

Regulations of the Henry County Board of Health  
Henry County Sanitary Code  
Chapter 29

Sewage Treatment System Rules

Henry County Health Department  
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## Henry County Sewage Rules

# Henry County Health Department Sewage Treatment System Rules Henry County Sanitary Code Chapter 29

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### 29-01 Definitions

As used in rules 29-01 to 29-21 of the Henry County Sanitary Code:

- (A) "ATU" or "Aerobic treatment Unit" 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 treatment systems. For the purposes of this chapter, the terms "alter" or "alteration" shall not include the replacement of an existing sewage system or the repair of a sewage system by making minor corrections to existing components or substituting parts of a component with like parts as would occur during the servicing and maintenance of a sewage system.
- (C) "Bedrock" means hard stratum that underlies unconsolidated surface materials or soil.
- (D) "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.
- (E) "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 3709.05 of the Revised Code.
- (F) "Building drain" means that part of the lowest horizontal piping of a building drainage system which receives the discharge from soil, waste, and other drainage pipes inside the walls of any building, and conveys such discharge to the building sewer three feet outside the building wall.
- (G) "Building sewer" means that part of the horizontal piping of a drainage system which receives and conveys the discharge from the building drain to the public sanitary sewer, private sanitary sewer, household sewage treatment system, or other points of disposal.
- (H) "Curtain drain" means a subsoil drain that prevents the entrance of ground water into the area of the household sewage treatment system.
- (I) "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.

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- (J) "Easily accessible" means of such location and design as to permit exposure with the use of only simple tools, such as screwdriver, pliers, open-end wrench, or other simple tools supplied by the manufacturer.
- (K) "Filter" means any device or material which separates matter in suspension from a liquid.
- (L) "Gray water recycling systems" means systems that treat and reuse wastewater discharged from lavatories, bathtubs, showers, clothes washers, and laundry sinks that does not contain food wastes or bodily wastes.
- (M) "Health commissioner" means the health commissioner of a city or general health district or his authorized representative.
- (N) "Household sewage Treatment system" or "HSTS" means a combination of components intended to receive, treat, and dispose of sewage from a single-family, two-family, or three-family dwelling and residential dwellings or appurtenances including but not limited to:
- (1) A bed and breakfast, residential facility, or other residence as described in divisions (B)(2), (B)(4), and (B)(13) of section 3717.42 of the Revised Code.
  - (2) An ancillary restroom associated with a dwelling in a location such as a barn or personal garage that is not used as an additional dwelling or business and the users of the ancillary restroom are the same users as the dwelling. An ancillary restroom shall not be available for public use.
  - (3) Vacation rental cabins provided there is a separate HSTS for each cabin.
  - (4) A dwelling with a home business having no access for the general public and does not generate additional sewage as part of its operation.
- (O) "Infiltrative surface" means the point or area of application of treated or partially treated sewage to the soil or sand fill for purposes of treatment, dispersal, or both.
- (P) "Inspection" means the on-site evaluation or analysis of the functioning design, installation, and operation of a sewage treatment system.
- (Q) "Installer" means any person who installs or who, as an employee of another, installs or alters any sewage system, a household sewage treatment system or part thereof.
- (R) "Leaching system" means that part of a household sewage disposal system used to dissipate the effluent from a sewage tank by means of evaporation, transpiration, soil absorption or any combination thereof.

