

Summary of Proposed January 1, 2015 Revisions to the Technical Standards for Subsurface Sewage Disposal Systems

○ **Section I Definitions:**

- Eliminate two (2) inch nominal tire chip aggregate definition, and reference to that term in the approved aggregate definition.
- Add definition for Outbuilding: Outbuilding means a structure that is located on the same lot as a residential building, and cannot be split off and sold as a separate residential building. Outbuildings include, but are not limited to, detached garages, workshops, barns, pool house cabanas, game rooms, guest houses, and in-law apartments.
- Add definition for Receiving soil: Note: Receiving Soil definition currently in MLSS Appendix A, but the term is used elsewhere in the standards in addition to this appendix.
- Add definition for Cesspool: A subsurface sewage disposal structure that does not follow a septic tank, and is designed to retain organic matter and solids, permitting the liquids to seep into the surrounding soil.

○ **Section II Location of SSDSs:**

- Add language noting minimum separating distances shall be also be maintained between holding tanks and cesspools. Cesspools have same distances as leaching systems. Special provision language to reference tanks rather than septic tank/pump chamber/grease interceptor tank, and note to be added indicating tanks include these tanks and holding tanks.
- Modify Table 1 Item B (Human Habitation on Adjacent Property) to cover other buildings generating domestic sewage, or combine with Item C.
- Change Table 1 Item C (Building Served) separating distance from 15 feet to 10 feet for buildings without drains.
- Provide separate item rows for groundwater drains and stormwater infiltration/retention/detention systems, which are currently both in Table 1 Item G. Include provision for reduced distances to relatively minor infiltration systems such as rain gardens. Include provision for increased separation up to 100 feet to major stormwater infiltration systems that have the potential to affect the SSDS.
- Modify Table 1 Item F (Surface & GW Drain Pipes) to also cover stormwater catch basins and manholes, and include provision for reduced distance of 10 feet to tanks if the stormwater structure has watertight pipe seals and seams with gaskets.
- Modify Table 1 Item O (Water Treatment Wastewater System) to reference term Water Treatment Wastewater Dispersal Structure utilized in new LFWTW General Permit, and cite a 25 feet minimum distance with provision to reduce distance to 10 feet if discharge is less than 75 gallons per day and not downgradient of leaching system. WTW Disposal Systems can include settling structures; therefore these tanks need to also be addressed.
- Modify Table 1 Item P (Closed Loop Geo-exchange Systems) to include provision for a reduced distance of 25 feet to tanks, and to leaching systems that are not upgradient of the closed loop geo-exchange system.

○ **Section III Piping:**

- Modify wording in Figure 2 to reference solid SSDS pipes rather than sanitary sewer.
- Eliminate Tables 2-A & 2-B that concern public sewer piping near water supply wells.
- Eliminate subsection C (Procedure for Air Pressure Testing of Sewer Pipe), and add reference to applicable leakage test specifications (ASTM, AWWA, TR-16). Concrete pipe: ASTM C924 (Per TR-16).

○ **Section IV Design Flows:**

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○ **Section V Septic Tanks & Grease Interceptor Tanks:**

- Non-concrete septic tanks must meet IAPMO or similar tank standard, and markings shall include dangerous gas warning and tank size.

- **Section VI Effluent Distribution, Pump Systems & Air Injection Processes:**
 - Pump chamber diagram (Figure 11) modified (check valve location, 2nd weep hole?).
 - Add reference to new approved proprietary dosing systems, and include required arrangements for access etc.
- **Section VII Percolation Tests:**
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- **Section VIII Leaching Systems:**
 - Note that reserve areas, except for new construction, are not required for outbuildings on single-family residential building lots.
 - Modify Table 6 (Residential Buildings) to include provision for 1-bedroom leaching system sizing outbuildings on single-family residential building lots. CAC discussion: ½ size minimum of 2-bedroom ELA?
 - Remove language concerning two (2) inch nominal tire chip aggregate.
 - Add proprietary leaching systems approved after the last Technical Standards' revision.
 - Add proprietary drip irrigation system (Perc Rite), and change the language in Subsection G to indicate the ELA rating for proprietary drip irrigation systems is calculated differently than other leaching systems since limited effluent application does not result in bio-mat growth at the orifice holes on the drip lines. Note the ELA rating and center to center spacing for proprietary drip irrigation systems are determined by the Commissioner of Public Health based on a review of supporting documentation from the proprietary company, and they are correlated to an equivalent area needed for a conventional 3 feet wide leaching trench. Note: A drip irrigation line credited at 0.75 SF/LF (1/4 quarter of the 3.0 SF/LF ELA for conventional trench) with 1.5 feet minimum center to center spacing utilizes approximately the same land area for a standard trench system.
 - Incorporate ELA rating revisions concerning internal bio-mats, competing bio-mats (no credit for <1/2 inch, 50% credit for ½ to 2 inches), credited height (3/4 up distribution pipe).
 - Add new language noting that in coastal areas on sites that have a groundwater table that is tidally impacted, the minimum separation distance above maximum groundwater shall be 24 inches, and maximum groundwater determinations shall take into account water level rise associated with high tides.
 - Allow non-marked filter fabric to cover leaching systems if specifications for a specific fabric are included on design plan, and if documentation is submitted to local health department confirming fabric meets the minimum specifications cited in the Technical Standards.
- **Section IX Groundwater, Roof, Cellar and Yard Drainage:**
 - Note that porous pavers/concrete are not considered stormwater infiltration systems for the purposes of minimum separation distances in Table 1, and note such systems can allow infiltration within 25 feet of a SSDS.
- **Section X Other Wastewater:**
 - Revise language to note DPH may allow Point of Use water treatment wastewater to discharge to a SSDS if the discharge is deemed to be incidental.
 - Modify language to stipulate Point of Entry water treatment wastewater shall be discharged in accordance with DEEP's General Permit for the Discharge of Low Flow Water Treatment Wastewater, which authorizes on-site discharges to dedicated disposal systems.
- **Section XI Non-Discharging Systems: None**
- **Forms #1, 2, 3 & 4:**
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- **Appendix A, MLSS Revisions:**
 - Language revisions pending.
 - Flow Factor for 1 bedroom outbuildings: 0.5

- **Appendix B & Appendix C:**

- Update Appendix B to include new filters and company names, and delete filters no longer approved.

- **Appendix D, Approved Non-Concrete Septic Tanks:**

- Update appendix to include the approved tanks based on most recent list.

Summary Date: February 27, 2014

P/RWS/Summary of Proposed 1-1-15 Revisions to the Technical Standards

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