

Maine Subsurface Wastewater Rules: “Certified” Inspection Guidelines

SECTION 15. INDEPENDENT THIRD PARTY INSPECTIONS OF DISPOSAL SYSTEMS

A. SCOPE: This section governs the Department’s minimum standards for the inspection of subsurface wastewater disposal systems in Maine, as required by 22 MRS § 42 (3-B). This section applies to independent third party subsurface waste water system inspectors certified by the Department.

B. REQUIRED SYSTEM INSPECTIONS: Subsurface wastewater disposal system inspections are required by Maine statute, 30-A MRS § 4216, for properties that include a subsurface wastewater disposal system located in the shoreland zone, when ownership of the property is transferred. This law requires that for such property transfers, an inspector certified by the Department must complete the inspection.

C. SYSTEM INSPECTIONS NOT REQUIRED: For properties not located in the shoreland zone, no disposal system inspection is required by Maine statute. Inspections of disposal systems not located in the shoreland zone initiated by a potential purchaser or for other reasons do not require that a person certified by the Department complete the inspection. Utilizing an inspector certified by the Department and the standards and procedures recommended in this rule should be beneficial to both the buyer and seller of properties outside the shoreland zone.

D. DISPOSAL SYSTEM INSPECTION CONCEPTS: The inspection of a subsurface wastewater disposal system be an objective evaluation of the components of a system leading to conclusions regarding the system’s current condition. The inspection is not a guarantee of system performance or functionality at any time in the future. The results of disposal system inspections are not endorsed or certified by the Department or the State of Maine.

SECTION 16. INDEPENDENT THIRD PARTY INSPECTOR CERTIFICATION

A. SCOPE: This section provides the minimum requirements for the Department to certify inspectors to perform disposal system inspections when a subsurface wastewater disposal system is located in the coastal Shoreland zone, as required in 30-A MRS § 4216.

B. DISPOSAL SYSTEM INSPECTIONS IN THE SHORELAND ZONE: Inspections of subsurface wastewater disposal systems located in the coastal Shoreland zone are required to comply with 30-A MRS §4216 and must be performed by a person certified by the Department.

C. CERTIFICATION REQUIREMENTS: Commencing on the effective date of this rule, disposal system inspectors must be certified by a nationally recognized organization approved by the Department that trains and certifies individuals to perform disposal system inspections. The Department will maintain a list of approved national certifications and update this list, as

additional organizations are proposed to the Department for review and approval. Commencing on July 1, 2023, certification also requires that applicants submit a completed written examination consisting of 25 questions derived from this rule of which 20 must be answered correctly. The examination will be available on the Department's website or by request, is an open book exam, and is intended to be completed at home to ensure that the applicant has reviewed and is familiar with the standards for disposal system design, permitting, installation and proper functioning. This examination is required of all applicants for certification, who are not licensed by the Department as site evaluators.

D. PRIOR CERTIFICATION: All disposal system inspector certifications issued by the Department prior to July 1, 2022 will expire on June 30, 2023. Holders of certifications issued prior to July 1, 2023 are required to obtain a Department approved national certification and pass the written examination prior to June 30, 2023, in order to continue certification.

E. SITE EVALUATORS: Individuals licensed by the Department as site evaluators may be certified upon request as disposal system inspectors. No additional certifications or examinations are required.

F. STATE AND NATIONAL CERTIFICATION: The Department may approve any state or national certification that it determines as providing training and knowledge regarding the inspection of subsurface wastewater disposal systems that meet or exceed the standards and practices found in this rule. For additional information please see, <https://www.maine.gov/dhhs/mecdc/environmentalhealth/dwp/index.shtml>

G. OPEN BOOK EXAMINATION: Applicants must complete the open book examination posted on the Department's website and submit results with their application for certification. Answering 20 out of 25 (80%) questions correctly will be considered a passing grade on the examination. All questions in the exam will be derived directly from this rule. Applicants may utilize this rule to determine correct answers to exam questions.

H. APPLICATIONS FOR CERTIFICATION: Applicants must submit a copy of their current and valid approved national certification, a completed open book examination, and a completed application for certification to the Department, to receive certification. Applicants with a current and valid approved national certification, a completed open book exam with a score of at least 80%, and a completed application form will be certified as disposal system inspectors by the Department. 10-144 CMR Ch. 241 146

I. CERTIFICATION RENEWAL: Department certification as a disposal system inspector is valid for up to three years. Each holder of certification as a disposal system inspector must earn a minimum of 12 Department approved professional development hours within each certification period, in order to obtain certification renewal. Applications for renewal must be made on a form provided by the Department and must include evidence that the required national inspector certification remains valid and in effect.