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- (S) "Leaching pit" means any covered pit with lining designed to permit effluent from a sewage tank to seep into the surrounding soil.
- (T) "Limiting condition" means a restrictive soil layer, bedrock, a water table, or ground water that limits or precludes the treatment or dispersal of sewage in the soil of a property where a household sewage treatment system is located.
- (U) "Lot" means the land area used or intended to be used as a single family, two family, or three family dwelling site.
- (V) "Normal ground water table" means the shallowest depth of soil which is saturated with water for an extended or permanent time period.
- (W) "Perched seasonal high water table" means the shallowest depth of soil which is saturated with water above an unsaturated zone for a temporary period of time.
- (X) "Person" means the state, any political subdivision, public or private corporation, partnership, firm, association, individual, or other entity.
- (Y) "Point of discharge" means the point at which the effluent from a household sewage treatment system or curtain drain enters a public ditch or discharges to the surface of the ground or to a body of water.
- (Z) "Pollution" means the placing of any noxious or deleterious substance in any waters of the state or affecting the properties of any waters 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 waters for domestic water supply, or industrial or agricultural purposes, or for recreation.
- (AA) "Privy" means any sanitary, waterless device for the collection and storage of human excreta but does not include chemical commodes or other portable receptacles.
- (BB) "Public 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.
- (CC) "Replacement" means the installation of a new sewage treatment system to replace an existing system.
- (DD) "Sanitary sewerage system" means any public or community sewerage collection system conveying sewage to a central sewage treatment plant.
- (EE) "Secured cover" means a removable cover or manhole that prohibits unwarranted or unauthorized removal.

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- (FF) "Septage hauler" means any person who engages in the collection, transportation, and disposal of the contents of sewage tanks, or privies.
- (GG) "Septic tank" means any watertight, covered receptacle designed and constructed to receive the discharge of sewage from a building sewer, and to discharge the effluent from settled sewage.
- (HH) "Sewage" means any liquid waste containing animal or vegetable matter in suspension or solution from water closets, urinals, lavatories, bathtubs, laundry tubs or devices, floor drains, drinking fountains, or other sanitary fixtures, and may include liquids containing chemicals in solution.
- (II) "Sewage tank" means any watertight tank designed to retain sewage and includes, but is not limited to, septic tanks and aerobic treatment units.
- (JJ) "Soil" means the naturally occurring pedogenically developed and undeveloped regolith overlying bedrock.
- (KK) "Subdivision" means that which is defined by section 711.001 of the Ohio Revised Code.
- (LL) "Water table" means the surface of the saturated zone below which all interconnected voids are filled with water and at which the pressure is atmospheric.

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### 29-02 Sewage treatment requirements

- (A) The design, construction, installation, location, maintenance, and operation of household sewage treatment systems including, but not limited to, septic tanks, aerobic type treatment systems, filters, leaching tile fields, leaching walls, building sewers, and privies or parts thereof shall comply with these rules 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 treatment system, prior to its being occupied.
- (C) Each household sewage treatment system shall serve one dwelling on an individual lot and shall be properly maintained and operated by the owner. All the sewage from the dwelling shall discharge into the system.
- (D) No household sewage treatment system or part thereof shall create a public health nuisance. For purposes of this chapter, a sewage treatment system is causing a public health nuisance if any of the following situations occurs and, after notice by a board of health to the applicable property owner, timely repairs are not made to that system to eliminate the situation:
  - (1) The sewage treatment system is not operating properly due to a missing component, incorrect settings, or a mechanical or electrical failure.
  - (2) There is a blockage in a known sewage treatment system component or pipe that causes a backup of sewage or effluent affecting the treatment process or inhibiting proper plumbing drainage.
  - (3) An inspection conducted by, or under the supervision of, the environmental protection agency or a sanitarian registered under Chapter 4736. of the Revised Code documents that there is ponding of liquid or bleeding of liquid onto the surface of the ground or into surface water and the liquid has a distinct sewage odor, a black or gray coloration, or the presence of organic matter and any of the following:
    - (a) The presence of sewage effluent identified through a dye test;
    - (b) The presence of fecal coliform at a level that is equal to or greater than five thousand colonies per one hundred milliliters of liquid as determined in two or more samples of the liquid when five or fewer samples are collected or in more than twenty per cent of the samples when more than five samples of the liquid are collected;
    - (c) Water samples that exceed one thousand thirty e. coli counts per one hundred milliliters in two or more samples when five or fewer samples are collected or in more than twenty per cent of the samples when more than five samples are collected.
- (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

