

# Sewage Treatment System (STS) Design Plan Requirements

As required in Section 7.1 of the Cuyahoga County Board of Health Sewage Treatment System Rules, an STS design plan must include:

- The Completed Site and Soil Evaluation.
- Documentation of the rationale for design decisions used to address site and soil limitations including justification for selected loading rates and the use of any soil depth credits.
- Description of the dwelling and/or structures to be served by the STS and the designated design flow including any anticipated variations. The design must handle peak daily flow or utilize flow equalization in compliance with Section 9 of the Cuyahoga County Board of Health Sewage Treatment System Rules.
- Description of the treatment process used to meet performance requirements required in Cuyahoga County Board of Health Sewage Treatment System Rules Section 10. In addition, if applicable, documentation of pollutant concentrations and mass loading in excess of residential waste strength, including the design for treatment to reduce higher strength wastewater to typical residential waste strength prior to distribution to a soil absorption component.
- Plan notes designating that the STS area shall be protected from disturbances, and additional plans/notes as needed to explain any siting, installation, or O&M requirements or restrictions, including any preconstruction meetings at the site, conditions on the selection of an installer, STS start-up procedures or other designer-designated conditions.
- The site plan drawn to a scale of one (1) inch equals fifty (50) feet or less including:
  - North directional arrow.
  - Identified vertical and horizontal reference point or benchmark with its location clearly marked at the site.
  - Designation of the described soil boring and/or excavation locations from the soil and site evaluation.
  - Outline of existing and proposed structures, driveways and other hardscapes, and other related items on the property.
  - Location of STS components and replacement area.
  - The dimensions of the property with horizontal isolation distances to the STS and replacement area from items designated in paragraph (E) of Section 5 of the Cuyahoga County Board of Health Sewage Treatment System Rules, including, but not limited to private water systems and surface water features.
  - Topography for the areas of the dwelling and/or structures to be served and the proposed STS and designated replacement areas including and indication of drainage features in these and surrounding areas.
  - Designation of any easements, disturbed areas, or wooded areas within fifty (50) feet of the proposed STS and replacement area, or other characteristics or obstructions that may affect the installation or operation of the STS.
  - Means of access for O&M equipment to service the STS.
- Enlarged plan view drawings of the STS components if the site plan scale does not allow for sufficient detail.
- Profile drawing showing elevations relative to surface grade sufficient to demonstrate compliance with OAC 3701-29 and the Cuyahoga County Board of Health Sewage Treatment System Rules including the invert elevations necessary to assess the hydraulic profile of STS components and any gravity or pumped discharge outlet elevations.
- Plan and section views for the STS components and/or attachments of component and material specification information.
- Installation and O&M instructions.
- Plan note requiring that the STS installer consult with the designer regarding any intended changes to the plan and requiring installer/designer coordination on the provision of an accurate as-built record.