

**10-144**

**Chapter 241**

**STATE OF MAINE**

**SUBSURFACE WASTEWATER DISPOSAL RULES**



**DEPARTMENT OF HEALTH AND HUMAN SERVICES  
MAINE CENTER FOR DISEASE CONTROL AND PREVENTION  
DIVISION OF ENVIRONMENTAL HEALTH  
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AUGUSTA, MAINE 04333**

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**10-144  
CHAPTER 241**

**Division of Environmental Health  
Maine Center for Disease Control & Prevention  
Department of Health and Human Services**

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**SUMMARY:**

This rule governs the siting, design, construction and inspection of subsurface wastewater disposal systems in order to protect the health, safety and welfare of the citizens of Maine. Approved procedures, design and siting requirements, materials, methods and administrative polices are described in detail.

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**BASIS STATEMENT:**

These Rules provide minimum State design criteria for subsurface wastewater disposal to assure environmental sanitation and safety. These Rules are intended to complement municipal planning, zoning, and land use control.

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**AUTHORITY: 22 M.R.S. §§ 42(3), 42(3-B);  
30-A M.R.S. §§ 4211 (5), 4215 (4), 4211 & 4452;  
22-A M.R.S. §205(2)**

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**SECTION 1. INTRODUCTION****A. General**

1. Scope: These Rules govern the general regulation of all subsurface wastewater systems.
2. Duties and powers of Local Plumbing Inspector: The Local Plumbing Inspector (hereafter, LPI) shall enforce all the provisions of these Rules. He or she shall act on any question concerning the method or manner of construction and the materials to be used in the installation of a system, except as may be specifically provided for by other requirements of these Rules.
3. Application for disposal system permits: The LPI shall receive applications for disposal system permits, issue permits for the installation of systems, inspect the premises for which such disposal system permits have been issued, and enforce compliance with the provisions of these Rules.
4. Notices and orders: The LPI shall issue all necessary notices or orders pertaining to removal of illegal or unsafe conditions, the requirement of necessary safeguards during construction, and compliance with all requirements of these Rules for the safety, health, and general welfare of the public.
5. Inspections: The LPI shall make all the inspections required these Rules. The LPI may engage such expert opinions as may be deemed necessary to report upon unusual technical issues that may arise, subject to the approval of the municipal officers.
6. Credentials: The LPI shall carry proper credentials of the office while inspecting any and all systems and premises in the performance of his or her duties.
7. Annual report: At least annually, the LPI must submit to the municipal officers of the jurisdiction a written statement of code enforcement activities in form and content as shall be prescribed by such authority.
8. Contact Information: Contact information herein is accurate, as of the effective date of these Rules. The Department may be contacted at <http://www.maine.gov/dhhs/eng/plumb/index.htm>, at (207) 287-5689, and at 286 Water Street, 3<sup>rd</sup> Floor, Augusta, ME 04333.

**B. Authorized Designers**

1. Non-engineered systems: A site evaluator licensed in Maine shall design non-engineered systems.
2. Engineered systems: A site evaluator licensed in Maine shall provide observation hole logs and soil profile descriptions as described in Section 10.C.4 for engineered systems. A professional engineer, licensed in Maine, shall design engineered systems, and may consult with the site evaluator.

**C. Design Requirements**

1. All systems: In designing any system, the site evaluator and/or professional engineer shall consider lot size and configuration, slope, surface drainage, soil characteristics, the presence and depth of limiting horizons within the soil, soil permeability, type and organic loading rates of wastes, (BOD and TSS), and the projected design flow.
2. Types of wastes: Systems must be designed to receive all wastewater from the structure served, except in the following cases:
  - (a) Black or grey wastewaters only: Separate systems may be designed to receive only grey wastewater, or only black wastewater, as allowed in Section 4.

- (b) Laundry wastes: Laundry wastes from a single-family dwelling may be discharged into a separate laundry disposal field. See Section 4(P).
- (c) Hot tubs: Hot tubs must not discharge into any disposal system utilized for any other wastewater, but may be discharged into a grey water disposal system.