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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 ground water 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 treatment system is not possible, as specified in rules 29-10(A), 29-10(B), and 29-11(B) of the Henry County Sanitary Code, and 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) Sewage effluent quality as measured at the point of discharge in the system shall comply with current effluent standards established by the director of the Ohio environmental protection agency. In the event there are no applicable standards established by the director of the Ohio environmental protection agency, the following effluent standards shall apply:
    - (a) Biochemical oxygen demand (five-day) - The arithmetic mean of two or more effluent samples taken at intervals of not less than twenty-four hours shall not exceed twenty milligrams per liter.
    - (b) Suspended solids - The arithmetic mean of two or more effluent samples taken at intervals of not less than twenty-four hours shall not exceed forty milligrams per liter.
  - (4) When test results indicate that the standards set forth in rule 29-02(G)(3) are not being met or nuisances are being created, additional treatment devices may be required by the board of health.
  - (5) All reasonable means shall be taken to minimize the amount of effluent discharged off the lot.
- (H) Lots on which household sewage treatment systems for dwellings are to be installed shall be of suitable topography and area to permit compliance with rules 29-01 to 29-21 of the Henry County Sanitary Code.

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- (I) A suitable area shall be available to provide for the complete relocation and replacement of the household sewage treatment system as required by rules 29-01 to 29-21 of the Henry County Sanitary 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 treatment system and the area intended for any relocation and replacement on this or adjacent lots as required by rules 29-01 to 29-21 of the Henry County Sanitary Code.
- (K) A household sewage treatment system shall be a minimum of ten feet from any lot or right-of-way line, ten feet from any occupied building, ten feet from any water service line, one hundred feet from any shallow well or well point, and fifty feet from any other water supply source on this or any adjacent lot.
- (L) No household sewage treatment 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 treatment system shall be abandoned and the house sewer directly connected to the sewerage system.
- (N) Roof water, foundation drain, cistern overflow, surface drainage, and subsurface drainage shall not be discharged into a household sewage treatment system.
- (O) Plastics in any form, wet-strength paper towels, cloth of any kind, rubber products, throw-away baby 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 treatment system shall not be deposited or flushed in plumbing fixtures nor shall they otherwise be introduced into a building sewer or household sewage treatment system.

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### 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 rules 29-01 to 29-21 of the Henry County Sanitary 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 household sewage treatment systems in new subdivisions, unless it is considered to be impracticable or inadvisable by the board of health and the Ohio environmental protection agency to install a central sewage system.
- (C) If household sewage treatment systems are proposed, the plans shall show:
  - (1) The total land area to be used;
  - (2) Location and size of all lots;
  - (3) The properties and characteristics of the soils in the subdivision;
  - (4) Depth to normal ground water table 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 treatment systems or the enforcement of rules 29-01 to 29-21 of the Henry County Sanitary 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 Revised Code.

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### 29-03.1 Site and Soil Evaluations

- (A) The board of health shall conduct a site review for any proposed HSTS installation to complete, or review the completeness of, the site and soil evaluation information required in this rule. Any person conducting a site and soil evaluation shall assess and record information in accordance with this rule. The board of health shall utilize the site and soil evaluation information to determine the feasibility of siting an HSTS in compliance with this chapter.
- (B) The site and soil evaluation shall include the assessment and documentation of the following:
- (1) Designation of the described soil boring and/or excavation locations and the information adequate to provide the required site and soil evaluation documentation. A scaled site drawing shall at least include:
    - (a) The dimensions of the lot or the proposed lot;
    - (b) Any existing dwellings and/or structures and any proposed dwellings and/or structures if known;
    - (c) Any site disturbances, existing driveways and other hardscapes, and proposed hardscapes or related site disturbances if known;
    - (d) Location of all private water systems and surface water features on the lot and within fifty feet of the lot boundary, or within fifty feet of the locations specified in paragraph (B)(3) of this rule; and
    - (e) North orientation arrow.
  - (2) Record of site and soil characteristics for each soil boring and/or excavation location designated in paragraph (B)(1) of this rule using USDA NRCS nomenclature, including but not limited to:
    - (a) Site descriptions: landscape position, slope, vegetation, drainage features, rock outcrops, erosion and other natural features;
    - (b) Soil profile descriptions including color, texture, structure, consistence, and the depth of the soil horizons or layers and identification of limiting conditions relevant to design of soil treatment components of an HSTS.
  - (3) Drawings and dimensions on the site plan or site drawing of at least two locations on the site that have been evaluated and determined to have the capacity for the treatment and/or dispersal of sewage from the proposed dwelling or structures including adequate length parallel to the land contour.

