

**BUTLER COUNTY HEALTH DEPARTMENT  
301 SOUTH THIRD STREET  
HAMILTON, OH 45011  
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## **HOUSEHOLD SEWAGE TREATMENT SYSTEM RULES**

**(Including the Ohio Administrative Code and the Board of Health Rules)**

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### **HOUSEHOLD SEWAGE DISPOSAL SYSTEMS**

#### **CHAPTER 3701-29**

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### 3701-29-01 - Definitions

As used in regulations 3701-29-01 to 3701-29-22, of the Ohio Administrative Code and the Butler County Board of Health:

- (A) “Aeration or aerobic type treatment system” means any system which utilizes the principle of oxidation in the decomposition of sewage by the introduction of air into the sewage or by surface absorption of air for a sufficient period of time to effect adequate treatment.
- (B) “Alter” means to change by making substantive additions or deletions in location, design, or materials of existing household sewage disposal systems.
- (C) “ARCPACS” means the federation of certifying boards in agriculture, biology, earth, and environmental sciences.
- (D) “Bedrock, rock, and other fragments” means bedrock underlying the soil or exposed at the surface of the ground and rock and other fragments that are discrete particles greater than two millimeters including, but not limited to, gravel, cobbles, flagstones, stones, and boulders. For the purposes of this chapter, a limiting condition shall include soils having bedrock, rock, or other fragments greater than fifty per cent by volume.
- (E) “Bedroom” means any room within a dwelling that might reasonably be used as a sleeping room including but not limited to rooms designated as a den, office, or study.
- (F) “Board of Health” means the board of health of a city or general health district, or the authority having the duties of a board of health in any city as authorized by Section 3709.5 of the Ohio Revised Code.
- (G) “Building drain” means that part of the lowest horizontal piping of a building drainage system which receives the discharge from soil, waste, or other drainage pipes inside the walls of any building and conveys such drainage to the building sewer three feet outside the building wall.
- (H) “Building sewer” means that part of the horizontal piping of a drainage system which extends from the end of the building drain which receives the discharge of the building drain and conveys it to the public sewer, private sewer, individual sewage disposal system or other points of disposal.
- (I) “Curtain drain” means a subsoil drain that inhibits the entrance of ground water into the area of the household sewage disposal system.  
  
For the purposes of this section the term “interceptor drain” shall have the same meaning as a curtain drain and shall be designed to intercept the horizontal flow of subsurface water to reduce its impact on a down gradient soil absorption component.
- (J) “Dam” means a natural or man made barrier designed to retard the flow of leachate within a sub-surface soil absorption system.
- (K) “Director of Health” means the director of the department of health of the state of Ohio.

- (L) “Dwelling” means any building or place used or intended to be used by human occupants as a single family, two family, or three family residence.
- (M) “Easily accessible” means of such location and design as to permit exposure or easy exposure with the use of only simple tools, such as screwdriver, pliers, open-end wrench, or other simple tools supplied by the manufacturer.
- (N) “Fill” means such permeable soil which may be used to increase the total depth of existing permeable soil on a plot of land for the purpose of making it acceptable for the installation of subsurface leaching lines.
- (O) “Filter” means any device or material which separates solids or matter in suspension from a liquid.
- (P) “Gradient drain” means a drain designed to create a hydraulic gradient to facilitate the flow of subsurface water away from the area of a soil absorption component to allow effluent from a sewage treatment system to infiltrate the soil.
- (Q) “Health Commissioner” means the health commissioner of a city of general health district or his authorized representative.
- (R) “Highly Permeable Material” means that this material is designated where effluent is expected to move too quickly to provide the retention time necessary for adequate treatment. A description of the type of highly permeable material is recorded using terms such as gravelly loamy sand (15 to <35% fragments). Highly permeable material is considered to be a limiting condition for soils with loamy sand or coarser textures.
- (S) “Household Sewage Disposal System (HSDS)” means any sewage disposal or treatment system or part thereof for a single family, two family, or three family dwelling which receives sewage.
- The term “household sewage disposal system” is deemed to have the same meaning as “Household Sewage Treatment System (HSTS)”.
- (T) “Impermeable soil” means that soil which contains clay of such character as to prevent water movement through the soil, thus resulting in rapid saturation of the proposed absorption area. Such soil is characterized by a standard percolation rate greater than 60 minutes per inch or as determined by soil profile analysis.
- (U) “Infiltrative surface” means the contact area where sewage is applied to the soil or sand fill for the purpose of treatment and/or dispersal.
- (V) “In situ soil” means soil that has been naturally deposited or formed in its present location with adequate texture, structure and consistence necessary for treatment and/or dispersal, or in the case of reclaimed or filled areas, has had sufficient time to form the texture, structure and consistence necessary for treatment and/or dispersal.
- (W) “Installer” means any person who installs or is in the business of installing or excavating for a household sewage disposal system or part thereof.

- (X) “Leaching system” means that part of a household sewage disposal system used to dissipate the liquid waste by the means of evaporation, transpiration, soil absorption, soil percolation or any combination thereof.
- (Y) “Leaching well” means any covered pit with lining designed to permit sewage to seep into the surrounding soil. The term “leaching well” is deemed to have the same meaning as “leaching pit”.
- (Z) “Limiting condition” means a restrictive soil layer, bedrock, ground water, a perched seasonal high water table or other condition or combination of conditions that severely limit the treatment and/or dispersal of sewage or effluent.
- (AA) “Linear loading rate (LLR)” means the volume of effluent applied daily along the landscape contour expressed in gallons per day per linear foot. The LLR may also be referred to as the hydraulic linear loading rate. The LLR is used to determine the required length of the distribution system parallel to surface contours.
- (BB) “Lot” means the land area used or intended to be used as a single family, two family, or three family dwelling site.
- (CC) “Normal ground water table” means the shallowest depth of soil which is saturated with water for any extended or permanent time period.
- (DD) “NPDES” means national pollutant discharge elimination system.
- (EE) “Nuisance” means any condition of sewage that is potentially injurious to the health, safety, comfort, or property of a person, or pollutes waters of the state.
- (FF) “OEPA” means the Ohio Environmental Protection Agency.
- (GG) “O & M” means operation and maintenance.
- (HH) “Percolation rate” means that time in minutes which is required for the last six inches of water to seep away in a pre-saturated test hole thirty inches deep, following Taft Sanitary Engineering Center procedures.
- (II) “Permeable soil” means that soil which readily permits the movement of water through the soil particles and is characterized by a standard percolation rate of sixty or less minutes per inch or as determined by soil profile analysis.
- (JJ) “Person” means the state, any political subdivision, public or private corporation, partnership, firm, association, individual or other entity.
- (KK) “Point of discharge” means the point at which the effluent from a household sewage disposal system or curtain drain enters a public ditch or discharges to the surface of the ground or to a body of water.
- (LL) “Pollution” means the placing of any noxious or deleterious substance in any water of the state or affecting the properties of any water of the state in a manner which renders such waters harmful or

inimical to the public health, or to animal or aquatic life, or to the use of such water for domestic water supply, or industrial or agricultural purposes, or for recreation.

