

Maine Center for Disease Control and Prevention

An Office of the Department of Health and Human Services

Paul R. LePage, Governor

Mary C. Mayhew, Commissioner

Maine Department of Health and Human Services,
Center for Disease Control and Prevention
Division of Environmental Health
Drinking Water Program, Subsurface Wastewater Unit

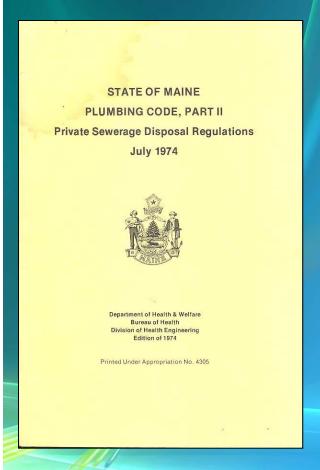
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Purpose of the Rules Revisions

The Subsurface Wastewater Disposal Rules have been revised numerous times since they were first adopted in their modern form, in July of 1974.

These revisions have been made to accommodate advances in technology, increased awareness of social and political concerns, and to accommodate various legal requirements, among other criteria.

As the Rules have been revised over the years, they have become much more complex. The Rules had reached a point in the 2009 version that there were several errors and omissions, internal conflicts and contradictory requirements, and the document itself was often confusing to professionals and laypeople alike.



Purpose of the Rules Revisions

The Division of Environmental Health, Drinking Water Program, Subsurface Wastewater Unit determined that the Rules needed another revision. Unlike most of the revisions over the years, this one would entail a significant rewriting of the Rules.

The Division had several goals for these revisions:

- to correct errors and inaccuracies,
- to create a more user-friendly and readable document, and
- to reflect the Department's statutory responsibilities more plainly.

At the same time, we worked to develop rules which would be equitable to the onsite sewage disposal industry, but would not compromise the protection of public health, safety and welfare.

Process of the Rules Revisions

After much research the Division staff prepared a first draft of the revised Rules in mid-December of 2009. The draft's format was based in part upon the format of the National Onsite Wastewater Recycling Association's model code. The content, however, remained specific to Maine, and continued to incorporate most of the prior Rules' content and requirements.

At about the same time, Division staff met with representatives from the Maine Association of Site Evaluators. This meeting was held to give MASE an opportunity to participate in the early planning stages of the revision process.

In accord with Department of Health and Human Services rule making practice, the Division invited 20 professional organizations, utilities, and government agencies to participate as stakeholder groups. Of the 20 groups invited, 16 accepted and participated.

Process of the Rules Revisions

The following groups participated as stakeholders to the draft Rules:

- Aroostook Code Enforcement Organization
- Congress of Lake Associations
- Maine Association of Professional Soil Scientists
- Maine Association of Site Evaluators
- Maine Building Officials and Inspectors Association
- Maine Department of Agriculture/County Soil & Water Conservation Commissions
- Maine Department of Environmental Protection
- Maine Ground Water Association
- Maine Land Use Regulation Commission
- Maine Public Health Association
- Maine Rural Water Association
- Maine State Planning Office
- Maine Water Utilities Association
- Mid-coast Code Enforcement Officers Association
- Portland Water District

Process of the Rules Revisions

Three stakeholder groups meetings were held, one each in February, March, and April of 2010. During each meeting, the stakeholder groups' representatives and the Division staff discussed various aspects of the proposed revisions. After each meeting, the Division staff prepared an updated revision based upon input and comments at the meeting. Copies were made available to all the representatives. Subsequently, additional comments on the revised drafts were incorporated into the proposal.

Once the draft was complete in the judgment of the Division staff, it was forwarded to the Office of the Attorney General for review. Division staff met twice with our Assistant Attorney General to discuss changes and amendments to the draft. When the draft was deemed legally sound, a public hearing was scheduled and announced.