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- (4) Identification on the site plan or site drawing of the area for which each soil profile description is representative and designation of any areas with conditions that would prohibit or impact the siting of an HSTS in accordance with this chapter.
  
- (D) The board of health may only waive the requirements of paragraphs (B)(2) and (B)(3) of this rule, and 29-02(I) when soil treatment and/or dispersal is not feasible for an HSTS replacement for an existing dwelling due to the absence of adequate area for sizing the HSTS.
  
- (E) Application for an HSTS installation permit shall be made within three years of a completed site & soil evaluation. Transfer of ownership of any evaluated property or any other actual or planned changes to the evaluated property after the date of the evaluation may be subject to an additional site & soil evaluation.

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### 29-04 Permits

- (A) No person shall install, replace or alter a household sewage treatment 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.
- (B) No person shall maintain or operate a household sewage treatment system installed after the effective date of this rule without an operation permit obtained from the board of health.
- (C) Application for permit shall be in writing and contain pertinent information including an installation layout plan provided by the installer as required by the board of health. Any fee established for a permit by law or authority of law shall accompany the application.
- (D) The board of health shall issue a permit when the pertinent information indicates that the provisions of rules 29-01 to 29-21 of the Henry County Sanitary Code can be met. The board of health may specify terms consistent with rules 29-01 to 29-21 on the permit governing the installation, alteration, and operation of the household sewage treatment system.
- (E) The board of health shall deny a permit if the information on the application is incomplete, inaccurate, or indicates that the provisions of rules 29-01 to 29-21 of the Henry County Sanitary Code cannot be met.
- (F) An installation permit shall remain in force until completion of the household sewage treatment system or until January 1, 2013, whichever occurs first. If a request is made prior to January 1, 2013, a six month extension may be granted to the applicant in order to complete the installation. The permit may be revoked or suspended by the board of health. An operation permit shall remain in force until it expires, is revoked, or suspended by the board of health.
- (G) The installation and operation of the household sewage treatment system or any part thereof shall conform with the requirements of rules 29-01 to 29-21 of the Henry County Sanitary Code and the terms of the permit as required by the board of health in division (D) of this rule.

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### **29-05 Registration of installers of household sewage treatment 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.
- (C) Each registration issued hereunder shall expire annually.
- (D) A renewal application for registration shall be submitted to the board of health prior to the expiration date.
- (E) Every registrant shall maintain and submit to the board of health such data and records as may be required for determining compliance with rules 29-01 to 29-21 of the Henry County Sanitary Code.
- (F) The owner shall not be required to have a registration for performing work on the household sewage treatment system for the dwelling which he occupies.
- (G) Whenever the health commissioner finds that an installer is or has engaged in practices which are in violation of any provision of rules 29-01 to 29-20 of the Henry County Sanitary Code or the terms of any permit as required by the board of health in rule 29-04(D) 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.

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### 29-06 Registration of septage haulers

- (A) No person shall perform the services of a septage hauler 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.
  - (C) Obtain a permit from the board of health for each vehicle used to haul septage, report tank capacity for each vehicle, allow each vehicle and its equipment to be inspected if required by the board of health, and maintain vehicles in compliance with paragraph (B) of this rule.
  - (D) Manage the pumping, hauling, disposal and land application of septage in compliance with all applicable rules and regulations, and provide information to the board of health on the locations and methods of septage disposal.
  - (E) Provide to the owner a report of the services conducted including the date of service and comply with any additional reporting requirements established by the board of health.
  - (F) Any vehicle and equipment used for septage hauling shall comply with the following:
    - (1) The company name and phone number is legibly written on the vehicle in words and numbers no less than four inches in height.
    - (2) All septage hauling equipment is maintained in proper operating condition and managed in a manner that prevents leakage or spills while in operation, transit, or storage.
- Violation of these provisions as determined by the board of health may be cause for immediate suspension of a vehicle permit.
- (G) The board of health shall issue a permit when the pertinent information indicates that the provisions of rules 29-01 to 29-21 of the Henry County Sanitary Code can be met. The board of health may specify terms consistent with rules 29-01 to 29-21 on the permit governing the collection, transportation, and disposal of the contents of sewage tanks or privies.
  - (H) Each registration issued hereunder shall expire annually.
  - (I) A renewal application for registration shall be submitted to the board of health prior to the expiration date.