**D. Department of Environmental Protection**

1. License Not Required: In accordance with 38 M.R.S. §413, a waste discharge license is not required for the installation, operation or maintenance of a subsurface wastewater disposal system for the subsurface disposal of domestic wastewater or other wastewater from commercial, industrial, or residential sources which is of a similar quality (constituents and strength) or of a lesser pollutant load strength to that of domestic wastewater provided it has been designed and installed in conformance with these Rules. This includes, but is not limited to, wastewater normally associated with hospitals, restaurants, nursing homes, schools, hotels, motels, and medical, dental, veterinary facilities, and backwash from water treatment systems, provided all pollutants including, but not limited to, radionuclides will be appropriately and adequately treated, and similar types of wastewater.
2. License Required: In accordance with 38 M.R.S. §413, a waste discharge license is required for the installation, operation or maintenance of a subsurface wastewater disposal system for the subsurface disposal of wastewater from commercial, industrial, or residential sources which has constituents unlike that of, or of significantly higher strength than, that of domestic wastewater and is therefore, beyond the jurisdiction of these Rules. This includes, but is not limited to, wastewater normally associated with abattoirs, commercial car washes, egg washing facilities, and industrial processes.
3. Wetland jurisdiction: The Army Corps of Engineers makes jurisdictional determinations and issues wetland permits for filling, dredging, and other construction in certain wetlands under Section 10 of the Rivers and Harbors Act of 1899. The Army Corps of Engineers provides the same function under Section 404 of the Clean Water Act for all other wetlands, with program oversight by the U.S. Environmental Protection Agency (EPA). With the combination of these two Acts, all wetlands, regardless of size, are regulated by EPA and the Army Corps of Engineers. The Maine Department of Environmental Protection (MDEP) regulates activities in, or adjacent to, coastal or freshwater wetlands, as defined in Chapter 2 under the Natural Resources Protection Act, (NRPA) at 38 M.R.S. §480-A *et seq.*
4. Permit by Rule: The installation or repair of a system does not require a NRPA permit from the MDEP, provided all Sections of these Rules are met. The requirements contained in these Rules are designed to meet the same requirements contained in MDEP's Permit by Rule program for soil disturbance adjacent to or within a protected natural resource associated with a wetland and/or other MDEP regulated NRPA natural resources.

**E. Prohibitions**

1. The use of system cleaners that contain restricted chemical materials is deemed a discharge of industrial wastes and is prohibited.
2. Chemicals, other than normal amounts of household cleaners, must not be disposed of in the disposal field. Examples of prohibited chemicals include, but are not limited to, pesticides, oil-based paints or stains, paint remover, paint thinner, acids, gasoline, solvents, glues and adhesives, pool chemicals, paint, paint thinner, commercial grease and oil, darkroom chemicals, and medications.
3. Roof drains and foundation drains: Roof drains and foundation drains must not be connected to systems.
4. The use of septic tank cleaners and degreasers prohibited: The Department does not recognize any additive as being beneficial to the operation of a subsurface wastewater disposal system. The use of septic tank additives containing halogenated hydrocarbon compounds is prohibited.
5. Structures: No portion of a structure may be located on any part of a disposal area.

6. If a municipality has not adopted a holding tank ordinance under Section 7 and Appendix A, holding tanks for residential first-time use are not allowed within that municipality.

**F. Floor Plans**

1. General: Discharges from floor drains, may adversely affect a system because of their potential volumes and different pollutant characteristics.
2. Floor drains: Floor drains must be connected to a subsurface wastewater disposal system if:
  - (a) the disposal area is properly sized to handle the potential flow from the drains;
  - (b) there is no significant potential for discharge of industrial, hazardous, or toxic liquids or pollutants;
  - (c) the floor drain is necessary for the discharge of wash water or other wastewater which has constituents similar in volume and similar in concentration to domestic wastewater (including animal or vegetable matter, soap solutions, and diluted domestic-use cleaning solutions) or at a lower wastewater strength; and
  - (d) connection to a public sewer is not available.

Floor drains must not be connected to a subsurface wastewater disposal system if there is a significant potential for industrial, hazardous or toxic liquids or pollutants (including gasoline, oils and degreasers) to drip, be spilled or washed into the floor drains.

**G. Licensed Establishments**

1. Applicability: This Section applies to all establishments licensed by the Department utilizing subsurface wastewater disposal systems.
2. Department review required: The LPI shall not issue a permit for a new, expanded, or replacement system serving a licensed establishment without prior approval from the Department.
3. Conditions requiring review: The following changes to a licensed establishment's status require a review of the subsurface wastewater disposal system by the Department:
  - (a) The planned installation of a new, expanded, or replacement system; or
  - (b) A planned increase in the licensed establishment's capacity.
4. Review Submission: The owner of the establishment shall submit the following items to satisfy the requirements of Section 1(H)(3).
  - (a) A clear description of the past, present, and intended future use of the establishment; and;
  - (b) A description of any existing subsurface wastewater disposal systems proposed for use; and;
  - (c) A copy of the HHE-200 form for any new, expanded, or replacement systems; and
  - (d) The review fee listed in Section 3 of these Rules.