Process of the Rules Revisions

A public hearing on the proposed revisions to the Rules was held in Augusta on December 1, 2010. As required under the administrative procedures act, the record remained open until December 13, 2010 for submission of written comments.

A total of 18 individuals provided either oral, written, or both oral and written comments on the proposed revisions. The proposal was modified, corrected, and amended as necessary in response to the comments.

The Rules were finalized and became effective on January 18, 2011. Concurrent notices were posted on our web site and e-mailed to everyone for whom we had a current e-mail address.

Organization of the Revised Rules

The revised Rules have 13 chapters, two appendices, and an index:

- > SECTION 1 INTRODUCTION
- ➤ SECTION 2 ADMINISTRATION
- > SECTION 3 DISPOSAL SYSTEM PERMITS AND FEES
- > SECTION 4 DESIGN CRITERIA
- > SECTION 5 APPLICATION FOR DISPOSAL SYSTEM PERMIT
- > SECTION 6 APPROVED MATERIALS AND EQUIPMENT
- > SECTION 7 FIRST-TIME SYSTEMS
- > SECTION 8 REPLACEMENT SYSTEMS
- > SECTION 9 EXPANDED SYSTEMS
- > SECTION 10 MISCELLANEOUS SYSTEMS
- > SECTION 11 QUALITY ASSURANCE AND QUALITY CONTROL
- > SECTION 12 APPEALS
- > SECTION 13 DEFINITIONS
- > APPENDIX A: Model Holding Tank Ordinance
- > APPENDIX B: Notice of Permit
- > INDEX

Organization of the Revised Rules

SECTION 1 INTRODUCTION

This Section establishes the overall responsibilities associated with the Rules, including:

- The duties of the LPIs,
- The design distinction between SEs and PEs,
- General design requirements for subsurface wastewater disposal systems,
- The exemption provision of the MDEP regulations,
- Prohibited activities,
- Floor drain regulations,
- Review requirements for facilities licensed by DHHS,
- > Standards for designing and installing subsurface wastewater disposal systems adjacent to wetlands an waterbodies.
- > Forms

Organization of the Revised Rules

SECTION 2 ADMINISTRATION

- General Administrative Requirements,
- Disposal System Permit Requirements,
- Applicability of the Rules,
- Validity of the Rules,
- Existing Systems,
- Repairs and Maintenance,
- Approved Materials and Equipment,
- Advisory Opinions,
- Department Responsibilities,
- Municipal Responsibilities, and
- > LPI Responsibilities

Organization of the Revised Rules

SECTION 3 DISPOSAL SYSTEM PERMITS AND FEES

- > Permit Required,
- Subsurface Disposal System Permits,
- > Fees. New Content
 - ➤ Nonengineered system fee raised to \$250, nonengineered disposal area and nonengineered tank only fees, raised to \$150 each.
- Municipal Records,
- Local Ordinance,
- Approved System Usage, and
- Unorganized Areas

Organization of the Revised Rules

SECTION 4 DESIGN CRITERIA

- Site Evaluation Requirements,
- Soil Profile Descriptions,
- Backfill Envelope for Very Permeable Soils,
- Design Flows for Dwelling Units,
- Design Flows for Other Facilities,
 - ➤ Water Use Data,
 - > Adjustments for Effluent Quality,
- Primitive Disposal System Requirements,
- Limited System Requirements,

Organization of the Revised Rules

SECTION 4 DESIGN CRITERIA, CONTINUED

- On-site Monitoring of Seasonal High Groundwater Table,
- Composting Toilets,
- Pit Privies,
- Grey Waste Water Disposal Systems, and
- Disposal Fields.

New Content

Of note, a design will now be good indefinitely unless a subsequent rule change impacts the design. There is a one year "grandfathering" period for designs that were given to clients with the understanding that they were good for two years before a permit was required. The only stipulation is that the LPI must field check conditions to make sure the design is still valid, ie: a well hasn't been drilled or a structure erected that changes setback requirements.

