

c. Utilization. Vault privies are an acceptable method of holding human excreta where ground water, surface water or other conditions prohibit the installation of other approved sewerage facilities. The conditions contained in subdivision B 1 c of this section shall be met.

3. Portable privies.

a. Description. A portable privy is a type of vault privy that is generally manufactured as a single unit and is easily transported.

b. Location. Location of portable privies should be determined on a case-by-case basis under the supervision of the district or local health department.

c. Utilization. Portable privies are normally used in association with mass gatherings, construction sites, etc., where temporary facilities are required.

d. Numbers required.

(1) When portable privies are used at mass gatherings, one privy per 100 persons shall be provided as a minimum.

(2) When portable privies are used at construction sites or transient worker locations, one privy per 25 persons shall be provided as a minimum.

e. Pumping. The containment vessel of the portable privies shall be pumped as often as necessary to prevent overflow. It is recommended that they be pumped when 2/3 full.

**12VAC5-610-990. General.**

Storage facilities associated with pump and haul operations permitted under 12VAC5-610-420 shall meet the criteria contained herein.

**12VAC5-610-1000. Location.**

The storage facilities shall be accessible by an all weather road of suitable carrying capacity to handle a fully loaded tank truck. Sufficient all weather surface area with appropriate carrying capacity shall be provided for maneuvering the tank truck.

**12VAC5-610-1010. Design.**

A. Capacity. Temporary storage facilities shall have sufficient capacity to store the projected flow for 48 hours.

B. Materials. The materials utilized shall be resistant to the corrosive action of sewage and shall be capable of withstanding the internal and external loads placed upon it.

C. Watertightness. The storage facility shall be watertight.

D. Access. The storage facility shall be easily accessible for the removal of the sewage. An access manhole with minimum dimensions of 18 inches by 18 inches terminating at or above the ground surface shall be provided. The storage facility shall be a closed containment vessel and all access ports shall be provided with removable covers.

E. Venting. Adequate venting shall be provided in all storage facilities.

F. Level Alarm. All facilities shall be provided with an audiovisual alarm to be activated when the storage facility is ¾ full. Audiovisual alarms shall alarm at two locations, one that is manned 24 hours per day and the other at the site of the storage facility where the storage facility receives sewage on a 24-hour basis. When sewage flow is intermittent only one alarm at the storage facility is required.

**12VAC5-610-1020. General.**

All vehicles utilized to transport sewage shall be kept in a clean and sanitary condition.

**12VAC5-610-1030. Vehicle identification.**

The name and address of the owner shall be displayed on each side of the vehicle in letters at least four inches high. In addition, the sewage handling permit number shall be displayed immediately beneath the owners name and address and in plain sight.

**12VAC5-610-1040. Sewage containment vessel (tank).**

The tank in which the sewage is to be transported shall be fully enclosed and watertight. All inlets and outlets to the tank shall be secured and made watertight during transit. The tank shall be secured to the truck.

**12VAC5-610-1050. Pumps.**

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When a pump is utilized to transfer sewage, the pump shall be watertight and properly valved and/or capped to prevent spillage during transport.

**12VAC5-610-1060. Valves.**

All valves shall be watertight.

**12VAC5-610-1070: Hoses.**

Suction and discharge hoses shall be watertight and provisions shall be made for carrying the hose in a manner to prevent leakage.

**12 VAC 5-610-1080. Anaerobic lagooning of septage.**

A. General. An anaerobic lagoon for the purpose of this chapter is a nondischarging facility consisting of an open impervious structure, constructed of earth or other material specifically designed for receiving and stabilizing septage and other sewage sludges. Industrial waste sludges and sludges containing toxic material shall not be placed in these lagoons.

B. General site requirements.

1. Engineering, geologic, soil and hydrologic evaluation. Geologic information required by the district or local health department and the division shall include, but not be limited to, soil characteristics, percolation information, maximum ground water table, direction of ground water movement and permeability.

2. Location.

a. Minimum setback distances for topographic features are the same as those for subsurface soil absorption systems and are contained in Table 4.2.

b. Buffer zone. Buffer zone criteria are contained in Appendix I.

c. Flood protection. The anaerobic lagoon and operational components shall be located at an elevation which is not subject to the 100-year flood/wave action or shall otherwise be adequately protected against the 100-year flood/wave action damage. The anaerobic lagoon shall remain fully operational during the 25-year flood/wave action.

d. Surface runoff. Adequate provisions shall be made to divert storm water around the anaerobic lagoon and otherwise protect the lagoon's embankments.

3. Access. An all weather access road shall be provided.

4. Fencing. The facility site to include treatment units and appurtenances shall be fenced with a five foot fence (woven wire plus barbed wire); gates and locks to provide controlled entry into the facility. The fence shall be posted with signs identifying the facility, safety and health dangers and trespass penalties. The fence shall not be constructed closer than 10 feet to the outside edge of any treatment unit or appurtenance.

C. Design requirements (see Figure V-1 for typical sections).

1. Receiving facilities.

a. An impervious pad of sufficient strength to support a loaded tank truck and with drainage to the lagoon shall be provided at the point or points where the contents of the tank truck is offloaded into the lagoon or receiving facilities.

b. The receiving and inlet facilities shall be designed to transport the septage into the lagoon, to distribute the septage as evenly as possible throughout the lagoon and to minimize generation of odors and suspension of solids.

2. Treatment units.

a. Anaerobic lagoons.

(1) Number and capacity. A minimum of two lagoons shall be provided. The combined total capacity of the lagoons shall provide eight months storage based on the average daily discharge into the lagoon.

(2) Operating depth. The normal operating depth shall be from three to five feet.

(3) Lagoon bottom. The lagoon bottom shall be level, constructed of impervious material ( $10^{-6}$  sm/sec) and be a minimum of two feet above the seasonal water table or at the original ground surface.

(4) Lagoon embankments. Embankments and/or dike walls shall be impervious and structurally stable. They shall be designed to permit access of equipment by appropriate lining or internal barriers necessary for sludge removal in a nuisance free and safe manner, and to minimize risk, supervision, operation and maintenance. Earthen embankments shall be sloped (minimum 1:3) and seeded with proper cover, subject to soil characteristics, to minimize erosion.