# DEPARTMENT OF HEALTH AND ENVIRONMENT



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# Notice of Revisions to Larimer County On-Site Wastewater Treatment System Regulations

On June 30<sup>th</sup>, 2017 the Colorado Department of Public Health and Environment's revisions to Regulation 43 which provide requirements for the installation and design of on-site wastewater treatment systems (OWTS) became effective. As a result, local OWTS regulations are required to be revised and updated by no later than June 30, 2018. Local regulations must be at least as stringent as Regulation 43.

Below is a summary of changes, a full version of the proposed revised regulations is available on the Larimer County website;

https://www.larimer.org/health/clean-air-water-and-soil/septic-systems-owts

# Applicability and Administration

43.4.E.2 – A system designed to use pressure distribution must be tested in operation prior to final approval to evaluate pump and floats, control panel operation, and adequate residual pressure.

### Site and Soil Evaluations

43.5.D.1 – Evaluation of two test pits is required for all systems. Percolation testing may be done in addition to evaluation of the test pits.

### Wastewater Flow and Strength

43.6.A.2.f – OWTS serving dwellings for which a building permit is necessary to convert to a rental unit will be sized based on the maximum number of occupants instead of the number of bedrooms.

### Design Criteria – Components

43.9.D.1.b – Flexible couplings used to connect the building sewer to the interior portion of the plumbing at the foundation must be provided with metal shielding or banding to prevent damage if settling occurs.

43.9.E.3 – When the building sewer has a change of horizontal direction greater than 45 degrees a cleanout must be installed at the change in direction unless a cleanout already exists within 40 feet upstream of the fitting.

43.9.F.3 – Distribution box risers must be 24" in diameter, unless less than 24" in riser height is needed to bring the lid to grade.

43.9.1.1 – Dosing tanks used in pressure distribution systems must be sized based on the design's specifications for dose volume, drain back, reserve capacity, and volume under the pump or siphon.

43.9.1.3.d – Dosing siphons used for pressure distribution must be equipped with a float and counter to track the number of dosing events.

43.9.1.8.a.5 – Control panels used for pressure distribution must have a mechanism for tracking both pump run time and number of pump cycles.

43.9.H.5.b – Pump discharge piping must have a union or quick disconnect within 18" of the access riser lid.

#### Design Criteria – Soil Treatment Area

Table 10-1A – New classifications for soil types with high rock content. Systems utilizing overexcavation to remove and replace weathered bedrock must be pressure dosed.

43.10.3.E.3.a.(4) – Residual head in a pressure distribution system must be a minimum of 30" for orifices sized at larger than  $\frac{1}{8}$ ", or 60" for  $\frac{1}{8}$ " orifices.

43.10.F.1.b – Separating distance between trenches has been reduced from 72" to 48", sidewall to sidewall.

43.10.F.6.a – Inspection ports must be provided in each corner of a bed system, or at the terminal end of each trench lateral.

43.10.H.1 & 43.11.C.2. – When a sand filter is installed a gradation of the sand must be provided. The gradation must be dated no more than one month from the date of the installation. New categories and loading rates for sand filters "Preferred" and "Secondary".

### Design Criteria – Higher Level Treatment Systems

43.11.D – Systems installed at or above original grade in order to maintain a vertical setback must be pressure dosed and follow new design criteria for mounds.