



LET'S CLEAR SOME THINGS UP FOR YOU!

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**RE: Colorado Drainfield/Leach Field Rejuvenation Rule**

In Colorado, systems designed to remediate or rejuvenate failed drainfields are referred to as, “remediation systems”. Requirements for the use and allowance of remediation systems are found within section 43.10.I.10 of Regulation 43.

While, as stated, Colorado State Regulation 43 allows for the use of drainfield rejuvenation products such as RioVation® BioMaze®, it is ultimately up to the county Authority Having Jurisdiction (AHJ) to make the final determination. Regardless, a permit will be required from the county for any installation utilizing a rejuvenation product such as BioMaze®.

The state does not credit the product with any treatment levels referenced in Table 6-3. That being said, BioMaze® installations in either one or multi-compartment tanks, typically achieve single digit CBOD5 and TSS levels along with greatly reduced fecal coliform and nutrient reductions. The resulting effluent discharged to the drainfield is high in dissolved oxygen and rich in aerobic microorganisms which rapidly rejuvenate or recover drainfields which have failed or are failing due to biomat sludge issues.

You will find more information on our website [www.riovation.com](http://www.riovation.com) and our YouTube channel [www.youtube.com/@rioovation](http://www.youtube.com/@rioovation).

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## DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

### Water Quality Control Commission

## REGULATION NO. 43 - ON-SITE WASTEWATER TREATMENT SYSTEM REGULATION

### 5 CCR 1002-43

*[Editor's Notes follow the text of the rules at the end of this CCR Document.]*

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#### 43.1 Authority

This regulation is promulgated pursuant to the On-site Wastewater Treatment System Act, 25-10-101, et seq. C.R.S.

#### 43.2 Scope and Purpose

##### A. Declaration

1. In order to preserve the environment and protect the public health and water quality; to eliminate and control causes of disease, infection, and aerosol contamination; and to reduce and control the pollution of the air, land and water, it is declared to be in the public interest to establish minimum standards and regulations for On-site Wastewater Treatment Systems (OWTS) in the state of Colorado and to provide the authority for the administration and enforcement of such minimum standards and regulations.
2. This regulation will apply to On-site Wastewater Treatment Systems as defined in section 25-10-103(12), C.R.S.

##### B. Purpose

1. The purpose of this regulation as authorized by the OWTS Act is to establish minimum standards for the location, design, construction, performance, installation, alteration and use of OWTS within the state of Colorado, and establish the minimum requirements for regulations adopted by local boards of health including but not limited to permit application requirements; requirements for issuing permits; the inspection, testing, and supervision of installed systems; the maintenance and cleaning of systems; the disposal of waste material and the issuance of cease and desist orders.

##### C. Effluent Discharged to Surface Waters

1. Any system that will discharge into surface waters must be designed by a professional engineer. The discharge permit application must be submitted for preliminary approval to the local board of health. Once approved by the local board of health, the application must be submitted to the Water Quality Control Division for review in accordance with the Water Quality Control Act, 25-8-101, et seq. C.R.S, and all applicable regulations of the Water Quality Control Commission. Compliance with such a permit will be deemed full compliance with this regulation.

- (8) Maintenance must include preventing aquatic and wetland plants from growing in or on the edge of the pond, protecting sides from erosion, and mowing grasses on the berm and around the pond.
  - (9) Wastewater ponds must be designed by a professional engineer.
- 8. Vaults
  - a. The allowable use of vaults for repairs in a local jurisdiction is determined by the local board of health.
  - b. Criteria for vaults are in section 12.C. of this regulation.
- 9. Higher Level Treatment Options
  - a. Reduction in required soil treatment area for repairs is possible with higher level treatment only where the local public health agency meets the requirements of section 43.14.
  - b. Design criteria for higher level treatment systems are in section 43.11.
- 10. Remediation Systems
  - a. The intent of a remediation technology or process is to sufficiently increase the infiltration rate through the infiltrative surface at the bottom of an existing trench or bed and restore permeability to the soil below. Treatment levels as defined in Table 6-3 are not granted to remediation technologies.
  - b. A local public health agency may permit the use of remediation technologies or processes to address an existing failure or malfunction within a soil treatment area.
  - c. The use of a remediation technology or process constitutes an alteration to the OWTS, and therefore the owner must obtain a permit for this work from the local public health agency.
  - d. Upon approval of the local public health agency, a system owner may choose to try a remediation technology or process to see if an existing problem with the soil treatment area will be resolved. The system owner bears the risk and cost of this attempt and is aware that an additional repair may be required.
  - e. Remediation technologies and processes must not adversely affect groundwater, surface water, any existing components, the long-term effectiveness of the soil treatment area, or the environment.
  - f. If the remediation technology or process does not correct the problem with the system, a conforming OWTS must be installed per the requirements in this regulation within a time frame determined by the local public health agency.
  - g. The local public health agency may require monitoring and/or maintenance of the remediation technology or process as a stipulation of permit issuance.