J. RECIPROCITY: The Department may issue a certification after successful completion of the open book exam to any person who holds a comparable registration, certification or license in any state, territory or possession of the United States or any country, if the Department determines that the requirements for registration, certification or licensure of wastewater disposal system inspectors under which the person's registration, certification or license was issued do not conflict with this rule. K. FEES: There are no fees associated with Department certification as a disposal system inspector.

SECTION 17. STANDARDS AND PROCEDURES FOR INDEPENDENT THIRD PARTY INSPECTION OF SUBSURFACE WASTEWATER DISPOSAL SYSTEMS

A. GENERAL: The following standards and procedures are the minimum necessary for subsurface wastewater disposal system inspections, including those located in the shoreland zone.

B. SYSTEM DOCUMENTATION: The inspector must obtain all relevant documentation for the disposal system to be inspected, which include the following: 1. The HHE-200 form. 2. Amendments to the design, by the site evaluator or LPI if applicable; and 3. Any variance forms approved by the municipality during the system's review and approval. These forms may be obtained at no charge on the Department's website or from the municipality in which the system is located. Documentation must include the type and location of system components, the design flow of the system and the use the system was approved. The system components identified during an inspection must be consistent with the design and location description on the HHE-200 form, or the inspection may be delayed. The structure connected to the system must align with the description within the HHE-200 form. For example, a structure with five bedrooms should not be serviced by a subsurface wastewater disposal system whose permitted design is for a three-bedroom home. A discrepancy such as this one must be noted prominently on the inspection report. All requirements for the design and installation of subsurface wastewater disposal systems are governed by the rules in effect at the time of permit issuance. Prior versions of this rule are maintained by the Department and are available on the Department's website.

C. DRINKING WATER WELL SETBACKS: The setbacks from the disposal system to all drinking water wells located on the property being inspected must be measured and noted on the inspection report. Well setbacks are governed by the rules in effect at the time of disposal system permit issuance and may be installed with reduced setbacks to disposal system components if located and constructed in compliance with rules promulgated by the Maine Water Well Commission. Many drinking water wells predate regulation and are legally existing wells. Well setbacks must be measured from the disposal field, not the disposal area, which includes the shoulders and fill extensions. Illegal setback distances or setback distances not meeting the setback requirement may require further investigation by the inspector

D. COMPONENTS TO INSPECT: At a minimum, the inspection must include locating and evaluating the internal plumbing associated with wastewater disposal, septic and/or treatment

tank(s), filters, distribution system, absorption area and, when applicable, any pumps, lift stations, dosing equipment, advanced treatment or advanced tertiary treatment devices.

E. COMPONENT INSPECTION CRITERIA: The following are the minimum standards and procedures for inspecting the disposal system components listed above in Section 5(D):

1. Internal Wastewater Plumbing: The internal wastewater plumbing must be identified and inspected to verify that all wastewater generated in the structure is routed to an approved subsurface wastewater disposal system. Washing machine outflow and water treatment system backwash water must be disposed of in either the disposal system or a separate grey water disposal system designed by a site evaluator and approved by the municipality, except in cases where Section 11(E) applies. An HHE-200 form with appropriate approvals must be available for any grey water disposal system. Unapproved grey water disposal is a sign that the structure's disposal system has experienced problems in the past. The use of the structure must also be noted and compared with the use described on the HEE-200 design. For example, the number of bedrooms in the structure or number of seats in a restaurant will be compared to the maximum allowed use described in the design. Any discrepancies must be noted on the inspection report. A valid permit issued by the LPI is evidence that the disposal system was designed and installed in accordance with the rule in effect at the time of permit issuance.

2. Septic Tank: The septic tank must be identified and access ports located, in order to perform the inspection be uncovered. The person requesting the inspection is responsible for ensuring access to inspection ports greater than 24 inches below grade, or when conditions make hand digging unreasonable. The condition of the tank must be noted, with any cracks, leaks or other defects noted on the inspection report. Any leaks that allow water to enter the tank threaten the proper functioning of the disposal system. The effluent level in the tank must be below the bottom of the inlet and equal to the bottom of the outlet. Inlet and outlet pipes must be inspected and any broken or collapsed sections noted. Effluent above either the inlet or outlet of the tank indicates either a blockage in the distribution system exists, the tank is not level or that the drain field is not functioning properly. These conditions must be noted in the inspection report. The tank inspection must also include an evaluation of any filters, baffles, risers or aeration equipment. Clogged filters, missing or defective baffles and aeration equipment that is not functioning properly must be noted in the inspection report. Some disposal systems will include multiple tanks. Each tank must be inspected and described on the inspection report.