Organization of the Revised Rules

SECTION 5 APPLICATION FOR DISPOSAL SYSTEM PERMIT

- > HHE-200 Form, Page 1
- > HHE-200 Form, Page 2,
- > HHE-200 Form, Page 3, and
- ➤ Location, Depth, and Minimum Number of Observation Holes

Organization of the Revised Rules

SECTION 6 APPROVED MATERIALS AND EQUIPMENT

- Treatment tanks, Dosing Tanks, and Grease Interceptors,
- Septic Tank Required,
- Septic Tank Construction Materials
- Septic Tank Dimensions
- Inlet & Outlet Connections
- Access Openings for all Septic Tanks
- Liquid Capacity of Septic Tanks

Organization of the Revised Rules

SECTION 6 APPROVED MATERIALS AND EQUIPMENT, CONTINUED

- Distribution Boxes
- Drop Boxes
- Dosing Tanks for Engineered Systems
- Specific Requirements for Dosing with Siphons
- Specific Requirements for Dosing with Pumps
- Venting

Organization of the Revised Rules

SECTION 6 APPROVED MATERIALS AND EQUIPMENT, CONTINUED

- Manufactured Disposal Areas
 - ➤ Concrete Disposal Devices
 - ➤ Plastic Disposal Devices
 - Gravel-Less Fabric Wrapped Disposal Tubing
 - ➤ Geotextile Sand Filters
 - Synthetic Aggregate Cylinders
 - ➤ Pre-Treatment Sand Filters

Organization of the Revised Rules

SECTION 6 APPROVED MATERIALS AND EQUIPMENT, CONTINUED

- Septic Tank Filters
- Mechanical Remediation
- Post-Septic Tank Effluent Filters
- Under-Drained Peat Filters
- Substitution of Proprietary Devices
- Drip Irrigation Disposal
- New Product Registration

Organization of the Revised Rules

SECTION 7 FIRST-TIME SYSTEMS

- Setbacks & Siting for First-Time Disposal Systems
- First-Time System Variance Requests
 - ➤ Municipal Review by LPI
 - ➤ Criteria Used for Approval
- Holding Tanks
- Work Adjacent to or within Wetlands & Water Bodies New Content

Organization of the Revised Rules

SECTION 8 REPLACEMENT SYSTEMS

- General
- Setbacks And Siting for Replacement Disposal Systems
- ➤ Replacement System Variance Request
 - > Extent of LPI's Authority
 - ➤ Disposition of a Variance by the Department
 - > Time Limit

Organization of the Revised Rules

SECTION 8 REPLACEMENT SYSTEMS CONTINUED

- Owner/Applicant's Understanding
- Holding Tanks
- > Application Procedure
- > LPI Approval
- Work Adjacent to or Within Wetlands & Water Bodies New Content

Organization of the Revised Rules

SECTION 9 EXPANDED SYSTEMS New Content

Alterations made to existing disposal systems, excluding those required for an expansion or change in use, may be approved by the LPI, provided that all requirements of Section 2(F) for repair and maintenance are met. This section is comprised of three parts:

- Expansion of Existing Disposal Systems
- Installation of Expanded Systems
- Design Criteria For Expanded Systems

Organization of the Revised Rules

SECTION 9 EXPANDED SYSTEMS New Content

"Expansion" means the enlargement or change in use of a structure using an existing subsurface waste water disposal system that brings the total structure into a classification that requires larger subsurface waste water disposal system components under these Rules, as follows:

- ➤ The initial expansion of a single family home by the addition of one or more bedrooms, or the introduction of mechanically pressurized water to a structure formerly served by hand pumped or hand carried water.
- ➤ The initial expansion of a non-residential structure which results in an increase in design flow of 10 percent or more.
- Expansions of a structure, such as a porch, living room or sun room, which do not increase the design flow are exempt from the requirements of this Section.

