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REPLACEMENT SYSTEMS FOR OVERBOARD DISCHARGES ON OFFSHORE ISLANDS

The Division of Environmental Health, Subsurface Wastewater Unit offers this document as guidance with respect to designing replacement subsurface wastewater disposal systems on offshore islands. In particular, this guidance is intended to address those situations in which an existing overboard discharge (OBD), licensed by the Maine Department of Environmental Protection, is being replaced by a subsurface system designed pursuant to the Subsurface Wastewater Disposal Rules, CMR 241 (the Rules).

The Division recognizes that the offshore islands have unique properties and conditions which make installation of a conventional subsurface wastewater disposal system problematic. Chief among them are shallow to non-existent soils, limited site access, limited potable water supplies, and inconsistent electric power.

Ultimately, a licensed Site Evaluator must exercise professional judgment when recommending the installation of a subsurface wastewater disposal system that does not meet the minimum criteria set by the Rules. The following guidance is offered by the Department to aid in this process.

- Systems intended to replace a licensed OBD, and which do not comprise a major expansion as defined in the Rules, may be designed using Replacement System criteria. Otherwise, First Time system criteria apply. In either instance, passive systems (non-mechanical) are recommended when electrical power is inconsistently available.
- Residential systems may be sized at 25 gallons per day (gpd) per fixture, when potable water is supplied by a cistern, storage tank, or other source which is not constantly pressurized (for example, seasonal public water systems).
- Non-residential systems may be sized at 5 gpd per employee, when potable water is supplied by a cistern, storage tank, or other source which is not constantly pressurized. Other water use sizing, such as for manufacturing, etc., must be reviewed on a case by case basis by the Division.
- The Division recognizes the high costs of importing soil and construction fill from the mainland to offshore islands. The Division occasionally has allowed the use of shredded bark mulch in lieu of backfill meeting provisions of Section 804 of the Rules. The Division now will allow use of shredded bark mulch in such a manner as a matter of practice on offshore islands. This must not be construed to allow such use for proprietary disposal devices which otherwise require specific construction sand or other materials, unless allowed in writing by the manufacturer for a specific installation.
- Septic tanks may be sized at 500 gallons per structure regardless of use, i.e., residential or non-residential. In instances wherein a non-discharging toilet is not proposed to reduce solids loading, the Division strongly recommends an effluent filter to mitigate suspended solids in the tank effluent. Given that access for tank pumping is frequently impossible, septic tank solids may be composted on site in conformance with applicable laws and regulations.
- Any style of disposal area included in the Rules is allowed, provided that these recommendations must not be construed to supersede any manufacturer's requirements.
- The use of non-discharging toilets is encouraged for the purpose of reducing solids buildup in the septic tank(s) and suspended solids loading in the tank effluent.

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