- (MM) “Privy” means any sanitary, waterless device for the collection and storage of human excreta but does not include chemical commodes or other portable receptacles.
- (NN) “Replacement” means the installation of a new sewage treatment system to replace an existing system.
- (OO) “Restrictive soil layer” means a compacted or dense soil layer such as a fragipan, a soil layer with a brittle and firm or very firm consistence, a soil layer having a massive structure or having a platy structure inherited from bedrock or other soil layer similarly restricting vertical flow.
- (PP) “Sanitary sewage system” means any public or community sewerage collection system conveying sewage to a central sewage treatment plant.
- (QQ) “Seasonally high water table” means the temporary or perched depth of soil, which is saturated during a season, a temporary period of time, or as a temporary condition.
- (RR) “Secured cover” means a removable cover or manhole that prohibits unwarranted or unauthorized removal.
- (SS) “Septic tank” means any watertight, covered receptacle designed and constructed to receive the discharge of sewage from a building sewer, separate solids from the liquid, digest organic matter, and store digested solids through a period of detention, and allow the clarified liquids to discharge for final disposal.
- (TT) “Service provider” means any person who services, but does not install or alter, a sewage treatment system.
- (UU) “Sewage” means any liquid waste containing animal or vegetable matter in suspension or solution and may include liquids containing chemicals in solution from water closets, urinals, lavatories, bathtubs, laundry tubs or devices, floor drains, drinking fountains, or other sanitary fixtures.
- (VV) “Sewage pump” means any device used to lift, move, or by means other than gravity flow, convey sewage waste from one point to another.
- (WW) “Sewage tank” means any water tight tank designated to retain sewage solids for bacterial decomposition and includes, but is not limited to, septic tanks and aeration type treatment tanks.
- (XX) “Sewage tank cleaner” means any person who collects or is in the business of collecting or transporting the contents of sewage tanks or privies.
- (YY) “Site Evaluation” means a study or report which includes the following information about the proposed site for a household sewage disposal system: soil conditions, properties and permeability, depth to zones of soil saturation, depth to bedrock, slope, landscape position, all setback requirements, existing easements and the potential for flooding. Soil test data shall relate to the undisturbed elevations, and a vertical reference point or benchmark shall be established. All site evaluations shall be prepared by a professional soil scientist certified through the

Association of Ohio Pedologists, ARCPACS, or other recognized professional association of soil scientists.

- (ZZ) “Soil depth credit” means the use of the design mechanisms of elevation, pretreatment, and/or distribution as substitutes for in situ soil treatment to compensate for inadequate vertical separation distance between the infiltrative surface and the limiting condition.
- (aa) “Soil loading rate (SLR)” means the daily volume of effluent applied per unit area of in situ soil expressed in gallons per day per square foot. The SLR may also be referred to as the basal loading rate or the infiltration loading rate. The SLR determines the size of the soil absorption area. The SLR and the LLR determine the dimensions of the soil absorption area.
- (bb) “Small flow on-site sewage treatment system (SFOSTS)” means a system, other than an HSTS, that treats not more than one thousand (1000) gallons of sewage per day and that does not require a national pollutant discharge elimination system permit under Section 6111.03 of the Ohio Revised Code or an injection well drilling or operating permit issued under Section 6111.043 of the Ohio Revised Code.
- (cc) “Subdivision” means that which is defined by Section 711.001 of the Ohio Revised Code.
- (dd) “Variance” shall mean the process whereby any portion of the Household Sewage Disposal Regulations may be waived by a majority vote of the board of health.
- (ee) “Vertical separation distance” means the depth from the infiltrative surface of the distribution system of the soil absorption component to a limiting condition, and/or water table.

## 3701-29-02 – Sewage Disposal Requirements

- (A) The design, construction, installation, location, maintenance, and operation of household sewage disposal systems including, but not limited to, septic tank, aeration type treatment systems, filters, leaching tile fields, leaching wells, building sewers, and privies or part thereof, shall comply with these regulations and engineering practices acceptable to the Ohio Department of Health and current Ohio Environmental Protection Agency effluent standards.
- (B) Any dwelling which is not connected to a sanitary sewerage system shall be provided with an approved household sewage disposal system prior to its being occupied.
- (C) Each household sewage disposal system shall serve a dwelling on an individual lot and shall be properly maintained by the owner. All the sewage from the dwelling shall discharge into the system.
- (D) No household sewage disposal system or part thereof shall create a nuisance.
- (E) No person shall discharge, or permit to be discharged, treated or untreated sewage, the overflow drainage or contents of a sewage tank, or other putrescible, impure, or offensive wastes into an abandoned water supply, well, spring or cistern or into a natural or artificial well, sink hole, crevice, or other opening extending into limestone, sandstone, shale, or other rock formation, or normal groundwater table.
- (F) No person shall discharge, or permit or cause to be discharged, treated or untreated sewage, the drainage or contents of a sewage tank, or other putrescible or offensive wastes onto the surface of the ground, into any street, road, alley, open excavation, or underground drain.
- (G) Off lot disposal of sewage effluent shall not be permitted except where the installation of an on-lot disposal system is not possible, as specified in regulations 3701-29-10 (A) through 3701-29-10 (F) and 3701-29-11 (B) and shall only be considered for a replacement HSTS, for an existing dwelling or a new HSTS for an existing lot. A discharging HSTS shall only be permitted by the board of health in compliance with NPDES, and if the following conditions are met:
  - (1) When off lot disposal of sewage effluent requires the crossing of adjacent properties to reach the point of discharge a recorded easement or the use of a legally established, publicly maintained drainage improvement from the dwelling lot line to the point of discharge shall be required.
  - (2) Written permission to discharge sewage effluent from the person or persons in control of the property or properties at the point of discharge shall be required.
  - (3) Off-lot disposal of sewage effluent shall not discharge to a ditch, stream, pond, lake, natural or artificial waterway, drain tile, other surface water, or the surface of the ground unless authorized by a NPDES permit issued under Chapter 6111 of the Ohio Revised Code and rules adopted under it.
  - (4) Discharging household sewage treatment systems shall require a service contract providing for professional maintenance in accordance with the terms of coverage under the NPDES permit to the extent required by the OEPA.