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- (J) Every registrant shall maintain and submit to the board of health such data and records as may be required for determining compliance with rules 29-01 to 29-21 of the Henry County Sanitary Code.
  
- (K) 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 29-01 to 29-21 of the Henry County Sanitary Code, the terms of the registration permit as required by the board of health in rule 29-06(C), or 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.

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### 29-07 Tanks, pumps and controls

- (A) Tanks subject to this chapter shall be manufactured to be watertight and structurally sound including septic tanks, other treatment component tanks, dosing tanks, pump vaults, HSTS holding tanks and privy vaults, or other applicable HSTS components.
- (B) The minimum capacity of septic tanks for an HSTS shall be:
  - (1) Single family dwelling;
    - (a) One to two bedroom - 1000 gallons;
    - (b) Three bedroom - 1500 gallons in one or two tanks or compartments;
    - (c) Four to five bedroom - 2000 gallons in two tanks or compartments;
    - (d) Six or more bedroom - 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 rule 29-07(B)(1).
- (C) In systems using two tanks, the septic tanks shall be connected in series and all sewage shall initially enter the first tank.
- (D) The invert level of the inlet shall be not less than two inches above the liquid level of the tank.
- (E) The inlet shall be provided with a vented tee or baffle to divert the incoming sewage downward. The 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.
- (F) The outlet shall be provided 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. The outlet shall include an effluent filter device that retains solids greater than one sixteenth of an inch in size.
- (G) The septic tank shall have a liquid drawing depth of not less than four feet.
- (H) The distance from the flow line to the cover shall be at least twelve inches.
- (I) Tank connections shall comply with the following specifications:
  - (1) Joint connections shall be watertight. Any joint sealants for concrete riser connections and tank seams shall be of a butyl rubber blend meeting material, manufacture, and physical requirements specifications of ASTM C 990.

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- (2) Inlet and outlet pipe connections to a tank shall be watertight. Connectors shall be provided by the tank manufacturer and shall meet material and manufacture specifications of ASTM C 923.
- (J) The tank shall be installed with a minimum of two watertight risers extended to grade or above grade to provide access to the inlet and outlet of the tank. The connection of the riser to the tank and the connection of additional riser sections shall incorporate joint grooves or adapters to prevent lateral movement of the riser. Riser lids shall prevent infiltration of water and have secured covers.
- (K) Dosing tanks shall be designed and manufactured in accordance with the following:
- (1) Dosing tanks shall be easily accessible and have secured covers. All connections shall comply with applicable specifications under paragraphs (I)(1) and (I)(2) of this rule.
  - (2) Dosing tanks shall be selected to accommodate the volume below maximum drawdown, the maximum design dose including any drainback, and the design portion of the reserve and surge capacities as applicable. The HSTS design shall provide a reserve capacity for high water alarm events that is not less than the daily design flow. If time dosed, the HSTS design shall accommodate combined reserve and surge capacities of not less than one hundred and fifty per cent of the daily design flow.
  - (3) A septic tank second compartment or a second septic tank in series may be used for low volume dosing if all conditions under paragraph (K)(2) of this rule are met and a filtered step system or screened vault is used in lieu of, or in addition to, the effluent filter device required under paragraph (F) of this rule.
- (L) Pumps shall meet the following specifications:
- (1) A pump shall be rated for effluent service by the manufacturer and be a UL or CSA listed product.
  - (2) The pump shall be properly sized to meet the design flow rate and total dynamic head requirements specified for the HSTS.
  - (3) A quick disconnect shall be accessible in the pump discharge piping, with adequate lift attachments provided for removal and replacement of the pump and water level control assembly without having to either enter the dosing tank or pump the tank to lower the liquid level.
- (M) A dosing siphon may only be used if the HSTS design requirements, including the design flow rate, dose capacity, and any pressure distribution parameters, can be met and maintained.

