

Bear Creek Watershed Association

Date: August 8, 2013

Policy 11 Supplement – 1) Clear Creek County ISDS Vault and Privy Regulations and 2) Jefferson County ISDS Vault and Privy Regulations



Clear Creek County Individual Sewage Disposal System Regulations Amended: August 20, 2008 Section VI – Alternative Disposal Systems

B. Vaults

1. Vaults may be permitted for limited use occupancy structures with water carriage sewage systems and shall have a minimum 1,000 gallon effective capacity. All vaults shall be equipped with an signal device indicating with visual or audible alarm when the vault has reached 85 percent capacity.
2. All vaults shall be equipped with a tripping device which when activated shall effectively eliminate the water supply to the building being served by the vault. Such device shall be approved by the Department and shall be activated at no greater than 95 percent capacity.
3. All receipts from a Licensed Systems Pumper shall be retained and available to the Department upon request.
4. Vaults shall meet the same installation and construction standards as septic tanks except they shall be single compartment and have no effluent outlet.

C. Vault Privy

1. A vault privy shall be built to include: insect-tight construction, a superstructure affording complete privacy, an earth mound around the vault and below floor level which slopes downward away from the superstructure base, a floor and riser of concrete or other impervious material, and seats and covers of easily cleanable, non-absorbent material, hinged, self-closing and insect proof. All venting shall be insect proof with No. 16 or tighter mesh screening.
2. Effective capacity of a vault privy shall be no less than 400 gallons.
3. Vault privies shall meet the same installation and construction standard as septic tanks except they shall be single compartment and have no effluent outlet.
4. The vault privy shall be pumped when full by a Licensed Systems Pumper. All pumping receipts shall be retained and available to the Department upon request.
5. Vault privies may be allowed at the discretion of the Health Official but shall be prohibited for residential uses.

D. Incineration Toilets and Chemical Toilets

1. Incineration or chemical toilets may be permitted at the discretion of the Health Official.
2. Incineration and chemical toilets shall be designed and installed in accordance with all applicable Colorado Safety Codes and shall have a National Sanitation Foundation Certificate.
3. The use of portable chemical toilets in permanently occupied buildings shall be prohibited except during construction or under emergency circumstances.

E. Composting Toilets

Deposits of feces, urine, and readily decomposable household garbage that are not diluted with water or other fluids may be retained in a compartment, in which aerobic composting will occur. The compartment may be located, subject to other applicable regulations or codes, within a dwelling or building provided the unit complies with NSF standards and provided the installation meets manufacturer's specifications. The effective volume of the receptacle must be sufficient to accommodate the number of persons served

**Individual Sewage Disposal System Regulation
Jefferson County Colorado
Amended: August 4, 2007
Section 15 – Alternative Disposal Systems**

15.0 General Requirements

- A. All alternate individual sewage disposal systems in Section 15 require Board of Health approval unless the proposed system is for the repair or replacement of a similar existing system.
- B. Design criteria and construction standards for alternate systems shall be sufficient to exclude flies and rodents from access to human excreta, prevent nuisances and health hazards, provide for cleanliness of such facilities, and prevent ground or surface water pollution.

15.1 Vaults

- A. Vaults may be permitted under the following conditions:
 1. when the proposed vault will serve an existing dwelling unit that is restricted to limited occupancy, or
 2. for nonresidential structures where due to on- or off-site constraints it is not feasible to install another type of individual sewage disposal system on the site.
- B. Vaults shall have a minimum effective capacity of one thousand (1,000) gallons for indoor water carriage sewage systems and shall meet the same installation and construction standards that apply to septic tanks, except that the vault shall contain a single compartment and no effluent outlet shall be provided.
- C. A signal device that meets the requirements of Sections 11.10 and 11.12 shall be required on all vaults.
- D. Vaults shall be located in an area that is readily accessible for routine pumping during all seasons of the year as documented by a letter from a Systems Cleaner.

E. If the vault is used in conjunction with a gray water system, the vault shall be placed at least five (5) feet away from the gray water septic tank and such that the top of the vault is one (1) foot horizontally below the top of the gray water tank, unless it can be demonstrated to the satisfaction of the health officer that a connection between the vault and the gray water tank cannot readily be made.

F. The owner of a system that includes a vault shall obtain and maintain a contract with a Systems Cleaner for the routine pumping of the vault. The owner shall maintain copies of all pumping receipts for a period of three (3) years and shall furnish copies to the Department upon request.

