



COLORADO

Department of Public Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

April 28, 2015

Thomas Kallenbach, President, CEO
Eliminite, Inc.
P.O. Box 359
Belgrade, MT 59714

Subject: Eliminite, Proprietary Treatment Product - TL2 Acceptance
For Use in Colorado On-site Wastewater Treatment Systems

Dear Mr. Kallenbach:

Pursuant to section 43.13 of the On-site Wastewater Treatment System Regulation 5 CCR 1002-43 (Regulation 43), the Water Quality Control Division (Division) has reviewed drawings and specifications received January 21, 2015, and April 1, 2015, for the Eliminite proprietary treatment technology products noted below.

The Eliminite treatment technology noted below was previously accepted by the Division on October 9, 2007 for use as a component of an on-site wastewater treatment system (OWTS) through NSF Standard 40 under the previous state regulation. Section 43.13(D)(3)(j) of the recently adopted Regulation 43 states:

“If a proprietary product has been accepted for use in Colorado under NSF/ANSI 40 or equivalent testing and at least one product unit has been installed in Colorado prior to the effective date of this regulation, the acceptance for use in Colorado may continue as treatment level 2”.

Based on the information that has been provided, the Eliminite treatment products noted below comply with this requirement and are accepted as a higher level treatment system for use as a component of an OWTS subject to the design criteria in Table 1 below. This acceptance is not intended as an endorsement or third-party certification of the technology.

This acceptance addresses the following models:

- Eliminite 120C and 120P, at treatment level TL2 for flows up to 400 gpd.
- Eliminite 220C and 220P, at treatment level TL2 for flows up to 700 gpd.
- Note: “C” in the model number indicates a concrete tank; “P” indicates an approved fiberglass or plastic tank.

This acceptance applies only to OWTS with design capacity less than 2,000 gallons per day (gpd). **Review and approval for the design of any OWTS proposing to use this technology will be reviewed by the local public health agency.** As individual local public health agency regulations may be more stringent than Regulation 43, the Division cannot ensure the acceptance of a treatment technology within any given jurisdiction.

Any modifications to the physical attributes or characteristics of this treatment technology must be submitted to this office for review and acceptance by the Division prior to sale in Colorado. The Division will review modifications, any additional third party verification reports and issue a revised acceptance letter, or denial, as appropriate.



Table 1. Design Criteria for Eliminte, Inc. models listed above:

Design Criteria
<ol style="list-style-type: none">1. The Eliminte wastewater treatment system is intended to be sold as a complete unit. The design of the treatment tank and all accessory components (pumps, control panel, etc.) shall conform to manufacturer specifications specific to the proposed daily flows and waste strength to be treated.2. A septic tank consistent with section 43.9(A) and 43.9(B) and installation of an effluent screen consistent with section 43.3(44) and 43.9(I) must precede the Eliminte treatment unit. Surge volume may be needed for some applications based on manufacturer recommendations. Pretreatment for non-residential kitchens must include adequate separate grease separator tank(s) prior to the primary septic tank(s) as required in section 43.9(J) of Regulation 43.3. The Eliminte 120 is designed to treat 400 gallons/day at a mass BOD loading/day of 1.0 lb.4. The Eliminte 220 is designed to treat 700 gallons/day at a mass BOD loading/day of 1.75 lb.5. The Eliminte control panel is designed specifically for the Eliminte treatment units and must be installed as an integral part of this system. The control panel is set to provide 144 recirculation cycles/day.6. Design flow shall be for maximum occupancy. Design flow for single-family residential designs may vary based on the regulations adopted by the local board of health for the design location. Design flow values and strengths for multi-family and commercial systems shall be consistent with section 43.6(A)(4). Therefore, all design criteria in this acceptance are based on total gallons per day and the assumption of residential strength wastewater.7. The design must include pressure dosed distribution of effluent. Reductions in soil treatment area size or separation distances shall be as described in section 43.10(C)(4) of Regulation 43.8. The designated higher level treatment rating is identified for each model on page 1. Use in higher level treatment applications requires system be designed by a Colorado Licensed Professional Engineer. The accepted treatment product may also be used for applications requiring less than the approved treatment level of the product. Reductions in soil treatment area size or separation distances based on higher level treatment <u>may not be applied unless</u> the local public health agency has a maintenance oversight program in place as described in section 43.14.D of Regulation 43. In locations where the local public health agency has not adopted a maintenance oversight program, the treatment system may be installed but only with soil treatment area and separation distances consistent with treatment level TL1 requirements.9. In addition to these design criteria, other provisions of Regulation 43 and local regulations also apply to a specific design as well as good OWTS design practice. The Division does not approve manufacturer design manuals. Manufacturer provisions shall not be applicable if those provisions are not consistent with Regulation 43, these design criteria, and the regulations adopted by the local board of health for the design location. Local public health agencies will review proposed designs to confirm consistency with Regulation 43, these design criteria, the local board of health regulations adopted pursuant to Regulation 43, and good OWTS design practice.10. Monitoring of the system may be required by the regulations adopted by the local board of health.

11. The treatment technology is not intended for industrial sources of wastewater. The treatment technology is intended to receive domestic wastewater with TL1 concentrations (see Table 6-3 in Regulation 43) exiting the septic tank. Wastewater with higher concentrations of biochemical oxygen demand (BOD); total suspended solids (TSS); or fats, oils, and grease (FOG) will require verification of ability to treat wastewater and appropriate modifications or pretreatment.
12. Design shall provide access for maintenance and repair. Septic tanks and all treatment components, other than the soil treatment area, shall be equipped with access manholes and risers that extend to or above final grade. Risers and lids shall be watertight and secure.

Additional Operation and Maintenance Criteria

1. Design shall include an Operation and Maintenance (O&M) Manual to be provided for all installations. Individual operation plans shall include scheduled inspections, assessments, and maintenance of the treatment unit. This plan for scheduled inspections and assessments should include a routine inspection at least annually as described in section 43.14(D)(4)(b) unless the local regulations require more frequent inspections.

The owner of the OWTS is responsible for arranging proper design, operation, and maintenance of the facility to achieve the desired treatment level.

If you have any questions regarding the Division's review or findings, please contact me at (303) 692-2366 or chuck.cousino@state.co.us.

Sincerely,

Charles J. Cousino, REHS
On-site Wastewater Treatment System Coordinator
Engineering Section
Water Quality Control Division
Colorado Department of Public Health and Environment

cc: Files