Organization of the Revised Rules

SECTION 9 EXPANDED SYSTEMS New Content

In the following instances, installation of the expanded system design is required.

- Systems proposed to be expanded within the shoreland area of major waterbodies/courses must be installed prior to the expansion of the subject structure.
- > Systems with no valid permitted HHE-200 Form, proposed to be expanded, must be installed prior to the expansion of the subject structure.
- > Systems proposed to be expanded by two or more bedrooms or 25 percent or more of the total design flow must be installed prior to the expansion of the structure.

Organization of the Revised Rules

SECTION 10 MISCELLANEOUS SYSTEMS

- Engineered Systems
 - > Responsibilities
 - > Requirements for Engineered Disposal System Designs
- ➤ Multiple User Systems
- Experimental Systems
- Peat Systems

Organization of the Revised Rules

SECTION 11 QUALITY ASSURANCE AND QUALITY CONTROL

- > Installation
 - ➤ Site Preparation
 - Excavation
 - Construction
 - ➤ Backfill Placement for Disposal Areas Including Fill Extensions
 - Disposal Fields
 - Final Grading

Organization of the Revised Rules

SECTION 11 QUALITY ASSURANCE AND QUALITY CONTROL CONT'D

- Curtain Drains
- > Inspections
- Certificate of Approval
- > Workmanship
- Enforcement and Violations
- Work Adjacent to Wetlands and Waterbodies New Content

Organization of the Revised Rules

SECTION 12 APPEALS

- > General
 - Procedure for Filing an Appeal
 - > Procedure for Hearing
 - Civil Appeals

Notably, this section no longer has a provision for an informal conference, which conforms to DHHS standard practice. The Division staff still have the ability to meet with any party at any time to discuss issues related to Division decisions.

Organization of the Revised Rules

SECTION 13 DEFINITIONS

Unless otherwise expressly stated, the words and terms used in the Subsurface Wastewater Disposal Rules, CMR 241 have the meanings set forth in Section 13.

Words used in the present tense include the future tense; words in the masculine gender include the feminine and neuter; the singular number includes the plural, and the plural includes the singular.

Terms not defined in the Subsurface Wastewater Disposal Rules, CMR 241 shall have ascribed to them their ordinarily accepted meanings, such as the context may imply.

Organization of the Revised Rules

APPENDIX A: Model Holding Tank Ordinance

This is unchanged except for its location in the Rules, and consists of a two page document, which must be modified to reflect the specific municipality within which it is adopted, and copied to the Department.

- ➤ Must be adopted to allow first time residential use of a holding tank in lieu of an onsite sewage disposal system.
- ➤ Requires municipality to maintain holding tanks approved under the ordinance.
- ➤ Allows municipality to fix, alter, charge, and collect rates, assessments, and other charges in the area served by its facilities at reasonable and uniform rates.

Organization of the Revised Rules

APPENDIX B: Notice of Permit

New Content

Section 3.B.8: A subsurface disposal system permit notice, on a form specified by the Department, or one containing the same information, shall be posted conspicuously in a place on the building or other location on the subject property that is visible from the street. The permit notice shall remain posted until the construction or permitted activity is completed and final inspection has occurred.

APPENDIX B: NOTICE OF PERMIT NOTICE OF PERMIT to install a subsurface wastewater sewage disposal system was issued to: Applicant's name and mailing address Property street and municipality municipal office or Town/City and may be viewed during normal working hours or LPI Signature Appendix A 10-144 CMR 241 Page 113

- ■Coordination of setbacks with Department of Environmental Protection and Land Use Regulation Commission for so-called "one stop shopping" permitting of subsurface wastewater disposal systems and the protection of public health.
- ■Revised criteria are adopted for replacement systems, expanded systems, and system upgrades versus systems that are malfunctioning.
- ■Forms are no longer a part of the Rules. Rather, they are now part of the Division's Guidance Manual, a companion publication to the Rules.
- ■Section 2.E, Relocation of non-malfunctioning system: The relocation of a non-malfunctioning system outside the Shoreland Zone with a system based on the current system components must meet replacement system criteria. The relocation of a non-malfunctioning system inside the Shoreland Zone with a system based on the current system components must meet first time system criteria.