- (5) All reasonable means shall be taken to minimize the amount of effluent discharged off the lot.
- (H) Lots on which household sewage disposal systems for dwellings are to be installed shall be of suitable topography and area to permit compliance with regulations 3701-29-01 to 3701-29-21 of the Ohio Administrative Code.
- (I) A suitable area shall be available to provide for the complete relocation and replacement of the household sewage disposal system as required by regulations 3701-29-01 to 3701-29-21 of the Ohio Administrative Code.
- (J) Lots on which private water supplies are to be installed shall be of sufficient area to provide isolation of the water supply system from both the original household sewage disposal system and the area intended for any relocation and replacement on this or adjacent lots as required by regulations 3701-29-01 to 3701-29-21 of the Ohio Administrative Code.
- (K) A household sewage disposal system shall be a minimum of ten (10) feet from any lot or right-of-way line, ten (10) feet from any occupied building, ten (10) horizontal feet from any water service line and fifty (50) horizontal feet from any water supply source on this or any adjacent lot.
- (L) No household sewage disposal system shall be installed, maintained, or operated on property accessible to a sanitary sewerage system.
- (M) Whenever a sanitary sewerage system becomes accessible to the property, a household sewage disposal system shall be abandoned and the house sewer directly connected to the sewerage system.
- (N) Roof water, foundation drain, cistern overflow, surface drainage, or sub-surface drainage shall not be discharged into a building sewer or into a household sewage disposal system.
- (O) Plastics in any form, wet strength paper towels, cloth of any kind, rubber products, disposable diapers, cigarette stubs, sand, grit, coffee grounds, excess cooking oils or greases, solvents, paints, caustic or oily liquids or materials, kerosene, gasoline, motor oil, floor waxes or any other wastes known to adversely affect the household sewage disposal system shall not be deposited or flushed in plumbing fixtures nor shall they otherwise be introduced into a building sewer or household sewage disposal system.
- (P) No person shall sell, transfer, assign, or otherwise dispose of the title of ownership, in any way, to any property which has not received final approval and inspection from the board of health for its private sewage disposal system, unless he has notified the person acquiring the property of the lack of final approval, or failure to receive final approval, or regarding any deficiencies in the system which prevent receiving final approval.
- (Q) No person shall sell, transfer, assign or otherwise dispose of the title or ownership, in any way, to any property on which exists a malfunctioning private sewage disposal system, or a system which is the cause of a nuisance, or dispose of any property on which exists a nuisance of which is the source or cause of a nuisance unless he has notified the person acquiring the property to this effect, and notified the person acquiring the property of any existing notice of such nuisance or order to correct from the board of health.

(R) Site evaluation approvals shall be valid for three years from the date of evaluation.

3701-29-03 – Subdivisions

- (A) Any person proposing to create a subdivision shall submit to the board of health, for approval, plans clearly showing that the provisions of regulations 3701-29-01 to 3701-29-21 of the Ohio Administrative Code, can be adequately met before any of the lots in the subdivision are sold or offered for sale whether or not such sale entails a transfer of title or deed.
- (B) No person shall install individual household sewage disposal systems in a new subdivision unless it is considered to be impractical and inadvisable by the board of health and the Ohio Environmental Protection Agency to install a central sewage system.
- (C) If individual household sewage disposal systems are proposed, the plans shall show:
  - (1) the total land area to be used
  - (2) location and size of all lots (individual lot sizes shall be of sufficient surface area so that no more than twenty-five (25) percent will be encumbered by the original on-site sewage disposal system and its equivalent replacement)
  - (3) the properties and characteristics of the soils in the subdivision
  - (4) depth to normal ground water table, perched seasonal water table, restrictive soil layer, and rock strata
  - (5) location of all bodies of water, streams, ditches, sewers, drain tile, existing and proposed potable water supply sources and lines on this or adjacent lots within one hundred feet of the proposed subdivision, or any other information which may affect the installation or operation of household sewage disposal systems or the enforcement of rule 3701-29-01 to 3701-20-21 of the Ohio Administrative Code
  - (6) existing and finished grade of all lots.
- (D) If the proposed subdivision is to be served by either a sanitary sewerage system or a water supply system or both, plans shall be submitted to the Ohio Environmental Protection Agency as required by Section 6111.44 of the Ohio Revised Code.

## 3701-29-04 – Installation Permit and Operation Permit

- (A) No person shall install or alter a household sewage disposal system without an installation permit issued to him by the board of health. The owner or his designated agent shall obtain such installation permit from the board of health for the installation of a household sewage disposal system prior to the start of construction of the system.
- (B) No person intending to install a new HSTS or replace an existing HSTS shall be issued an installation permit without the Board of Health first approving a site review application. A site review application shall include a complete site evaluation report and a design plan having sufficient detail and adequate information to demonstrate compliance with the HSTS rules.
- (C) In the case where an alteration involves the expansion of a soil absorption component, the board of health shall determine when a site and soil absorption evaluation shall be conducted or required in compliance with the Ohio Administrative Code.
- (D) Application for a permit shall be written and contain pertinent information as required by the board of health. Any fee established for a permit by law or authority of law shall accompany the application.
- (E) No person shall maintain or operate a household sewage disposal system installed after the effective date of this rule without an operation permit obtained from the board of health.
- (F) Household sewage treatment systems subject to an NPDES permit, or utilizing mound, drip distribution, or other non- traditional components installed after the effective date of this rule shall require an annual operation permit obtained from the Board of Health.
- (G) Aerobic household sewage disposal systems with surface discharge installed prior to January 1, 2007 shall be subject to the rules in effect at the time of the installation. No person shall maintain or operate these systems without an annual operation permit obtained from the board of health.
- (H) The board of health shall issue a permit when the pertinent information indicates that the provisions of rules 3701-29-01 to 3701-29-21 of the Ohio Administrative Code can be met. The board of health may specify terms consistent with rules 3701-29-01 to 3701-29-21 on the permit governing the installation, alteration, and operation of the household sewage disposal system.
- (I) The board of health shall deny a permit if the information on the application is incomplete, inaccurate, or indicates that the provisions of regulations 3701-29-01 to 3701-29-21 of the Ohio Administrative Code cannot be met.
- (J) An installation permit shall remain in force until completion of the household sewage disposal system or for one year from the date of issuance whichever occurs first. The permit may be revoked or suspended by the board of health.
- (K) The installation and operation of the household sewage disposal system or any part thereof shall conform with the requirements of rules 3701-29-01 to 3701-29-21 of the Ohio Administrative

Code and the terms of the permit as required by the board of health in paragraph (D) of this rule.

