# Mound Design Plan Checklist

Date Received: ___________________  Property Owner: ________________________________________________  

## Property Address

<table>
<thead>
<tr>
<th>Indicates plan meets ODH &amp; DGHD requirements</th>
<th>YES</th>
<th>NO</th>
<th>N/A</th>
</tr>
</thead>
</table>

### 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
- 29-06
  - Plan review fee paid

### Site Review

- 29-05
  - Site review fee paid
- 29-06
  - Plan review fee paid

### System Requirements

- 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

### Soil Requirements

- 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
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topography, scale, and north arrow provided</td>
<td></td>
</tr>
<tr>
<td>Elevations (house, tanks, pumps, beginning/middle/end of distribution area etc.)</td>
<td></td>
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<tr>
<td>Dimensions of property</td>
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<tr>
<td>Pump info/pump curve</td>
<td></td>
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<tr>
<td>Pressure distribution network with description and calculations</td>
<td></td>
</tr>
<tr>
<td>Product info (Materials, Components, Tank Sizes, etc.)</td>
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<tr>
<td>Length and width of treatment areas adequate</td>
<td></td>
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<tr>
<td>Designation of primary and secondary treatment area mapped on plan</td>
<td></td>
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<tr>
<td>Adequate access for O&amp;M equipment provided</td>
<td></td>
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<tr>
<td>Designation of hardscapes, easements, disturbed areas, soil boring locations, wooded areas, and notable areas of concern mapped on plan</td>
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<tr>
<td>29-12</td>
<td>Tank size adequate</td>
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<td></td>
<td>Tank approved by ODH</td>
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<td></td>
<td>Dosing tank accommodates reserve and/or surge capacity</td>
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<td></td>
<td>Pump properly sized and provided with accessible quick disconnect</td>
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<td></td>
<td>Air vacuum release valve (needed if pump fitting or transport line is at a higher elevation than soil absorption component.)</td>
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<td></td>
<td>Switches, controls, alarms and electrical devices are in an easily accessible location</td>
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<td></td>
<td>Control panels and alarms on exterior and 1 foot above grade</td>
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<td></td>
<td>Building sewer-no angles &gt;45 degrees, 1-10% elevation change in pipe, and cleanout provided</td>
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<tr>
<td></td>
<td>Additional cleanouts indicated when needed (over 75’ and every 100’ thereafter)</td>
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<tr>
<td>29-13</td>
<td>Pretreatment components have effluent sampling capability after pretreatment</td>
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<tr>
<td></td>
<td>If depth ≤ 2’, 8” spacing between inlet and outlet pipe</td>
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<tr>
<td></td>
<td>If depth &gt;2’ but ≤6’, 12” spacing between inlet and outlet pipe</td>
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<tr>
<td></td>
<td>At least 2” elevation difference from inlet to outlet</td>
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<tr>
<td>29-14</td>
<td>Pretreatment device utilized for depth credit meets standards for selected depth credit</td>
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<tr>
<td>29-15</td>
<td>Limiting condition not specified-VSD-18” In situ-8”</td>
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<tr>
<td></td>
<td>Fractured or karst bedrock, ground water or aquifer, flow restrictive layer-VSD-36” In situ- 12”</td>
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<tr>
<td></td>
<td>Perched seasonal water-VSD 18” In situ 6”</td>
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<td></td>
<td>Sand elevation 1:1 soil depth credit utilized (12” credit) but maintains min. infiltrative distance</td>
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<tr>
<td></td>
<td>Pathogen reduction depth credit utilized (12” credit) but maintains min. infiltrative distance</td>
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<tr>
<td></td>
<td>Timed micro-dosing depth credit utilized (12” credit) but maintains min. infiltrative distance</td>
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<tr>
<td></td>
<td>LPP distribution soil depth credit utilized (6” credit) but maintains min. infiltrative distance</td>
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<td></td>
<td>Most limiting in situ soil layer within 6” of infiltrative surface or basal surface utilized for sizing</td>
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<td></td>
<td>If a reduction for an existing lot is utilized, an explanation of need is provided</td>
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<tr>
<td></td>
<td>Oriented parallel to natural contour</td>
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<td></td>
<td>Zones are designed to prevent stacking</td>
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<tr>
<td>29-15.1</td>
<td>Dose less than 1/4 daily design flow and 5 times void volume of laterals</td>
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<td></td>
<td>When flow restrictive layer within 12” of surface, Dose 1/8 design flow &amp; 3 times void</td>
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<td>If zoned, dosing equal</td>
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<td>If time dosed, dosing spaced uniformly throughout the day</td>
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<td></td>
<td>Direction of orifices and method for shielding designated</td>
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<tr>
<td></td>
<td>Orifice number and spacing provide distribution of no more than 6 sq. ft. per orifice</td>
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<tr>
<td></td>
<td>Orifice size ≥1/8”, ≥6” from end of lateral and ≤ 6’ apart</td>
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<td></td>
<td>Method for uniform stream dispersal from orifice noted (shielding/spash plate etc.)</td>
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<tr>
<td></td>
<td>Inspection port in each pressure leaching trench with 4” opening</td>
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<td></td>
<td>Inspection port in mound-at least 3, with 4” openings</td>
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<td></td>
<td>Accessible turn-ups at each lateral</td>
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<tr>
<td>Requirement</td>
<td>Notes</td>
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<td>-------------------------------------------------------------------</td>
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<tr>
<td>Shutoff mechanism provided</td>
<td></td>
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<tr>
<td><strong>29-16 If utilized during design</strong></td>
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<tr>
<td>STS 8' from drain tiles</td>
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<tr>
<td>Interceptor drain, if used 6' upslope</td>
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<tr>
<td>Perimeter drain, if used 6' upslope 8' elsewhere</td>
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<tr>
<td>Perimeter drain at least 8' from mound lateral or 1' from toe</td>
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<tr>
<td>Subsurface drainage 4&quot; in diameter</td>
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<td>Subsurface drainage at least 10&quot; of coarse aggregate</td>
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<tr>
<td>Subsurface drainage positive slope of 1/10' per 100'</td>
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<tr>
<td>Engineered drainage shows depth to seasonal water with and without drainage</td>
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<tr>
<td>Drainage outlet-accessible, rigid wall, animal guard</td>
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<tr>
<td>Drainage outlet-sufficient freeboard-at least 4&quot; above water level</td>
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<td>Drainage outlet-permission received for discharge point, when applicable</td>
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<tr>
<td><strong>MOUND</strong></td>
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<tr>
<td>VSD matches soil report</td>
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<td>Surface water diversion addressed, as needed</td>
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<td>If many boulders or trees are present, additional area incorporated to compensate</td>
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<tr>
<td>If more than 5% slope, downslope is free of disturbances</td>
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<tr>
<td>If less than 5% slope, radial areas free of disturbances</td>
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<tr>
<td>Sand fill depth not less than 4&quot; with pretreatment, not less than 6&quot; with septic effluent</td>
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<tr>
<td>Loading rate does not exceed 1g/sqft</td>
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<tr>
<td>Geotextile fabric/straw provided</td>
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<tr>
<td>Settled cover at least 6&quot; depth and crowned to promote runoff no steeper than 3:1</td>
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<tr>
<td>Network calculations provided</td>
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<tr>
<td>Distribution media at least 3&quot; below pipe and 1&quot; above pipe</td>
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<tr>
<td>Force main installed upslope side</td>
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</tbody>
</table>

RSU 01-2015