3. Distribution System: The distribution system includes all piping from the structure to the absorption field and usually includes a distribution box (D-Box). The person requesting the inspection is responsible for ensuring access to D-Boxes greater than 24 inches below grade, or when conditions make hand digging unreasonable. The inspector must verify that the inlet pipe entering the septic tank is higher than the outlet pipe(s), which leads to the absorption field. Inlet and outlet pipes must be inspected and any broken or collapsed sections noted. The D-Box must be located and exposed. The D-Box must be level and free of solids. Any defects or the presence of solids in the D-Box must be noted on the inspection report. If the system is

pressurized, any pumps or grinders must be located and inspected. Any defects or issues must be noted on the inspection report.

4. Absorption Area: There are many different types of absorption areas, including stone beds and trenches, proprietary devices and concrete chambers. The type of absorption field must be determined by reviewing the HEE-200 form. The location of the absorption area must be confirmed to match the description in the design. The person requesting the inspection is responsible for ensuring access to absorption areas greater than 24 inches below grade or when conditions make hand digging unreasonable. The effluent level in the disposal field must be determined in several locations to ensure proper distribution. If the system employs parallel distribution, effluent must be at an equal depth and evenly distributed throughout the entire bed. If not, the bed may not have been installed properly, sections of the bed may be clogged, a pipe may be crushed, clogged or broken, or the D-Box may not be level. In systems based upon serial distribution, the extent of effluent progression through any given serial segment should be noted. Serial distribution systems are designed to utilize the first serial segment until it is exhausted, then progress to the next segment. Unutilized segments indicate remaining life in the disposal area, a full segment up gradient of additional segments is not an indicator of a malfunction. Any issues or deficiencies determined in the absorption area must be noted on the inspection report.

5. Pumps, Lift Stations, Dosing Equipment and Alarms: When utilized pumps, lift stations, dosing equipment risers, and alarms must be located and inspected. Any deficiencies or defects must be noted on the inspection report.

6. Advanced and Advanced Tertiary Treatment Systems: These systems reduce effluent strength before it is discharged to the disposal system. Advanced treatment devices lower effluent strength, which allows for smaller absorption areas and are used in locations where lot configurations limit the area available for the absorption area. Advanced tertiary treatment devices treat effluent sufficiently to require no additional treatment in either a septic tank or an absorption area. These devices are generally utilized on sites with conditions that preclude the use of conventional disposal systems and may not include a septic tank but always require a disposal field. If one of these devices is included in a system being inspected, then the inspector must review all maintenance and service records for the system and contact the service provider, to ensure that the system has been properly serviced and maintained. These devices usually require a maintenance contract as part of their approval. The contract must be reviewed, and the annual maintenance costs included in the inspection report. Discrepancies regarding required maintenance must be noted on the inspection report.

7. Limitations: There are many different types of subsurface wastewater disposal systems, proprietary devices and advanced treatment systems and devices utilized in modern wastewater disposal systems. An inspector should limit their inspection to the types of systems and components they are familiar with and can accurately evaluate.

8. Access to Disposal System Components: Inspectors are not required to uncover any component located more than 24 inches below grade, or when conditions make hand digging unreasonable. Examples of unreasonable conditions are frozen ground or components located under other structures such as patios, walkways and decks. The person requesting the inspection must have components uncovered that are either more than 24 inches below grade or when conditions make hand digging unreasonable. An inspection that does not include an evaluation of all the components of the disposal system is not complete and does not satisfy the requirements of this rule.

9. Inspection Camera: All inspections of subsurface wastewater disposal systems in the shoreland zone must include a camera that is suitable for inspecting disposal system components.

F. Inspection Report for Disposal Systems Located in the Shoreland Zone: A summary report of any inspection of disposal systems located in the shoreland zone must be completed by the certified inspector on a form provided by the Department, in accordance with Maine law (30-A MRS § 4216). Copies of the summary report must be submitted upon completion of the inspection to the person requesting the inspection, for the purpose of demonstrating compliance with 30-A MRS § 4216 during the transfer of that property. The inspector must also submit a copy of the summary report to the appropriate municipality within 60 days of inspection. Disposal systems located in the shoreland zone found to be malfunctioning as defined in this rule must be reported to the Department's State site evaluator and the Local Plumbing Inspector within 72 hours of the completion of the inspection.

G. Inspection Report for Disposal Systems Located Outside the Shoreland Zone: A summary report for disposal system inspections not located in the shoreland zone must be completed by the inspector and provided to the person requesting the inspection on a form provided by the Department. The summary report must be submitted to the appropriate municipality within 60 days, as well.