

Subsurface Wastewater Disposal System Certified System Inspectors



*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

Winter/Spring, 2013

Division of Environmental Health
Subsurface Wastewater Team

Subsurface Wastewater Disposal System Certified System Inspectors

Agenda

- Background
- Certification Process
- Inspection Process

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Background

- Why are system inspections by certified individuals required?
- What benefits do system inspections provide, and to whom?

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Under Maine law, 30-A MRS §4216, any person transferring property within a coastal shoreland area on which a subsurface wastewater disposal system is installed shall have the system inspected prior to purchase, by a person certified by the Department of Health and Human Services, except that if it is impossible due to weather conditions to perform an inspection of the system prior to the purchase, the inspection must be performed within nine months after transfer of the property.

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If the inspection finds that the system is malfunctioning, the system must be repaired or replaced within one year after transfer of the property. A subsurface wastewater disposal system that has been installed pursuant to the Subsurface Wastewater Disposal Rules within three years prior to the closing date of the transfer of property is not subject to these inspection requirements.

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If the seller of the shoreland property has a written inspection report for an inspection of the subsurface waste water disposal system that was performed within three years prior to the date of the transfer of property by a person certified by the Department of Health and Human Services, then the seller shall provide the inspection results to the purchaser, and the purchaser is not required to have the system inspected.

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The inspection is not required if the purchaser certifies to the local plumbing inspector that the purchaser will replace the subsurface waste water disposal system within one year of the transfer of property.

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The inspection process provides the buyer and seller of a property with information regarding the age, status, and general condition of the septic system, and identifies problems such as malfunctions and surface discharges that must be corrected. The inspection also provides assurances to the Federal government that the Maine has adequate administrative controls relative to subsurface systems.

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The septic system inspection is not:

- A review of the accuracy of a site evaluator's work, especially soil suitability.
- A review of the property's overall suitability for a particular use.
- A review of whether a system is better or worse than a potential alternate design, such as a bed versus chambers.

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Certification Process

- How does one become certified?
- How does one remain certified?

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One may become a Certified System Inspector (Inspector) by attending a training class held by the Division.

Once certified, the Inspector will be given a numbered Certificate by the Division which will remain in effect for 5 years.

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During this 5 year certification period the Inspector must attend at least 6 hours of related training, and provide evidence of attendance to the Division if the training was held by a third party.

Such training will renew the Certificate for 5 years, beginning at the end of the current period.

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Related training includes but is not limited to that provided by the Division; training provided by another State agency which may reasonably be considered related to the Subsurface Wastewater Disposal Rules, septic system installation, or inspection; or other training with case-by-case prior approval from the Division. This process will repeat for each 5 year certification period.

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The Division will maintain an online list of certified system inspectors on our web site.

Inclusion in this list is opt-in only. That is, if you want to be on the list you must specifically notify the Division.

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Inspection Process

- What is involved in a system inspection?
- How does one prepare a report for the client?

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In very broad terms, an inspection consists of:

- Collecting background data from the client, municipality, and state as appropriate.
- Visiting the site and examining the system.
- Completing a report and submitting it to the client.

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The current use of the system must be determined.

Is the system used by a retired couple, or by a family with four children? Is there a separate system for the laundry? Is there a water treatment device backwashing into the system? Was the system designed for a dwelling but now serving a commercial use? And so on.

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Was the system installed after July of 1974,
when the Rules were adopted?

- If so, is there an HHE-200 Form on file with the municipality?
- If not on file with the municipality, is there one on file with the Division? This may require a request for a record search.

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If a design is available, the system as installed must be compared to the design. Any deviations from the design must be noted, such as setbacks. For example:

As Designed

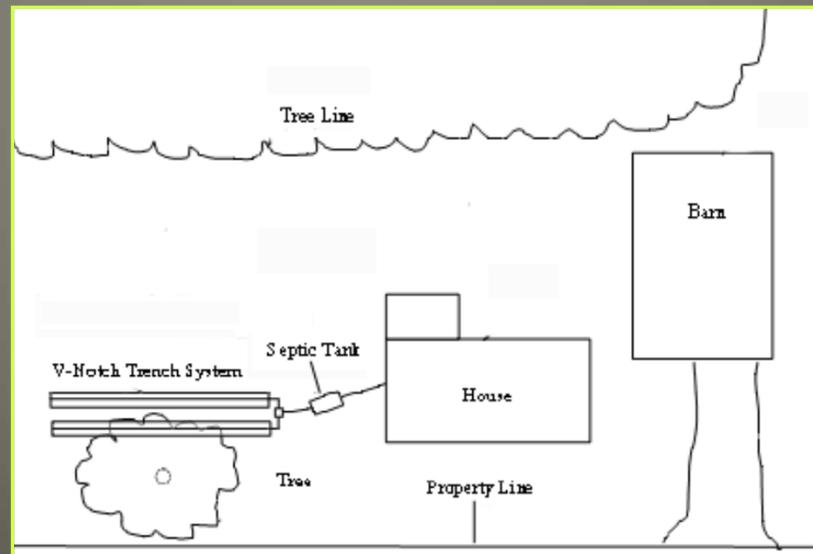
Bed to well: 100 feet

As Installed

Bed to well: 75 feet

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If a design is not available, the system as installed must be documented. The locations of the septic tank(s) and disposal area must be determined and a site plan created in lieu of an HHE-200 Form.

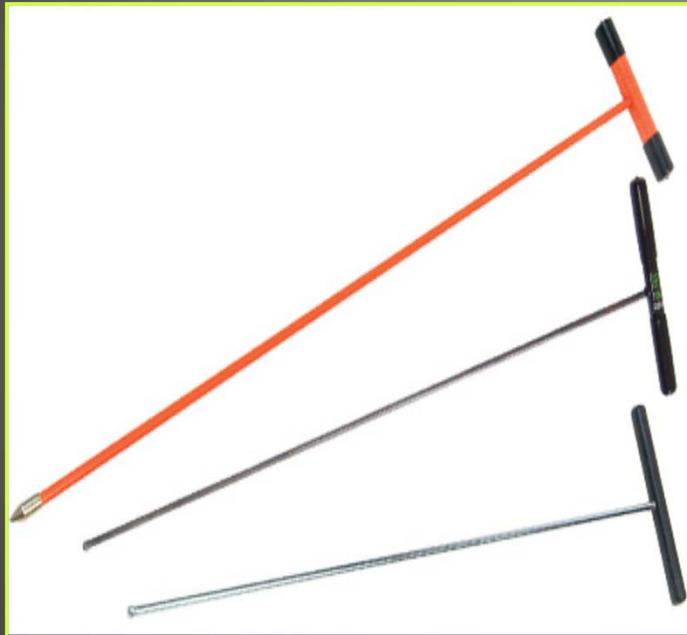


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Recommended equipment



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Recommended equipment

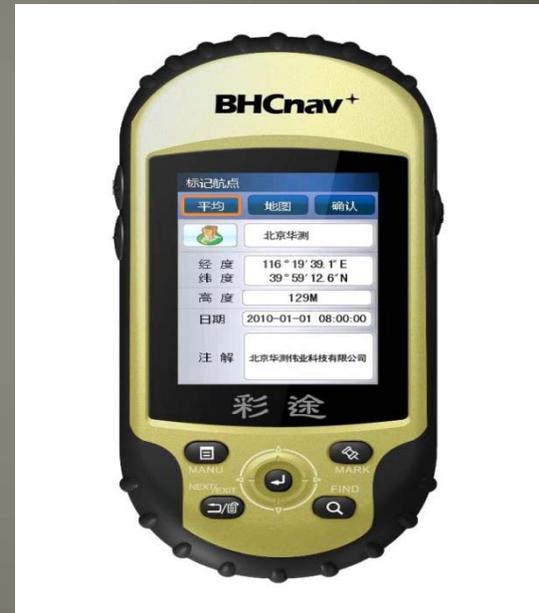


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Optional equipment



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The physical inspection requires that the septic tank be pumped. Examine the septic tank for cracks, missing bungs, and condition of inlet and outlet baffles.



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If there is a distribution box indicated, uncover and inspect it. Excess solids within the distribution box is evidence of a problem with septic tank solids carry over.



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If the system includes a lift pump, inspect the lift station for condition, and the outward pump and switch condition. Wiring may be noted, but should not be speculated upon by other than a licensed electrician.



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To inspect the disposal area, locate it on the site based upon the HHE-200 Form (if available) or investigation. Excavate the fill above a small portion of the disposal area to expose it for inspection.



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Examine the disposal area for signs of ponding, solids accumulation, and any evidence of past breakouts (discolored vegetation, etc.), and in the case of proprietary devices, the physical condition.



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Examine the fill
extensions for proper
extent, vegetated cover,
4:1 grade, proper
crown, or erosion.



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The Division recommends that an extensive photographic record of the inspection be created.

This is useful for documenting site conditions at the time of the inspection, and for mitigating arguments concerning any disputed findings.

