

Section 8 Technical Reports

8.1 Air Quality Impact and Mitigation Report

This section addresses *Larimer County Procedural Guide for 1041 Permits*, Item 8.1, and the criteria and standards described in LUC Sections 8.11, 14.10.D.3, 14.10.D.4, 14.10.D.6, and 14.10.D.11.

Larimer County requires that fugitive dust emissions be controlled during construction. The amount of surface clearing required for construction will exceed 25 acres; therefore, Thornton and/or the TWP contractors will develop a fugitive dust control plan, submit an air pollution emissions notice, and obtain a permit from CDPHE prior to construction activities in accordance with state air quality regulations. Construction is anticipated to be constructed under multiple packages; therefore, multiple permits will be obtained as required.

Construction activities, such as vehicles driven over cleared ground, general disturbance to vegetated areas, or soil stockpiles susceptible to winds, can cause fugitive dust. During construction, dust control measures will be implemented. Examples of these mitigation measures that may be used on the TWP include:

- Speed limits for construction vehicles within the work area
- Water application to disturbed areas, dirt access roads, and stockpiles
- Erosion control techniques and best management practices listed in **Appendix D**
- Revegetation of disturbed areas following construction activities

Water will be used as needed for dust suppression during construction. Water sources could be nearby fire hydrants, water pipelines, and water trucks. Water may be purchased from local water providers for construction activities.

Permanent facilities associated with the TWP will comply with air pollution control regulations. A generator might be required at the source water pump station for emergency backup power, if a second independent power source is not included. It may be possible for PVREA to extend a second, redundant power feed to the source water pump station for emergency backup power. If a second feed is feasible and cost-effective, an emergency diesel powered backup generator will not be required. Thornton will continue to coordinate with PVREA to determine specific requirements for power service to the source water pump station. Regular maintenance will be performed to ensure that the generator provides backup power throughout its service life. The proposed generator will comply with county, state, and federal air quality standards. If required by the state, a Colorado Air Emissions Permit will be obtained prior to system startup. A Larimer County Site Plan Review application will be submitted to Larimer County for the source water pump station after design.

The proposed water tank will not have emission sources; therefore, will not require a Colorado Air Emissions Permit.