



Ohio Administrative Code

Rule 3701-29-10 Installation requirements for soil absorption and percolation.

Effective: January 1, 2015

(A) STS designs shall be prepared and submitted by persons capable of reviewing the soil evaluation, site conditions, information provided by the homeowner, and these rules to facilitate the choice of an appropriate, site specific STS and complete the STS design in compliance with paragraph (B) of this rule. Designers shall be knowledgeable of the requirements of this chapter and obtain education as necessary or required by manufacturer for all STS technologies they intend to design. Designers may complete the STS design while acting either as an agent of a board of health, or as an independent agent of the homeowner. Any board of health that employs staff qualified to prepare STS designs and offers this service may adopt a fee for the preparation of the design and all associated costs, provided the fee complies with the cost methodology required in rule 3701-36-14 of the Administrative Code.

(B) For the purposes of this chapter, STS designers shall demonstrate the ability to perform the following tasks required for STS designs through the submission of complete and accurate designs to the board of health:

(1) Estimate STS flows including, daily design flows, and any expected variations and estimate pollutant concentrations and mass loads exceeding typical residential sewage strength as defined in paragraph (C) of rule 3701-29-11 of the Administrative Code.

(2) Interpret and evaluate all site specific information including the soil evaluation, site conditions, site prohibitions and information provided by the owner to determine feasible STS options that will meet the requirements of this chapter.

(3) Evaluate site hydraulics and understand how the proposed STS integrates with the site topography and grade to site the STS

(4) Select devices and components capable of meeting performance requirements based on knowledge of these rules and STS technologies approved by the director of health.



(5) Provide approximate installation and operation costs of feasible STS options to assist the owner in selection of the STS to design.

(6) Prepare a detailed design including all items outlined in paragraph (C) of this rule which fully complies with this chapter.

(7) Delineate by staking or flagging the proposed soil absorption areas on the site as they relate to topography and contour.

(8) Be available to clarify any questions with and make adjustments to the system design, layout, or operational concerns. It may be necessary for the designer to meet with the owner, soil scientist, installer, service provider, or local health department during, prior, and after the installation.

(C) The designer or designee shall visit the site where the STS is to be located during the design process. The proposed location of a soil absorption component shall be staked or flagged on site to facilitate protection by the owner or his agent and to demonstrate that it can be installed as designed. Documentation submitted to the board of health shall be legible and contain sufficient detail to demonstrate compliance with the provisions of this chapter. At a minimum the STS design shall include:

(1) A description of the dwelling and/or structure(s) to be served by the STS;

(2) Details on daily design flow, soil loading rates based on soil evaluation, length along contour, absorption area dimensions, and if needed, pump selection/sizing, and pressure distribution network information;

(3) Rationale if varying from standards for items such as design flow, waste strength, or length along contour;

(4) Identification and a description of all materials and system devices and components including septic tanks, dosing tanks, distribution piping, diversion mechanisms, and distribution materials;



- (5) Identification of applicable sizing requirements for all STS devices and components;
- (6) If applicable, identification of the approved system manufacturer and model to be used, manufacturer O&M instructions, and means of access for O&M equipment to service the STS;
- (7) Construction and installation notes for the system installer including manufacturer installation instructions, if applicable;
- (8) Copies of or electronic access to O&M requirements, manuals, and instructions for the owner and service provider;
- (9) A legible scaled site drawing on eight and a half inch by eleven inch or larger paper showing the layout of the STS on the site. The drawing shall illustrate:
 - (a) The proposed location of STS devices and components including the location of the soil absorption component as staked or flagged on site;
 - (b) The designated area for complete relocation and replacement of the STS as staked on site as required by paragraph (G) of rule 3701-29-06 of the Administrative Code;
 - (c) The approximate location of all items designated in paragraph (G) of rule 3701-29-06 of the Administrative Code and demonstrate that required isolation distances are met to both the proposed STS and the replacement area;
 - (d) The location of all surface features that may affect the operation or installation of the STS including, but not limited to, disturbed areas, drainage features, wooded areas, and hardscapes;
 - (e) The approximate location of soil borings and/or soil test pits; and
 - (f) North directional arrow.
- (10) If necessary or applicable at least one enlarged, detailed plan view drawing of the system. The drawing(s) shall illustrate:



- (a) The proposed location and configuration of the system with proposed absorption area dimensions and elevations;
 - (b) Ground surface elevations and component elevations as necessary to ensure compliance with this chapter; and
 - (c) Any additional information requested by the board of health.
- (11) If applicable, pump selection information including the pump curve and system performance curve;
- (12) If applicable, pressure distribution network description and calculations; and
- (13) Any additional information required by the board of health.