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- (N) Switches, controls, alarms, and electrical components shall be UL or CSA listed products, shall be installed in a manner easily accessible for routine monitoring and maintenance, and shall comply with the following:
- (1) Switches and controls shall accommodate the minimum and maximum dose capacities of the specified distribution component.
  - (2) An elapsed time meter, counter, and/or flow meter shall be included in those HSTS having any dosing component. Time dosed HSTS shall include flow meters, counters, and control panels with programmable timers, manual pump operation, test features, and as applicable, adjustable override settings for high water alarm conditions.
  - (3) Controls shall have both audible and visual alarms. Alarms and controls shall be on a separate frequently used circuit from dedicated circuits for each pump or motor. The board of health may require that the alarm be located in closer proximity to the dwelling or structure when the HSTS location is remote.
  - (4) Control panels and alarms shall be mounted in an easily accessible exterior location, shall be field-tested to assure compliance with the HSTS specifications, and shall include written instructions related to standard operation and alarm events.
- (O) The installer shall assure that all electrical wiring meets the national electric code.
- (P) HSTS components described in this rule shall be installed, operated and maintained as specified by the manufacturer or the approved plan.

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### 29-08 Aerobic treatment Units.

- (A) Aerobic treatment units 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 29-01 to 29-21 of the Henry County Sanitary Code.
- (B) In addition to division (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, a 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 rule 29-02(G) 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.

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### **29-10 Installation requirements for soil absorption.**

- (A) Leaching systems utilizing soil absorption 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 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 qualified person before a final decision is made in issuing a permit. The criteria of the national cooperative soil survey shall be used as a guideline by the health commissioner to determine the suitability of the soils in lieu of a more detailed guideline relating to code requirements and soil characteristics.

#### **29-10.1 Vertical Separation Distance – Henry County Resolution**

- (A) The vertical separation distance is the depth from the infiltrative surface of the distribution system of the soil absorption component to a limiting condition. Soil absorption components shall maintain a vertical separation distance of at least two feet to any limiting condition with the following exceptions:
  - (1) Bedrock, rock, and other fragments require at least four feet of vertical separation distance
  - (2) The infiltrative surface of the soil absorption component shall be installed above the perched seasonal high water table and above the associated restrictive soil layer. The separation distance shall be greater than zero inches.

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### 29-11 Leaching tile field

- (A) Total field requirement shall be divided into two equal sections and provided with a diversion 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 household sewage treatment systems shall be adequate to prevent water pollution or a nuisance, except those sites eliminated by rules 29-01 to 29-21 of the Henry County Sanitary Code.
- (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 pipe and gravel leaching trench shall have a minimum of twelve inches of gravel extending at least two inches above and six inches below a four inch perforated pipe. Gravel shall be three-fourth to one and one-half inch in size and washed or thoroughly rinsed to avoid the accumulation of fines in the trench. Use of other leaching trench material such as alternative aggregate or proprietary gravelless and chamber components shall be specified by the installer or designer on the installation permit plan..
- (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 thirty inches.
- (G) A leaching line shall have a maximum length of one hundred-fifty feet.
- (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 one inch in fifty feet.
- (I) The top of the gravel stone fill shall be covered with a pervious material such as untreated 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 treatment site.
- (K) If required by the findings of the site & soil evaluation, fill material shall be a sandy texture soil or sandy loam soil capable of maintaining trench sidewall stability during installation and shall be applied in a manner that both protects and creates an interface with the underlying in situ soil.

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### **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 six 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 diameter of eight inches and shall be on the discharge line adjacent to the leaching system unless an open out-fall 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.