- ■2.J, Municipal Responsibilities. This section clarifies the statutory responsibility of municipalities to enforce the Rules, and sets for the general process for doing so.
- ■Section 4.H.2 provides criteria for adjusting design flows based upon effluent quality for restaurants and similar uses. This was formerly a footnote for Table 501.2, "Design flows for other facilities".
- Table 4C, "Design flows for other facilities" has been updated with additional facilities and revised design flows based upon field data.
- Table 400.1, Key to Drainage Classes was replaced by "KEY FOR DETERMING DEPTH TO THE SEASONAL GROUNDWATER TABLE" for use by all disciplines that practice site evaluation, not just soil scientists.

- ■Section 4 tables that do not include design classes and are based on limiting factors, have replaced former Chapter 6 tables.
- ■Section 4.P, septic tank requirements and revised design flows for greywater systems are adopted.
- ■Section 5, now includes specific requirements for each page of the HHE-200 Form. Elevation of the septic tank has been eliminated.
- Table 6A, liquid capacity of septic tanks for dwelling units specifically requires a minimum of 750 gallons per dwelling unit.
- ■Section 8.D.I, any structure which utilizes a permanent holding tank permitted after July 1, 1974, as a first-time system, is required to meet first-time criteria for alternate means of subsurface wastewater disposal should the holding tank be discontinued in favor of a subsurface system.

- ■Section 9, design criteria for expanded systems are now explicitly based on meeting first time requirements as closely as possible.
- ■Section 12, the appeal process has been changed to require more local involvement and to conform to standard DHHS practice.
- Appendix B, a notice must now be posted on the property when a permit is issued to install a septic system.

Notable Changes in the Revised Rules: wetlands and waterbodies

Work adjacent to wetlands and waterbodies associated with the installation of subsurface wastewater disposal systems is allowed, provided it is done in accordance with the requirements of the Rules.

The Rules have been designed to meet DEP, NRPA, 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.

Notable Changes in the Revised Rules: wetlands and waterbodies

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 the 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.

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/or the U.S. Army Corps of Engineers for a permit.

Notable Changes in the Revised Rules: wetlands and waterbodies

First-time systems for previously undeveloped lots and other lots that do not qualify for replacement system criteria installed in accordance with the 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.

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.

Notable Changes in the Revised Rules: wetlands and waterbodies

All ground disturbance or clearing of woody vegetation necessary for the installation of a subsurface wastewater disposal system adjacent to major water bodies/courses must maintain a minimum setback of 75 feet from the normal high water mark of a major water body/course. Tributary water courses outside of the shoreland zone, 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) require a setback of 25 feet.

All ground disturbance or clearing of woody vegetation necessary for the installation of a subsurface wastewater disposal system adjacent to minor water bodies/courses 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.

Notable Changes in the Revised Rules: wetlands and waterbodies

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 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.
- ➤ No setbacks are required for clearing, filling or grading from other wetlands that are not Major or Minor water bodies/courses.
- 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.

Notable Changes in the Revised Rules: wetlands and waterbodies

Minimum standards for work adjacent to, or within, wetlands that are not major or minor water bodies/courses, continued:

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

THE END

Wendy Austin 287-5672

wendy.austin@maine.gov

David Braley 441-5324

david.braley@maine.gov

Mark Hyland 592-2084

mark.hyland@maine.gov

James Jacobsen 287-5695

james.jacobsen@maine.gov

Brent Lawson 592-7376

brent.lawson@maine.gov

www.mainepublichealth.gov/septic-systems