3701-29-05 – Registration of Installers of Household Sewage Disposal Systems or Parts Thereof

- (A) No person shall perform the services of an installer unless he holds a valid registration issued to him by the board of health.
- (B) Application for registration shall be in writing and contain pertinent information as required by the board of health. Any fee established for a registration by law or authority of law shall accompany the application. A condition of registration shall include installer to demonstrate competent knowledge of rules 3701-29-01 to 3701-29-21 of Ohio Administrative Code through satisfactory testing of its contents by the health department.
- (C) Each registration issued hereunder shall expire annually.
- (D) A renewal application for registration shall be submitted to the board of health at least thirty days prior to the expiration date. Testing may be waived for registrants who have demonstrated adequate knowledge of the rules as determined from inspection of their installations.
- (E) Every registrant shall maintain and submit to the board of health such data and records as may be required for determining compliance with regulations 3701-29-01 to 3701-29-21 of the Ohio Administrative Code.
- (F) The owner shall not be required to have a registration or bond for performing work on the household sewage disposal system for the single family dwelling which he occupies. However, the homeowner shall demonstrate competent knowledge of rules 3701-29-01 to 3701-29-21 of the Ohio Administrative Code through satisfactory testing of its contents by the health department.
- (G) Whenever the health commissioner finds that an installer is or has engaged in practices which are in violation of any provision of rules 3701-29-01 to 3701-29-21 of the Ohio Administrative Code or the terms of any permit as required by the board of health in paragraph D of rule 3701-29-04 of the Ohio Administrative Code under which installation is performed, the board of health shall give notice in writing to the registrant describing the alleged violation and state that an opportunity for a hearing will be provided by the board of health to show cause why his registration should not be suspended or revoked.
- (H) Registration permits shall be revoked or suspended by the board of health for failure to comply with regulations 3701-29-01 to 3701-29-21 of the Ohio Administrative Code.
- (I) A bond in the amount determined by the board of health shall be provided prior to registration of any installer of household sewage disposal systems.

## 3701-29-06 – Registration of Sewage Tank Cleaners

- (A) No person shall perform the services of a sewage tank cleaner unless he holds a valid registration issued to him by the board of health.
- (B) Application for registration shall be in writing and contain pertinent information as required by the board of health. Any fee established for registration by law or authority of law shall accompany the application. A condition of registration shall include sewage tank cleaners to demonstrate competent knowledge of rules 3701-29-01 to 3701-29-21 of Ohio Administrative Code through satisfactory testing of the contents by the health department.
- (C) The board of health shall issue a permit when the pertinent information indicates that the provisions of rules 3701-29-01 to 3701-29-21 of the Ohio Administrative Code can be met. The board of health may specify terms consistent with rules 3701-29-01 to 3701-29-21 of the Administrative Code on the permit governing the collection, transportation, and the disposal of the contents of sewage tanks or privies.
- (D) Each registration issued hereunder shall expire annually.
- (E) A renewal application for registration shall be submitted to the board of health at least thirty days prior to the expiration date. The establishment of a record of proper disposal of sewage without complaint, shall allow a sewage tank cleaner to renew a registration in a subsequent year without testing.
- (F) Every registrant shall maintain and submit to the board of health such data and records as may be required for determining compliance with regulations 3701-29-01 to 3701-29-21 of the Ohio Administrative Code.
- (G) Whenever the health commissioner finds that a sewage tank cleaner is or has engaged in practices which are in violation of any provision of rules 3701-29-01 to 3701-29-21 of the Ohio Administrative Code, the terms of the registration permit as required by the board of health in paragraph (C) of this rule, or the applicable laws of the state, the board of health shall give notice in writing to the registrant describing the alleged violation and state that an opportunity for a hearing will be provided by the board of health to show cause why his registration should not be suspended or revoked.
- (H) Registration permits shall be revoked or suspended by the board of health for failure to comply with regulations 3701-29-01 to 3701-29-21 of the Ohio Administrative Code.
- (I) A bond in the amount determined by the board of health shall be provided prior to registration of any sewage tank cleaner.
- (J) The holding tank on all pumping trucks shall be clearly labeled with the operator's name on each side and the rear of the tank. This labeling is to be of bold block lettering, a minimum of eight inches high, and in a color contrasting to that of the tank itself.
- (K) Disposal of the contents of sewage tanks or privies within the Butler County General Health District shall only be permitted at a sewage treatment facility approved by the OEPA. Land application of the contents of sewage tanks and privies shall not be permitted within the Butler County General Health District.

## 3701-29-07 – Septic Tanks

- (A) The minimum capacity of septic tanks shall be:
  - (1) Single family dwelling:
    - (a) 1 bedroom – 1000 gallons;
    - (b) 2-3 bedrooms – 1500 gallons in one or two tanks or compartments;
    - (c) 4-5 bedrooms – 2000 gallons in one or two tanks or compartments;
    - (d) 6+ bedrooms – 2500 gallons in two tanks or compartments;
  - (2) Two or three family dwelling – the sum of the volumes for each single family residential unit within the dwelling as defined by paragraph (A) (1) of this rule.
- (B) In systems using two tanks, the septic tanks shall be connected in series and all sewage shall initially enter the first tank.
- (C) The invert level of the tank inlet shall be not less than two inches above the liquid level of the tank.
- (D) A vented tee or inlet baffle shall be provided at the tank inlet to divert the incoming sewage downward. The vented tee or baffle shall penetrate at least six inches below the liquid level, but the penetration shall not be greater than that allowed for the outlet device.
- (E) The tank outlet shall be fitted with a vented tee or baffle which shall extend not less than six inches above and not less than eighteen inches below the liquid level of the tank.
- (F) The septic tank shall have a liquid drawing depth of not less than four feet.
- (G) The distance from the flow line to the cover shall be at least twelve inches.
- (H) The septic tank shall be installed with secured covers which will provide access to the inlet and outlet devices and to each compartment of the tank for inspection and cleaning. The cover shall have a minimum inside diameter of ten inches. Septic tanks with soil cover greater than six inches shall be installed with a minimum of one secured cover extended above grade.
- (I) Septic tanks shall be watertight and of material which is non-corrosive.
- (J) Septic tanks and/or holding tanks may be used temporarily and under limited circumstances to collect and hold sewage for removal and proper disposal by a registered sewage tank pumper. Examples of allowable circumstances are HSTS installation delays caused by inclement weather, wet soil conditions, or availability of public sewer within a short time frame.
- (K) A pump station as a component of on-site sewage disposal systems shall be required when it is necessary to raise the effluent from the sewage tank to the proper elevation at the point of disposal or when necessary to dose the filtering or leaching system. This is applicable to all on-site sewage disposal systems that are designed to operate by gravity flow.
- (L) A sump pump station as a component of a curtain drain shall be permitted when it is necessary to raise the collected water from the drain to an outfall at a higher elevation.

- (M) All pump stations as a component of an on-site sewerage system shall have a watertight sump compartment, and shall be equipped with at least one pump specially designed to withstand the chemical properties of the liquid to be pumped (i.e. permanently sealed and lubricated bearings, corrosion resistant hardware and fittings).
- (N) The pump station as a component of an on-site sewage system shall be designed to provide the proper loading rate at the proper dosing frequency as determined by the health commissioner.
- (O) The pump station shall be properly vented in a manner that will allow the proper operation of the pump and will not create offensive odors.
- (P) The pump station shall be installed in accordance with all applicable electrical codes.
- (Q) The pump station and pump installation shall be equipped in a manner that will facilitate the maintenance of the pump. The pump station shall be provided with a secure cover.
- (R) The pump station as a component of an on-site sewage disposal system shall be equipped with an audible alarm and indicator light which will indicate the failure of the pump at the time failure occurs.
- (S) Whenever the use of a pump station as a component of an on-site sewage disposal system is permanently discontinued, all removable equipment shall be removed and the compartment shall be cleaned, if necessary, and filled with inert material.