## H. Wetlands and Waterbodies

1. Intent: The filling, alteration of, or work adjacent to, wetlands and waterbodies for activities associated with the installation of subsurface wastewater disposal systems, is allowed, provided it is done in accordance with the requirements of these Rules pertaining to work adjacent to, or within, wetlands and water bodies. These Rules have been designed to meet DEP, NRPA and Shoreland Zoning, and LURC requirements, so that no additional permitting is needed for the installation of a subsurface wastewater disposal system. Work in, or adjacent to, wetlands and waterbodies not in accordance with these Rules, or for work not associated with the installation of a subsurface wastewater disposal system, may require permits from DEP, LURC and/or ACOE. All auxiliary development associated with First-Time systems (e.g. buildings, driveways, parking lots, detention areas, general lawn and clearing not part of the subsurface wastewater disposal system) shall be subject to all DEP, NRPA and Shoreland Zoning and LURC Rules. It is the professional and ethical responsibility of the Site Evaluator to notify the client that the auxiliary development outside of the subsurface waste water disposal system must conform to DEP and LURC Rules, which specifically applies to the following significant wildlife habitats:
  - (a) Inland Waterfowl Wading Bird Habitats;
  - (b) Shorebird Staging Habitat and Buffer Screening; and
  - (c) Significant Vernal Pools
2. Wetlands suspected to be present: When site evaluators suspect wetlands may be present and may affect the proposed location of a system they have designed, and they do not have the expertise to delineate wetlands, they should advise their client to either hire an expert to delineate the wetland boundary or contact the DEP, the municipal Code Enforcement Officer or LURC for guidance and/or a field determination
3. Wetlands present: If a wetland is present, the client must contact the site evaluator to re-visit the property to design a system that meets requirements of these Rules pertaining to work adjacent to, or within, wetlands and water bodies. If a system cannot be designed that meets the requirements of these Rules, the client needs to contact the Maine Department of Environmental Protection or Land Use Regulation Commission and the U.S. Army Corps of Engineers for a permit.
4. First-Time Subsurface Wastewater Disposal Systems: First-time systems for previously undeveloped lots and other lots that do not qualify for replacement system criteria installed in accordance with these Rules pertaining to work adjacent to, or within wetlands and water bodies, do not require additional permits from the DEP (NRPA) or LURC and are in accordance with Guidelines for Municipal Shoreland Zoning Ordinances. First-time systems that do not meet the minimum requirements of these Rules pertaining to work adjacent to, or within, wetlands and water bodies may need a permit from DEP, LURC and/or ACOE.
5. Replacement Subsurface Wastewater Disposal Systems: Systems designed to replace legally existing systems on previously developed lots are allowed to be installed within, or closer to, wetlands and waterbodies than specified for first-time systems, without the need for additional permits from DEP, LURC and/or ACOE, provided that there are no practical alternatives and the reductions to the standards for first-time systems are minimized to the extent practical as required by these Rules.
6. Minimum standards for work adjacent to major water bodies/courses: All ground disturbance or clearing of woody vegetation necessary for the installation of a subsurface wastewater disposal system must maintain a minimum setback of 75 feet from the normal high water mark of a major water body/course. Except for water courses outside of the shoreland zone, from the point where the water course first becomes a water course to the confluence of two water courses, as depicted as blue lines on the most recent 7.5 minute USGS topographic map, (or, if not available, the most recent 15-minute USGS topographic map) which requires a setback of 25 feet. All work must comply with these Rules pertaining to work adjacent to or within wetlands and water bodies. (See Section 11(M)).
7. Minimum standards for work adjacent to minor water bodies/courses: All ground disturbance or clearing of woody vegetation necessary for the installation of a subsurface wastewater disposal

system that occurs within 100 feet of the normal high water mark of a minor water body/course must maintain a minimum setback of 25 feet from the normal high water mark of the minor water body / course, except for minor water bodies / courses within the shoreland zone, which requires a setback of 75 feet. All work must comply with these Rules pertaining to work adjacent to or within wetlands and water bodies. (See Section 11 (M)).

8. Minimum standards for work adjacent to, or within, wetlands that are not major or minor water bodies/courses: When work is performed adjacent to, or within, wetlands that are not a Major or Minor water bodies or water courses, the following apply:
- (a) A setback of 25 feet is required for wetlands consisting of, or containing at least 20,000 square feet in total, of the following: aquatic vegetation, emergent marsh vegetation, peatlands dominated by shrubs, sedges and sphagnum moss or open water.
  - (b) No setbacks are required for clearing, filling or grading from other wetlands that are not Major or Minor water bodies/courses.
  - (c) For wetlands of special significance not included in Major or Minor water bodies / courses, no filling or alteration of the wetland is allowed without a permit from the appropriate regulatory agency.
  - (d) For all other wetlands, up to 4,300 square feet of alteration, including the subsurface wastewater disposal system and all other wetland alterations on a single property, in total, may be allowed without a permit (property owners should consult with the appropriate regulatory agency). For wetland alterations of more than 4,300 square feet, permits are required from the appropriate regulatory agency.
9. Steep slopes: For sites with sustained slopes steeper than 3 feet horizontal to 1 foot vertical (33 percent) within 25 feet from a protected natural resource. If a sustained slope of 33 percent or greater exists less than 25 feet from a protected natural resource, it does not count toward the 25-foot setback. Sustained slopes greater than 3:1 may be part of the 75-foot setback, but cannot be counted as part of the 25-foot setback.

#### I. **Forms**

All subsurface wastewater disposal system permit applications (HHE-200 Forms) and supporting forms must be in a format and contain content prescribed by the Department. All applications and forms including, but not limited to, HHE-200 Forms must be the current revision as specified by the Department, at the time of completion. Alternations to the format and content of the Department's forms are not allowed, except that additional pages may be added as necessary for any individual design.