



Delaware General Health District Division of Environmental Health

1 West Winter Street, 2nd Floor, P.O. Box 570, Delaware, Ohio 43015 Phone: (740) 368-1700 Fax: (740) 368-1736

Mound Design Plan Checklist

Date Received: _____ Property Owner: _____

Property Address _____

| Indicates plan meets ODH & DGHD requirements | YES | NO | N/A |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|-----|
| Site and Soil Survey | | | |
| Do the plans match the calculations | | | |
| Notes Required | | | |
| Designation in notes that the designer is available to make adjustments and address concerns, as needed | | | |
| O&M requirements noted or provided | | | |
| Designation of any other obstructions | | | |
| Designation in notes that homeowner has been informed of system options and cost | | | |
| Designation in notes to contact designer before making changes to the design | | | |
| Designation in notes for protection of primary and replacement areas | | | |
| Date designer and/or designee visited the site | | | |
| Installation instructions | | | |
| 29-05 | | | |
| Site review fee paid | | | |
| Plan review fee paid | | | |
| 29-06 | | | |
| No unapproved connections to STS (e.g. roof, foundation, clear water sump, swimming pool, etc.) | | | |
| System is non-discharging | | | |
| 10' isolation distances (utility line, roadway, driveway, property line, right-of-way, sealed well, recorded easement, intermittent stream, swale, geothermal horizontal closed loop, irrigation line, GWRS, hardscape, etc.) | | | |
| 50' isolation distances (surface water impoundment, lake, river, wetland, perennial stream, road cut-bank, stream cut-bank, water supply source, vertical open and closed loop geothermal, etc.) | | | |
| STS sited on lot | | | |
| STS not in floodway, or wetland | | | |
| If within 100 year flood plain, STS is below grade | | | |
| Sanitary sewer not accessible | | | |
| 29-07 | | | |
| Soils submitted by qualified individual | | | |
| Limiting conditions described and noted | | | |
| Depth to limiting layer adequate | | | |
| Depth to restrictive layer adequate | | | |
| Soil horizons and depth indicated | | | |
| Soil texture and structure of each horizon indicated | | | |
| Slope and contours indicated | | | |
| Basal loading rate and linear loading rate are appropriate for soils utilized | | | |
| Soil classifications | | | |
| Highly permeable soil identified | | | |
| 29-10 | | | |
| House plan provided (with bedrooms) | | | |
| Daily design flow (with anticipated variations) | | | |
| Plan view | | | |
| Rationale for design, if differing from standards | | | |
| Description of treatment process | | | |

| | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| Topography, scale, and north arrow provided | | | |
| Elevations (house, tanks, pumps, beginning/middle/end of distribution area etc.) | | | |
| Dimensions of property | | | |
| Pump info/pump curve | | | |
| Pressure distribution network with description and calculations | | | |
| Product info (Materials, Components, Tank Sizes, etc.) | | | |
| Length and width of treatment areas adequate | | | |
| Designation of primary and secondary treatment area mapped on plan | | | |
| Adequate access for O&M equipment provided | | | |
| Designation of hardscapes, easements, disturbed areas, soil boring locations, wooded areas, and notable areas of concern mapped on plan | | | |
| 29-12 | | | |
| Tank size adequate | | | |
| Tank approved by ODH | | | |
| Dosing tank accommodates reserve and/or surge capacity | | | |
| Pump properly sized and provided with accessible quick disconnect | | | |
| Air vacuum release valve (needed if pump fitting or transport line is at a higher elevation than soil absorption component.) | | | |
| Switches, controls, alarms and electrical devices are in an easily accessible location | | | |
| Control panels and alarms on exterior and 1 foot above grade | | | |
| Building sewer-no angles >45 degrees, 1-10% elevation change in pipe, and cleanout provided | | | |
| Additional cleanouts indicated when needed (over 75' and every 100' thereafter) | | | |
| 29-13 | | | |
| Pretreatment components have effluent sampling capability after pretreatment | | | |
| If depth ≤ 2', 8" spacing between inlet and outlet pipe | | | |
| If depth >2' but ≤6', 12" spacing between inlet and outlet pipe | | | |
| At least 2" elevation difference from inlet to outlet | | | |
| 29-14 | | | |
| Pretreatment device utilized for depth credit meets standards for selected depth credit | | | |
| 29-15 | | | |
| Limiting condition not specified-VSD-18" In situ-8" | | | |
| Fractured or karst bedrock, ground water or aquifer, flow restrictive layer-VSD-36" In situ- 12" | | | |
| Perched seasonal water-VSD 18" In situ 6" | | | |
| Sand elevation 1:1 soil depth credit utilized (12" credit) but maintains min. infiltrative distance | | | |
| Pathogen reduction depth credit utilized (12" credit) but maintains min. infiltrative distance | | | |
| Timed micro-dosing depth credit utilized (12" credit) but maintains min. infiltrative distance | | | |
| LPP distribution soil depth credit utilized (6" credit) but maintains min. infiltrative distance | | | |
| Most limiting in situ soil layer within 6" of infiltrative surface or basal surface utilized for sizing | | | |
| If a reduction for an existing lot is utilized, an explanation of need is provided | | | |
| Oriented parallel to natural contour | | | |
| Zones are designed to prevent stacking | | | |
| 29-15.1 | | | |
| Dose less than 1/4 daily design flow and 5 times void volume of laterals | | | |
| When flow restrictive layer within 12" of surface, Dose 1/8 design flow & 3 times void | | | |
| If zoned, dosing equal | | | |
| If time dosed, dosing spaced uniformly throughout the day | | | |
| Direction of orifices and method for shielding designated | | | |
| Orifice number and spacing provide distribution of no more than 6 sq. ft. per orifice | | | |
| Orifice size ≥1/8", ≥6" from end of lateral and ≤ 6' apart | | | |
| Method for uniform stream dispersal from orifice noted (shielding/spash plate etc.) | | | |
| Inspection port in each pressure leaching trench with 4" opening | | | |
| Inspection port in mound-at least 3, with 4" openings | | | |
| Accessible turn-ups at each lateral | | | |

| | | | |
|-------------------------------------------------------------------------------------------|--|--|--|
| Shutoff mechanism provided | | | |
| 29-16 If utilized during design | | | |
| STS 8' from drain tiles | | | |
| Interceptor drain, if used 6' upslope | | | |
| Perimeter drain, if used 6' upslope 8' elsewhere | | | |
| Perimeter drain at least 8' from mound lateral or 1' from toe | | | |
| Subsurface drainage 4" in diameter | | | |
| Subsurface drainage at least 10" of coarse aggregate | | | |
| Subsurface drainage positive slope of 1/10' per 100' | | | |
| Engineered drainage shows depth to seasonal water with and without drainage | | | |
| Drainage outlet-accessible, rigid wall, animal guard | | | |
| Drainage outlet-sufficient freeboard-at least 4" above water level | | | |
| Drainage outlet-permission received for discharge point, when applicable | | | |
| MOUND | | | |
| VSD matches soil report | | | |
| Surface water diversion addressed, as needed | | | |
| If many boulders or trees are present, additional area incorporated to compensate | | | |
| If more than 5% slope, downslope is free of disturbances | | | |
| If less than 5% slope, radial areas free of disturbances | | | |
| Sand fill depth not less than 4" with pretreatment, not less than 6" with septic effluent | | | |
| Loading rate does not exceed 1g/sqft | | | |
| Geotextile fabric/straw provided | | | |
| Settled cover at least 6" depth and crowned to promote runoff no steeper than 3:1 | | | |
| Network calculations provided | | | |
| Distribution media at least 3" below pipe and 1" above pipe | | | |
| Force main installed upslope side | | | |