### 3701-29-08 – Aerobic Type Treatment Systems

- (A) Aerobic type treatment systems shall comply with standard number forty as adopted by the National Sanitation Foundation board of trustees or standards accepted as equivalent by the Ohio Department of Health relating to materials, design, construction, performance, operation, maintenance, and safety of the system in effect at the time of acceptance of a system by the Ohio Department of Health and the requirements of rules 3701-29-01 to 3701-29-21 of the Ohio Administrative Code.
- (B) In addition to paragraph (A) of this rule, aerobic type treatment systems shall comply with the following requirements:
  - (1) Where a final effluent sample cannot easily be obtained from within the system, the sampling well immediately following the system shall be provided. The sampling well, with a minimum inside diameter of eight inches, shall be accessible from the surface of the ground, and shall be provided with a secured cover.
  - (2) The system shall be sized on the basis of one hundred twenty gallons per day per bedroom.
  - (3) The system shall not be installed where the estimated daily flow exceeds the rated capacity at which the system was tested and approved.
- (C) An aerobic type treatment system may be permitted under the conditions provided in paragraph (G) of rule 3701-29-02 for off-lot discharge, or in conjunction with a leaching tile field, or other means approved by the Ohio department of health to prevent water pollution or a nuisance.
- (D) Prior to off-lot discharge the effluent from an aerobic type treatment system shall discharge through a filter conforming to the requirements of rules 3701-29-09 or 3701-29-14 of the Ohio Administrative Code, or other device approved by the Ohio department of health.

### 3701-29-09 – Surface Sand Filter Following an Aerobic Type Treatment System

When a surface sand filter is used as a component of an aeration type treatment system it shall comply with the following requirements:

- (A) The surface sand filter shall have a minimum filter area of thirty square feet.
- (B) The effective size of the filter sand shall be six-tenths to one millimeter with a uniformity coefficient not to exceed three.
- (C) The minimum depth of the filter sand shall be eighteen inches.
- (D) A minimum of twelve inches of freeboard above the upper sand surface shall be provided.
- (E) The effluent shall be distributed over the entire sand filter area.
- (F) Dosing devices, if required, shall be provided with a pump having a minimum capacity of 3.75 gallons per minute.
- (G) The sump for the dosing device shall have a minimum working volume of seventy-five gallons.
- (H) The sand filter shall be covered with durable grating constructed of materials resistant to corrosion and decay, or surrounded by a fence to prohibit unwarranted or unauthorized entry.
- (I) A sampling well with a minimum inside diameter of eight inches shall be installed on the surface sand filter discharge line within six feet of the filter bed, accessible from the surface of the ground, and provided with a secured cover.

### 3701-29-10 – Installation Requirements for Soil Absorption and Percolation

- (A) Leaching systems utilizing soil absorption or percolation shall not be permitted where the depth to rock strata is less than four feet below the bottom of the proposed system.
- (B) Leaching systems utilizing soil absorption or percolation shall not be permitted where the depth to the normal ground water table is less than four feet below the bottom of the proposed system.
- (C) Septic tank effluent from leaching systems utilizing soil absorption or percolation may be permitted when the depth to the perched seasonal water table is at the bottom of the proposed system. (A separation distance of zero inches.)
- (D) Leaching systems utilizing soil absorption or percolation shall not be permitted where the depth to the restrictive soil layer and/or impermeable soil layer is less than twenty four inches below the proposed system. A one foot soil depth credit may be utilized for pretreatment of sewage effluent by a special device as approved in rule 3701-29-20 (C).
- (E) Leaching systems utilizing soil absorption or percolation shall not be permitted where the depth to highly permeable soil is found to be less than twenty four inches below the proposed system. A one foot soil depth credit may be utilized for pretreatment of sewage effluent by a special device as approved in rule 3701-29-20 (C).
- (F) Leaching systems utilizing soil absorption or percolation shall not be installed where the texture, structure or permeability of the soil is not suitable to provide internal drainage. The health commissioner may require the owner at the owner's expense to provide a written site evaluation by a professional soil scientist and a detailed system plan by a qualified designer before a final decision is made in issuing a permit.

A qualified system designer shall be able to perform the following to demonstrate competency:

- (1) Estimate and report any expected variations in HSTS or SFOSTS daily design flows, pollutant concentrations, and mass loads exceeding typical residential waste strength.
- (2) Select appropriate system components capable of meeting performance requirements based on site and soil evaluation information.
- (3) Prepare scaled design plan, profile, and detail drawings depicting STS layout, dimensions, and materials and equipment specifications including construction and O&M information.
- (4) Conduct installation oversight as necessary to assure provision of an adequate installer as-built record documenting installation in accordance with approved design plans.

A system designer shall comply with the requirements of Chapter 3701-29-01 to 3701-29-21 of the Ohio Administrative Code when submitting design plans for an STS, including details on system components, construction, and O&M sufficient for regulatory review and determination of compliance.

- (G) The soil absorption component area shall be of adequate size and configuration to disperse the effluent and prevent surface discharge. When sizing the soil absorption area the following requirements shall be met:
- (1) Soil loading rates, including basal loading rates for sand fill systems, shall be based on effluent quality and on soil structure, texture, and consistence and shall be justified through reference to soil and site evaluation information and the loading rate estimates referenced in the appendix to this chapter.
    - (a) The selection of soil loading rates based on effluent quality shall be limited to a rate for septic tank effluent or a rate for effluent meeting the 5 day Biochemical Oxygen Demand / Total Suspended Solids (BOD5/TSS) standard. Compliance with this standard requires that effluent meet the thirty day average of less than thirty milligrams per liter for five day biochemical oxygen demand and total suspended solids.

3701-29-11 – Leaching Tile Field

- (A) Total field requirement shall be divided into two equal sections separated by a distribution box or similar device equipped to provide alternate flow to each section of the field. The diversion device and inspection ports shall be brought to grade and shall be provided with secured covers.
- (B) Leaching field absorption area requirements for home sewage disposal systems shall be adequate to prevent water pollution or a nuisance, except those sites eliminated by rules 3701-29-01 to 3701-29-21 of the Ohio Administrative Code. The requirements set forth in Table 1 are accepted generally as being adequate.