15.2 Vaulted Privies

A. Vaulted privies shall be constructed to include:

1. a fly-proof, watertight vault with a minimum capacity of four hundred (400) gallons and a superstructure affording privacy;
2. an earthen mound around the top of the vault and below the floor level, that slopes downward away from the vault for the purpose of diverting surface water away from the vault;
3. a floor and riser of concrete or other impervious material, and a seat and lid of easily cleanable, impervious material, hinged, self-closing and fly-proof; and
4. fly-proofed venting with No. 16 or smaller mesh screening, vented to the outside atmosphere.

B. Vaulted privies shall not be allowed for new single family dwellings.

C. The construction of non-vaulted privies is prohibited.

D. The continued use of existing, non-vaulted privies is prohibited except for limited occupancy dwellings.

15.3 Incineration Toilets

Incineration toilets that meet the requirements of NSF P157 or equivalent shall be designed and installed in accordance with all applicable Colorado safety and building codes, and the Colorado Air Pollution Control Commission rules and regulations.

15.4 Portable Chemical Toilets

A. Portable chemical toilets shall have a superstructure that meets the requirements of Section 15.2 and a sewage receptacle of easily cleanable and impervious material that is accessible or removable for thorough cleaning and disinfection. Portable chemical toilets shall be pumped as necessary and maintained in a sanitary condition at all times.

B. The temporary use of commercial portable chemical toilets for construction sites, recreational areas, festivals and fairs, etc., is not regulated

15.5 Gray Water Disposal Systems

A. Gray water systems may be considered when a separate system such as a vault or composting toilet is provided to dispose of human excreta.

B. Design requirements for conventional individual sewage disposal systems prescribed in these Regulations shall apply to gray water systems except that:

1. the average daily flow for the design shall be based on a minimum volume of wastes of one hundred (100) gallons per bedroom per day, exclusive of toilet wastes;
2. the capacity of the septic tank shall meet the criteria in Table 7; and
3. the building drain and sewer line leading to the septic tank shall be a maximum of two (2) inches in diameter.

C. The maximum number of fixtures per two (2) inch sewer line shall not exceed the number permitted by the building code.

15.6 Cesspools and Flush Hopper Toilets

Installation or use of cesspools and flush hopper toilets is prohibited.

15.7 Composting Toilets

A. Deposits of feces, urine, and readily decomposable household garbage such as kitchen scraps, waste food, etc., that are not diluted with water or other fluids may be retained and treated in a composting toilet.

B. Only manufactured composting toilets meeting NSF/ANSI 41 or an equivalent testing program and approved by the Colorado Department of Public Health and Environment may be installed.

C. The composting toilet may be located within a dwelling or building, provided that:

1. it is specifically designed for interior use;
2. it complies with the applicable requirements of these Regulations and the building code; and
3. the installation will not result in conditions considered to be a health hazard as determined by the health officer.

D. The effective volume of the composting toilet shall be sufficient to accommodate the number of persons served.

E. A system to collect and dispose of gray water meeting the requirements of Section 15.5 shall be provided for dwellings and other facilities that generate such waste water.

F. The compartments and appurtenances related to the composting toilet shall include flyproof construction and exterior ventilation as required by the building code.

G. When the composting toilet is filled to seventy-five percent (75%) of capacity, the residue shall be removed and disposed of by acceptable solid waste practices.

H. No composting toilet shall be installed to serve more than eight (8) persons per system in a residential structure or for a capacity in excess of its design for recreational use

I. If a composting toilet will be installed where low temperatures may be a factor, the design shall compensate for the effects of those temperatures.

15.8 Systems that Recycle Treated Waste Water for Non-Potable Uses

A. If waste water is to be recycled for non-potable purposes such as flushing water closets or urinals it shall meet the treatment requirements adopted by the Colorado State Board of Health or Water Quality Control Commission.

B. No cross-connection to a pipe, fixture, or supply containing potable water shall be permitted.

C. Fixtures utilizing non-potable water shall be clearly marked with a sign to indicate that the water is non-potable.

15.9 Systems that Recycle Treated Waste Water for Potable Purposes

No system shall be permitted that will recycle waste water for potable purposes unless it meets all requirements for potable water of the Colorado Department of Public Health and Environment and of the State Board of Health or Water Quality Control Commission.