headaches available for all by airborne noxious, chemicals; etc., etc., etc. Shame on you with power for not protecting your voters!</p>
January 28, 2019	<p>I live right on the border of Larimer county and I am appalled that the people who are supposed to be representing the best interests of the citizens are once again giving oil and gas carte blanche to do whatever they want to do! Pollute our water, pollute our air, destroy our natural surroundings, and basically spit on our right to clean resources. After all, they don't have to live in the places that these wells are drilled! Science has PROVEN the effects of these chemicals on human health. And it is not positive. Not to mention that we have a beautiful state (for now). More and more wells, more and more roads, more and more destruction of our wild places. This is the MO of the oil and gas industry. Anything for the almighty dollar.</p>

	<p>How is it that oil and gas wins over human well-being every time (not to mention all the creatures, but they care even less about them). Are you so blinded by dollar signs that you would do anything, including sell out the very people that you are supposed to be protecting? It would seem so.</p> <p>Please reconsider your decisions on these matters. Money cannot buy a sustainable future.</p>
January 29, 2019	<p>I've read the setback requirements and strongly believe that they are nowhere near enough.</p> <p>As quoted:</p> <ul style="list-style-type: none"> a. 1,000-foot setback from a residential building or platted residential lot b. 2,000-foot setback from a high occupancy building including schools, registered day cares, nursing homes. c. 500-foot setback from a water body or designated outside activity area <p>These setbacks are woefully inadequate--especially (c) water body. They should, at the very least, be doubled. In the case of water body, increased 5-fold. When things go perfectly, all is well. But there is no such thing as perfection, and the extraction industry has a miserable record of self-regulating and cleaning up after itself. So accidents must be anticipated--they WILL happen--and when they do, these setbacks are absolutely critical.</p> <p>Thank you for reading my recommendations. Please consider them seriously, taking public health and the costs of cleanup of disasters with the utmost seriousness.</p>
	<p>I appreciate that strong air quality and odor quality measures are being put in place. I also wonder if they need to be even more stringent when there is an issue with easterly winds that makes air quality among the front range even worse. Also the mental health impacts of noise and pollution are important to address since mental health issues are the key health issue in Larimer County. Noise and pollution create anxiety, while other exposures can make chronic diseases worse and increase depression rates.</p>
	<p>B. Air Quality: items 3,4,5. The wording allows applicant to avoid compliance if "economically infeasible" Are we saying that profit trumps health? This corrupts the purpose of these regulations.</p> <p>C. Leak detection and repair. 1. leak detection screening should occur at least quarterly. Makes economic sense (avoid unneeded product loss) and damage from methane leaks to environment</p> <p>F. Noise: should measure at 500'</p> <p>N. Well plugging and abandonment : these wells should be checked annually for methane leaks and at owners expense.</p> <p>S. Flow lines, and gathering lines: this information must be recorded and accessible for future development.</p> <p>Recent study in "Environmental Science & Technology" authored by Prof. John Adgate, Dean of Colorado School of Public Health. This study found that at 152 m. (500') from O&G facilities, residents cancer risk is >USEPA upper risk level. Yet these regulations do not discuss safe setbacks for O&G development to homes/schools/sports fields beyond current requirements.</p>
January 30, 2019	<p>We want our environment and wildlife protected not sacrificed for industry profit!</p>

	<p>Perhaps the volatility inherently associated with oil and gas prices and stringent rules for compliance will directly influence which companies have the financial resources to withstand the risk to undertake a sustained downturn in their revenue stream. If not ,where does that leave the land owners and the mineral owners along with the State of Colorado who also have a vested interest at stake ?</p> <p>As you may have seen recent articles in the Denver Post and other responsible sources which noted the dereliction of required monthly oil and gas well production reports by some 420 operators. . These legally required reports either intentionally or irresponsibly have not been properly filed for the past two years by a majority of the operators in Colorado. Sadly, the Colorado Oil and Gas Conservation did not perform their required obligation to oversee compliance by the operators and cheated the State of Colorado out of much required and necessary revenue.</p> <p>I have several comments on this sad situation which must be addressed in the proposed rules to ensure Larimer County does not become entangled in this web of fraud , intentional or not.</p> <ol style="list-style-type: none"> 1. Operators approved to file permits to drill must post a substantial bond to ensure they meet all the requirements both financially and physically throughout the entire process. Moreover, they must be held responsible to restore the land to the previous condition as it existed before drilling commenced and after final production ceases ,subject to inspection by regulatory authorities. 2. Has anyone in your committee researched with the Colorado Oil and Gas Commission to determine if any well location or tank battery ever found that H2S gas has been discovered during the ongoing drilling production phases of these type operations? As you know hydrogen sulfide is or can be commonly found in oil and gas production. This gas is extremely lethal in very small quantities (800 ppm) and can almost certainly lead to death in humans when exposed for approximately 5 minutes or so. The first warning signs are noxious smell of rotten eggs which after a brief time will numb the senses preventing any possible chance of escape before it too
<p>February 1, 2019</p>	<p>I sent in a written comment already about the Larimer County oil and gas draft regulations. It appears I can also contact you directly, via this e-mail. My concern is generally, are the purported negative health effects of oil and gas exploration and production overblown? I have not seen any news about health concerns of those working directly in the industry, on the rigs and at the well sites, in the transportation links and in refineries. Have you seen any or are there any health studies done or going to be done with these individuals or groups?</p> <p>It seems to me that if oil and gas exploration and production is so bad, it would show up in negative health effects of these workers! Sinclair, Wyoming is a small community with a refinery, also SE Cheyenne, Wyoming has a refinery east of U.S. 287 and north of I-80; two good places for some studies</p>

	<p>of communities near refineries. Individuals working in drilling (exploration and production), hydraulic fracturing, wire-line and hauling services would be groups expected to have high incidences of negative health effects if there are real problems.</p> <p>Are you or others aware of any such studies? Many of these individuals have been working in these jobs or living in these communities for years.</p>