TABLE I  
LEACHING FIELD ABSORPTION AREA REQUIREMENTS  
PRECEDED BY SEPTIC TANKS

<u>SIZE OF DWELLING</u>	<u>SOIL PERMEABILITY LIMITATION EVALUATION</u>	<u>TOTAL LINEAL FEET OF TRENCH REQUIRED</u>
Minimum 2 bedroom	Severe	600
Per each additional bedroom		300
Minimum 2 bedroom	Moderate	400
Per each additional bedroom		200
Minimum 2 bedroom	Slight	300
Per each additional bedroom		150

- (C) The minimum distance between any leaching lines shall be six feet.
- (D) The minimum distance between any leaching line and any drain line located on the lot shall be eight feet.
- (E) A leaching trench shall have a minimum of twelve inches of clean gravel or stone fill, extending at least two inches above and six inches below the leaching tile, such fill shall be three-fourths inch to one and one-half inches in size.
- (F) A leaching trench shall have a minimum width of eighteen inches. The depth shall be a minimum of eighteen inches but not more than twenty four inches.
- (G) A leaching line shall have a maximum length of one hundred fifty feet. A dam, drop box or turn may be considered as the termination point of the length of any line.
- (H) A leaching line shall have a minimum diameter of four inches and shall have a relatively level grade. The grade shall not exceed a fall of three inches in fifty feet.
- (I) The top of the gravel stone fill shall be covered with a pervious material such as untreated felt paper or a two inch layer of hay, straw, or similar material before being covered with earth.
- (J) The land surface shall be graded so as to exclude surface drainage from the household sewage disposal site.

- (K) Lots which have been filled with more than six inches of top soil shall be re-evaluated and confirmed acceptable for sub-surface leaching before installation.
- (L) Leaching fields shall be installed only in areas where sod or vegetation will provide for evapotranspiration of liquid from the leaching field.
- (M) Alternative leaching trenches which differ in design, materials, or principle of operation from those set forth in paragraphs (A) through (I) of this rule may be used in accordance with the terms and conditions specified in a special device approval by the Director of Health referenced in the appendix to this chapter.

(3701-29-12 – Curtain Drain

- (A) A curtain drain shall be provided in soil subject to a seasonally high ground water table. The curtain drain shall be installed not less than twelve inches below the leaching trench bottom and shall be at least eight feet from the center line of any leaching line.
- (B) A curtain drain shall have an inspection well accessible from the surface of the ground and shall be provided with a secured cover. The well shall have a minimum inside dimension of eight inches on the discharge line adjacent to the leaching system unless an open outfall is present on the property.
- (C) When off-lot disposal of curtain drain discharge requires crossing adjacent properties to reach the point of discharge, a recorded easement or the use of a legally established, publicly maintained drainage improvement from the dwelling lot line to the point of discharge shall be required.
- (D) The subsurface drain tile shall be laid on the bottom of the trench and backfilled with gravel or other approved material (slag is not an approved material). The particles of the backfilling material shall be of such size that they cannot enter into the tile through the openings. The gravel backfill shall extend above the drain tile to within six inches of the ground surface.

### 3701-29-13 – Leaching Well

Notwithstanding the requirements of this rule, a leaching pit is a type of drainage well, dry well, or other connection to ground water that, until July 1, 2009 is prohibited by Section 120.02 (C) (2) of Amended Substitute House Bill 119 of the 127<sup>th</sup> General Assembly and shall not be used as a method for receiving sewage.

- (A) A leaching pit shall be installed only in areas where gravel deposits underlie the ground surface and the seasonally high water table is not less than ten feet below the bottom of the leaching pit. Test borings to determine the suitability of the soil shall be constructed to a depth of at least ten feet below the bottom of a proposed leaching pit prior to issuance of an installation permit.
- (B) A leaching pit shall be a minimum of one hundred feet from any water supply source, ten feet from any lot or right-of-way line, and twenty feet from any occupied building.
- (C) A leaching pit shall be provided with a secured cover extended to ground level.

### 3701-29-14 – Subsurface Sand Filter

- (A) A subsurface sand filter shall be permitted only under the conditions provided in regulation 3701-29-02 (G) of the Ohio Administrative Code.
- (B) A subsurface sand filter shall have a minimum filter area of two hundred-forty square feet per bedroom unless the filter is dosed. When dosed, the filter shall have a minimum filter area of three hundred square feet or one hundred twenty square feet per bedroom, whichever is greater. The total filter area shall be divided into two beds, each with a separate distribution system. Provision shall be made for alternating from one bed to the other by gravity or pumping.
- (C) A dosing tank shall have a minimum working volume of seventy five gallons, shall extend to grade, and shall be provided with secured covers.
- (D) When a subsurface sand filter is dosed, the distribution system shall be vented to the surface of the ground at the lower end of each bed by one or more vented caps having a minimum inside diameter of four inches.
- (E) All distribution lines shall have a minimum diameter of four inches and shall have a relatively level grade. The grade shall not exceed a fall of three inches in fifty feet.
- (F) The distribution lines shall be installed within a minimum of twelve inches of clean gravel or stone three-fourths inch to one and one-half inches in size which cover the entire bed. The lines shall be laid on three foot centers, and eighteen inches from the sidewalls of the filter.
- (G) The filtering material shall be a minimum of eighteen inches in depth and the sand shall be an effective size of four-tenths to one millimeter with a uniformity coefficient not to exceed three.
- (H) The lower or collecting line shall have a minimum diameter of four inches and shall be laid the full length of the bed. The grade shall have a minimum fall of six inches in fifty feet.
- (I) The collecting line shall be surrounded with a minimum of twelve inches of clean gravel or stone three-fourth inch to one and one-half inches in size which underlies the entire bed.
- (J) The top of the filter shall be covered with a pervious material such as treated paper or a two inch layer of hay, straw, or similar material before being covered with earth.
- (K) The earth cover shall not exceed eighteen inches.
- (L) A sampling well with a minimum inside diameter of eight inches shall be installed on the subsurface sand filter discharge line within six feet of the filter bed, accessible from the surface of the ground, and provided with a secured cover.

3701-29-15 – Privy

Notwithstanding paragraph (B) of this rule, until July 1, 2009, a privy vault with an open or porous bottom is prohibited by Section 120.02 (C) (3) of Amended Substitute House Bill 119 of the 127<sup>th</sup> General Assembly and shall not be used as a method for receiving sewage.

- (A) A privy shall be provided with watertight vaults or other watertight receptacles of not less than five hundred gallons capacity except as specified in paragraph (B) of this rule and shall be a minimum of fifty feet from any water supply source, and twenty feet from any occupied building or lot or right-of-way line.
- (B) A vault may be constructed with an open or porous bottom if it is located not less than one hundred feet from any water supply source, and so located that the liquids leaching from the vault will not discharge at the ground surface, or into limestone, sandstone, shale, or other rock formation. The vault shall not be permitted where the depth to the seasonally high water is less than four feet below the bottom of the proposed vault.
- (C) The construction and design of the vault and superstructure shall prevent access by insects, fowl, or animals.
- (D) A privy shall be cleaned before the contents reach the top level of the vault.

### 3701-20-16 – Building Sewer

- (A) A building sewer shall have a minimum diameter of four inches.
- (B) A building sewer shall be constructed of durable material with watertight joints, capable of withstanding a ten foot head of water test or equivalent.
- (C) Traps shall not be installed in a building sewer.
- (D) A building sewer shall be laid in good alignment and embedment at a uniform grade in accordance with engineering practices acceptable to the Ohio Department of Health.
- (E) A building sewer shall be a minimum of ten feet horizontal from any household water supply source and water service line.
- (F) If a building sewer is located within fifty feet of a water supply source, the sewer shall be of watertight construction.
- (G) A building sewer shall have cleanouts with ground level access every fifty feet prior to entering a private household sewage disposal system.