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### **29-13 Leaching pit**

- (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.

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### 29-14 Subsurface sand filter

- (A) A subsurface sand filter shall be permitted only under the conditions provided in rule 29-02(G) of the Henry County Sanitary 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 covers 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 installed within a minimum of twelve inches of clean gravel or stone three-fourths 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 untreated 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.

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- (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.

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### 29-15 Privy

- (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 division (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.

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### **29-16 Building sewer**

- (A) A building sewer shall have a minimum diameter of four inches.
- (B) A building sewer shall be watertight and constructed of durable material, capable of withstanding a ten foot head of water test or equivalent.
- (C) Traps shall not be installed in a building sewer.
- (D) The elevation of a building sewer shall be aligned to accommodate the plan elevations of the subsequent HSTS components and shall be properly bedded at a uniform grade of not less than one eighth of an inch per foot.
- (E) A building sewer shall be a minimum of ten feet from any household water supply source and water service line.

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### **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 treatment system or part thereof, sample the effluent, or take any other steps which he deems necessary to insure proper compliance with rules 29-01 to 29-21 of the Henry County Sanitary Code. The health commissioner may utilize inspection reports or other data submitted or obtained from reliable sources to determine compliance.
  
- (B) No household sewage treatment system or part thereof shall be covered or put into operation until the system has been inspected and approved by the health commissioner.

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### 29-18 Abandoned household sewage treatment system

- (A) Any person who is no longer using an HSTS or an applicable component of an HSTS shall properly abandon all tanks, dosing tanks, and/or pretreatment components that are no longer in use in accordance with this rule.
- (B) All tanks, dosing tanks, and/or pretreatment components shall have the sewage contents pumped and removed by a registered septage hauler. If there is a need to remove solid materials such as filter media or other HSTS components, these shall be taken to an approved solid waste disposal facility or shall be managed in a manner that prevents a public health nuisance and contamination of surface or ground water.
- (C) Upon removal of the contents of the tank, dosing tank and/or pretreatment component, the top shall either be completely removed or shall be collapsed and at least one side collapsed to prevent containment of water in the abandoned tank or component. The resulting void shall be filled to the ground surface with inert and clean fill materials such as sand, gravel, or compacted soil in an amount and manner that allows for settling and prevents ponding of surface water.
- (D) Any person who abandons an HSTS system shall notify the board of health in writing that the HSTS has been properly abandoned, and shall provide the following information that shall be retained by the board of health:
  - (1) The owner and location of the abandoned HSTS and the date of abandonment.
  - (2) The name of the registered septage hauler and the name of the person or registered installer that performed the HSTS abandonment.
  - (3) The manner in which the tank, dosing tanks, and/or pretreatment components were abandoned or removed.

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### **29-19 Hearing**

The board of health shall grant a hearing to any person affected or aggrieved by rules 29-01 to 29-21 of the Henry County Sanitary Code.

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### 29-20 Variance

- (A) The board of health may grant a variance from the requirements of rules 29-01 to 29-21 of the Henry County Sanitary 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 29-20(A) provided the director of health concurs in writing with the design and evaluation plan.
- (C) Household sewage treatment system components or household sewage treatment systems differing in design or principle of operation from those set forth in rules 29-01 to 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 treatment components or systems complying with such regulations. Such approval shall be obtained in writing from the director of health.
- (D) Rules 29-01 to 29-21 of the Henry County Sanitary Code are minimum standards. A board of health may adopt more stringent standards when local conditions indicate such standards are necessary.

## Henry County Sewage Rules

### 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 treatment 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 Revised Code or an injection well drilling or operating permit issued under section 6111.043 of the 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 29-01 to 29-21 of the Henry County Sanitary 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 29 of the Henry County Sanitary 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 Code should not be construed as a conflict of law.

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(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 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 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 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 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 treatment 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 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 Administrative Code. For an

## Henry County Sewage Rules

SFOSTS with periodic large daily flows that are stored to avoid exceeding the one thousand gallon 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 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

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(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.