



Leaching Design Plan Checklist/Inspection Checklist

Date Received: _____ Property Owner: _____

Property Address: _____

Indicates plan meets ODH & CGCHD 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 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			
3701-29-05			
Site review fee paid			
3701-29-06			
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			
3701-29-07			
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			

3701-29-10			
House plan provided (with bedrooms) 120 GPD/Bed (ie-2 BR x 120 GPD=240 GPD)			
Daily design flow (with anticipated variations) 240 GPD Min. Sizing, 1,000 GPD Max. W/O time storage			
Plan review			
Rationale for design, if differing from standards			
Description of treatment process			
Topography, scale, and north arrow provided			
Elevations (Benchmark, house, house to tank, tank (inlet and outlet), tank to D Box, D Box to leach, pumps, beginning/middle/end of distribution area, etc.)			
Dimensions of property			
Pump info/pump curve, if applicable			
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			
3701-29-12			
Tank size adequate, 1-2 Bed 1000 Gal/ 3 Bed 1500 Gal/ 4-5 Bed 2,000 Gal			
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)			
3701-29-13			
Pretreatment components have effluent sampling capability after pretreatment			
If depth $\leq 2'$ 8" spacing between inlet and outlet pipe			
If depth $> 2'$ but $\leq 6'$, 12" spacing between inlet and outlet pipe			
At least 2" elevation difference from inlet to outlet			
3701-29-14			
Pretreatment device utilized for depth credit meets standards for selected depth credit			
3701-29-15			
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-8"			
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			
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			
LEACH			
Surface water diversion addressed, as needed			
Special consideration for slopes greater than 15% needed?			
Unless timed-low pressure, 25% additional infiltrative surface added			
Non-gravel, at least 75% of required infiltrative surface			
If used, only one sizing reduction used (i.e. pretreatment and gravel-less cannot be stacked)			
No partial trenches utilized-Must use minimum length base upon Hydraulic Linear Loading Rate (HLLR)			
If trench longer than 150', manifold placed in center or pressure utilized			
New installation width maximum of 2' (alterations and replacements up to 3', if needed)			
Minimum trench depth of 2"			
Trench depth coincides with soil report			
Distance between trenches (4' for gravity/3' for LLP)			
Trench media at least 8" thickness			
Geotextile fabric/straw provided and minimum 6" of cover			
Distribution piping extending entire length of trench and minimum 3" diameter			
Pipe holes at least 1/2" in diameter and no more than 40" apart			
No serial distribution			
Availability to rest any one line while maintain ability to treat entire daily design flow/ Line shutoff valve/turn ups/ cap/ speed levelers			
If fill material will be utilized, soil meets standard of 29-15 (O) (5) (a) & (b)			
Leaching piping meets ASTM, D1785, ASTM D2729, ASTM F405 on ASTM 810 standards			
When the trench depth design results in the distribution product or media extending above natural grade of the in situ soil, fill material placed between the trenches after installation of the distribution media shall be of silt loam, loam, sand, loamy sand, or sandy loam texture. Fill material shall be applied in a manner that protects and creates an			

interface with the underlying in site soil and prevents compaction of material between trenches.			
Fill material applied to the natural around surface prior to the evacuation of leaching trenches for the purpose of creating trench sidewall shall be sand, loamy sand, or sandy loam texture 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.			
Final Grade/Seed Straw Arrangements			

 Installer/Service Provider

 Date

 Registered Environmental Health Specialist

 Date