### 3701-29-17 – Inspections

- (A) The health commissioner may, at any reasonable time during the course of construction or any time thereafter, inspect any household sewage disposal system or part thereof, sample the effluent, or take any other steps deemed necessary to insure proper compliance with rules 3701-29-01 to 3701-29-21 of the Ohio Administrative Code. The health commissioner may utilize inspection reports or other data submitted or obtained from reliable sources to determine compliance.
- (B) No household sewage disposal system or part thereof shall be covered or put into operation until the system has been approved by the health commissioner.
- (C) All aerobic type sewage disposal systems with surface discharge (off-lot or pond/lagoon retention) installed prior to January 1, 2007 and that have current operating permits shall be inspected annually by a board of health staff sanitarian. The owner of said system shall make any repairs or adjustments as deemed appropriate to preserve the integrity and safety of the surrounding environment.
- (D) All household sewage treatments systems with mound, drip distribution, or other non-traditional components that have current operation permits shall be inspected annually by a Board of Health staff sanitarian. The owner of said system shall make any repairs or adjustments as deemed appropriate to preserve the integrity and safety of the surrounding environment.
- (E) The owner of any aerobic type sewage disposal systems with surface discharge (off-lot or pond/lagoon) installed prior to January 1, 2007 and found to be in use without a permit to operate shall be required to secure a permit to operate and shall make any repairs or adjustments as deemed appropriate to preserve the integrity and safety of the surrounding environment.
- (F) The owner of any household sewage treatment system subject to an NPDES permit, or mound, drip distribution, or other non-traditional components installed after the effective date of these rules and found to be in use without a permit to operate shall be required to secure a permit to operate and shall make any repairs or adjustments as deemed appropriate to preserve the integrity and safety of the surrounding environment.
- (G) Not later than one year after the installation of a household sewage treatment system, a board of health sanitarian shall inspect the system to ensure that it is not a public health nuisance.

3701-29-18 – Abandoned Household Sewage Disposal System

- (A) A permit shall be required to abandon any existing household sewage disposal system.
- (B) An abandoned household sewage disposal system or part thereof shall be cleaned and filled to the ground surface with suitable material or crushed and buried.

3701-29-19 - Hearing

- (A) The board of health shall grant a hearing to any person affected or aggrieved by regulations 3701-29-01 to 3701-29-21 of the Ohio Administrative Code.
- (B) Violation: Whoever takes action contrary to the requirements or fails to comply with any portion of these regulations, or fails to proceed as ordered and directed in these regulations, or fails to obey an order issued by the board of health relating to these regulations, shall be deemed to be in violation of these regulations and subject to the penalties provided and/or any corrective action to ensure compliance.

### 3701-29-20 – Variance

- (A) The board of health may grant a variance from the requirements of regulations 3701-29-01 to 3701-29-21 of the Ohio Administrative Code as will not be contrary to the public interest, where a person shows that because of practical difficulties or other special conditions, their strict application will cause unusual and unnecessary hardship. However, no variance shall be granted that will defeat the spirit and general intent of said rules, or be otherwise contrary to the public interest.
- (B) Experimental systems may be installed under the provision of 3701-29-20 (A) provided the director of health concurs in writing with the design and evaluation plan.
- (C) Household sewage disposal system components or household sewage disposal systems differing in design or principle of operation from those set forth in regulations 3701-29-01 to 3701-29-21, may qualify for approval as a special device or system provided comprehensive tests and investigations show any such component or system produces results equivalent to those obtained by sewage disposal components or systems complying with such regulations. Such approval shall be obtained in writing from the director of health.
- (D) Rules 3701-29-01 to 3701-29-21 of the Ohio Administrative Code are minimum standards. A board of health may adopt more stringent standards when local conditions indicate such standards are necessary.
- (E) Any and all review fees as set by the board of health that are associated with the variance request shall be paid by person (s) requesting the variance.
- (F) All variances shall be viewed and considered by the board of health on a case by case basis. Any variance granted to one request under one set of circumstances shall not and does not set a precedent.

## 3701-29-21 – Small Flow On-Site Sewage Treatment System

- (A) “Small flow on-site sewage treatment system (SFOSTS)” means a system other than a household sewage disposal system, that treats not more than one thousand gallons of sewage per day and that does not require a national pollutant discharge elimination system permit issued under Section 6111.03 of the Ohio Revised Code or an injection well drilling or operating permit issued under Section 6111.043 of the Ohio Revised Code. A structure or structures served by a SFOSTS shall include but is not limited to:
- (1) Vacation rental cabins with multiple cabins served by an SFOSTS.
  - (2) A dwelling and an ancillary building both served by an SFOSTS where the ancillary building may be open to the public and is used by more than the residents of the dwelling.
  - (3) Two dwellings, including arrangements such as a dwelling and a detached garage with living space.
  - (4) A dwelling with a home business that may be open to the public, generates sewage in excess of the daily design flow or waste strength for an HSTS, and has no wastewater going to the SFOSTS other than sewage as defined in this rule.
- (B) Rules 3701-29-01 to 3701-29-21 of the Ohio Administrative Code apply to SFOSTS that are under the jurisdiction of a board of health in compliance with this paragraph.
- (1) The board of health has determined that all applicable provisions of the rules related to SFOSTS can be fully implemented under its authority.
  - (2) The board of health has committed to maintaining the necessary resources to support implementation of all applicable rules.
  - (3) The board of health has sent a letter of notification to the director of health and the director of environmental protection at least sixty days prior to the date when the board of health will assume authority for SFOSTS. The letter of notification shall include the intended date for transfer of jurisdiction and shall indicate compliance with paragraphs (B) (1) and (B) (2) of this rule.

It is recognized that certain design standards for SFOSTS authorized in Chapter 3701-29 of the Ohio Administrative Code differ from those standards for on-site systems regulated under Chapter 3745-42 of the Ohio Administrative Code due to operation permit requirements for SFOSTS in paragraph (E) of this rule. As such, differences in design standards between these two chapters of the Ohio Administrative Code should not be construed as a conflict of law.

- (C) SFOSTS shall comply with the following performance requirements and prohibitions:
- (1) An SFOSTS shall not discharge to an abandoned well, drainage well, a dry well or cesspool, a sink hole or other connection to ground water. If classified as a class V injection well, an SFOSTS shall comply with 40 C.F.R. 144 (as published in the July 1, 2005 Code of Federal Regulations) and the registration requirements pursuant to rule 3745-34-13 of the Ohio Administrative Code.

- (2) An SFOSTS shall not be permitted for the holding, treatment, or dispersal of industrial waste or storm water for industrial activities. For the purpose of this rule, the normal use of housekeeping products does not constitute industrial waste. Any waste prohibited for introduction into an SFOSTS by the Ohio Environmental Protection Agency regulations shall be source separated and regulated by the Ohio Environmental Protection Agency.
  - (3) An SFOSTS shall not be sited within the sanitary isolation radius of a public water system as determined in accordance with rule 3745-09-04 of the Ohio Administrative Code. An SFOSTS shall have additional design and/or management controls when sited within the inner management zone of a drinking water source protection area determined to be highly susceptible to contamination by the Ohio environmental protection agency source water assessment and protection program for a community or non-transient non-community public water system as defined in rule 3745-81-01 of the Ohio Administrative Code.
  - (4) A board of health that has assumed authority for SFOSTS in accordance with paragraph (B) of this rule shall not permit a privy or holding tank for an SFOSTS. Except as permitted for a household sewage disposal system by a board of health, holding tanks are subject to the requirements of the Ohio Environmental Protection Agency under rule 3745-42-11 of the Ohio Administrative Code.
- (D) The flow and waste strength characteristics of an SFOSTS shall be addressed in accordance with the following provisions:
- (1) The owner or owner's agent shall provide information on the sources of sewage from the structure or structures to be served by an SFOSTS for the board of health determination of compliance with this rule. The board of health may require submission of building and plumbing plans including plumbing fixture details and other information as needed.
  - (2) The daily design flow estimate for an SFOSTS shall comply with the following general provisions:
    - (a) The daily design flow for an SFOSTS shall be determined in accordance with table A-1 of rule 3745-42-05 of the Ohio Administrative Code. For an SFOSTS with periodic large daily flows that are stored to avoid exceeding the one thousand gallons per day treatment limit, the peak daily design flow shall be greater than the average of the daily flows and no actual daily flow shall exceed three thousand five hundred gallons.
    - (b) An increase in the daily design flow estimate for an SFOSTS shall be required by the board of health when there is an indication that the flows established in accordance with paragraph (D) (2) (a) of this rule will be exceeded. Any required increase in daily design flow shall be documented on the installation permit and operation permit.
    - (c) A reduction in daily design flow for an SFOSTS may be approved by the board of health when the information submitted indicates conditions

that justify reduced flow such as limited fixtures, waterless toilets, or other circumstances that may warrant a reduction in daily design flow. Any approved reduction in daily design flow shall be documented on the installation permit and operation permit.

- (3) The waste strength estimate for an SFOSTS shall be determined for design purposes in accordance with the following general provisions:
  - (a) When the waste strength for an SFOSTS is expected to exceed or has exceeded typical residential waste strength, the design plan shall include loading calculations using values in accordance with table A-1 of rule 3745-42-05 of the Ohio Administrative Code. Any variation from the loading table values shall be justified in the design plan including waste strength characterization information. Board of health approval for any reduction or increase in loading estimates shall be documented on the installation permit and operation permit.
  - (b) Additional pretreatment shall be provided to assure that the SFOSTS soil absorption component receives a waste strength within the range of typical residential sewage. The method of pretreatment to reduce waste strength shall be justified in the design plan, reviewed by the board of health for compliance with this rule, and, if approved, shall be documented on the installation permit and operation permit.
  - (c) When an external grease interceptor is a component of the proposed pretreatment to reduce waste strength, the external grease interceptor shall be located, designed, and installed in a manner that will allow access for inspection and maintenance, including the following:
    - (i) a source segregated inlet line, when feasible;
    - (ii) sized to account for flow volume and temperature; and
    - (iii) watertight access risers extended to grade with secure covers.
- (E) An operation permit shall include provisions to assure the proper operation and maintenance of an SFOSTS when the board of health has expanded its local authority through the regulation of SFOSTS in accordance with this rule.
- (F) When a board of health has taken responsibility for SFOSTS in accordance with this rule, the board of health shall notify the Ohio Environmental Protection Agency, within sixty days, when an SFOSTS that was previously permitted to be installed by the Ohio Environmental Protection Agency has been abandoned in accordance with this chapter.

3701-29-22 – Registration of Service Provider of Household Sewage Disposal Systems or Parts Thereof

- (A) No person shall perform the services of a service provider unless he holds a valid registration issued to him by the board of health.
- (B) Application for registration shall be in writing and contain pertinent information as required by the board of health. Any fee established for a registration by law or authority of law shall accompany the application. A condition of registration shall include demonstration of knowledge of rules 3701-29-01 to 3701-29-21 of Ohio Administrative Code through satisfactory testing of its contents by the health department.
- (C) Each registration issued hereunder shall expire annually.
- (D) A renewal application for registration shall be submitted to the board of health at least thirty days prior to the expiration date. The testing requirement for registration renewal may be waived for registrants who have demonstrated adequate knowledge of the rules as determined from review of their service reports and any verbal reports received from their clients.
- (E) Every registrant shall maintain and submit to the board of health such data and records as may be required for determining compliance with regulations 3701-29-01 to 3701-29-21 of the Ohio Administrative Code.
- (F) Whenever the health commissioner finds that a service provider is or has engaged in practices which are in violation of any provision of rules 3701-29-01 to 3701-29-21 of the Ohio Administrative Code or the terms of any permit as required by the board of health in paragraph D of rule 3701-29-04 of the Ohio Administrative Code under which installation is performed, the board of health shall give notice in writing to the registrant describing the alleged violation and state that any opportunity for a hearing will be provided by the board of health to show cause why his registrant should not be suspended or revoked.
- (G) Registration permits shall be revoked or suspended by the board of health for failure to comply with regulations 3701-29-01 to 3701-29-21 of the Ohio Administrative Code.
- (H) A bond in the amount determined by the board of health shall be provided prior to registration of any service provider of household sewage disposal systems.

APPENDIX

Special device approvals by the Director of Health and the stipulations, terms, and conditions specified for their use may be viewed online at

<http://www.odh.ohio.gov/odhPrograms/eh/sewage/sewmore.aspx>

Loading rate estimates are provided in Table 1 of the following published documents available through the Small Scale Waste Management Project (SSWMP) at University of Wisconsin, Madison:

Hydraulic Wastewater Loading Rates to Soil. E.J. Tyler. 2001. Proceedings of the 9<sup>th</sup> International Symposium on Individual and Small Community Sewage Systems. ASAE. Saint Joseph, MI. P. 80-86.

[http://www.wisc.edu/sswmp/SSWMP\\_4.43.pdf](http://www.wisc.edu/sswmp/SSWMP_4.43.pdf)

Designing with Soil: Development and Use of a Wastewater Hydraulic Linear and Infiltration Loading Rate Table. E. Jerry Tyler and Laura Kramer Kuns. 2000. Conference Proceedings, NOWRA. Grand Rapids, MI.

[http://www.wisc.edu/sswmp/SSWMP\\_4.42.pdf](http://www.wisc.edu/sswmp/SSWMP_4.42.pdf)