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Malfunctioning Systems

If the system is malfunctioning, it must be reported to the client. The inspector is not under any legal obligation to notify the Town or State.

A malfunctioning septic system is one that is not operating properly based on the following indicators:

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Effluent ponding or breakout.

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Back-up of wastewater into the building.

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Seepage of effluent into buildings.

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Contamination of wells or water bodies/courses.

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Preparing the report.

Information in the report may be useful to the buyer in negotiating a purchase price. For the seller, the report can be used to increase the value of the property by dealing with any problems in advance or documenting that no problems exist.

Recipients of the report are not obligated to forward copies to any federal, state, or local officials.

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The report should provide the following data:

- Client name and contact information.
- Property owner name and contact information if different from client.
- Inspector(s) name and contact information.
- Property location, including map and lot numbers.
- Date on which the inspection took place.

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The report should provide the following data:

- Age of system.
- Verification whether a design and permit exists.
- A description of components and condition.
- A list of differences if any between the design and installation.
- Identification of any malfunctions, surface discharges or conditions needing correction.

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Note system deficiencies if present. Deficiencies include:

- Conditions that pose an immediate or potential threat to public health if not corrected, including malfunctions.
- Physical defects in the system components, such as a cracked septic tank or missing outlet baffle.

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Note system deficiencies if present. Deficiencies include:

- Differences between observed conditions and the design.
- Other unique conditions identified by the inspector.

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The report may also include additional explanatory information provided by the inspector, along with photographs, sketches, and copies of existing design plans.

The report also should include a disclaimer statement on the part of the inspector.

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Unusual Situations

There will always be sites, systems, and situations that are not easily categorized. When coming up against an unusual inspection, a significant aspect to the process will be the ability of the inspector to make a judgment call.

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Are inspections limited to transfers in the Shoreland Zone?

Once one is certified, one can perform system inspections outside the shoreland zone, and for any reason the client may require. For example, restaurant license applications require documentation of the septic system (if not on public sewer), which may be difficult to find or which may not exist. An inspection report can be substituted in most cases.



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What if the disposal area is under a parking area?

If a disposal area is under a parking lot, chances are it is concrete chambers. A metal detector should be able to locate the rebar, and the boundaries estimated. If paved, a small area of pavement can be removed to expose a chamber for inspection.



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What if the system pre-dates the Rules?

If the system was installed before July of 1974, the likelihood of it meeting the current Rules is small.

The report should explain what was found (cesspool, plank trench, etc.) for the record. It is up to the buyer and the seller to decide how to proceed with this information.

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What if the system has not been used for a while?

If a system has been idle it will not be possible to assess its functionality. It will not show signs of active problems like breakouts, but may show signs of past problems such as discolored vegetation. In the final report, it should be noted that the system was not in use and the functionality should not be speculated upon.



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What if the client wants to change the use of the system, and it's too small?

If the inspection reveals that an existing septic system is undersized for a proposed change in use, this should be noted in the report. For example, changing from a 2 bedroom home to a 6 room B&B would need a bigger system. The report should advise the client to hire a Site Evaluator.



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What if the system has a
grandfathered direct discharge?

There are no grandfathered direct wastewater discharges, for all practical purposes, not even for laundry waste. Direct discharges and straight pipes have been prohibited under the Maine State Plumbing Code since 1926, and the Subsurface Wastewater Disposal Rules since 1974.



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Resources

- Maine Subsurface Wastewater Disposal Rules, 144 CMR 241
- “Maine Septic System Inspection Guidelines “
Maine Association of Site Evaluators
- “Septic System Checkup: The Rhode Island Handbook for Inspection” by James Riordan

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These prior versions of the Maine State Plumbing Code and the Subsurface Wastewater Disposal Rules are posted on the Division's web site.

- Pre-1974 Rules Synopses
- 1920 Maine State Plumbing Code
- 1926 Maine State Plumbing Code
- 1944 Changes to Maine State Plumbing Code
- 1946 Maine State Plumbing Code
- 1970 Maine State Plumbing Code
- 1974 Subsurface Wastewater Disposal Rules
- 1982 Subsurface Wastewater Disposal Rules
- 1995 Subsurface Wastewater Disposal Rules
- 2005 Subsurface Wastewater Disposal Rules
- 2009 Subsurface Wastewater Disposal Rules

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Staff Contacts

Glenn Angell 592-2084
glenn.b.angell@maine.gov

Wendy Austin 287-5672
wendy.austin@maine.gov

David Braley 441-5324
david.braley@maine.gov

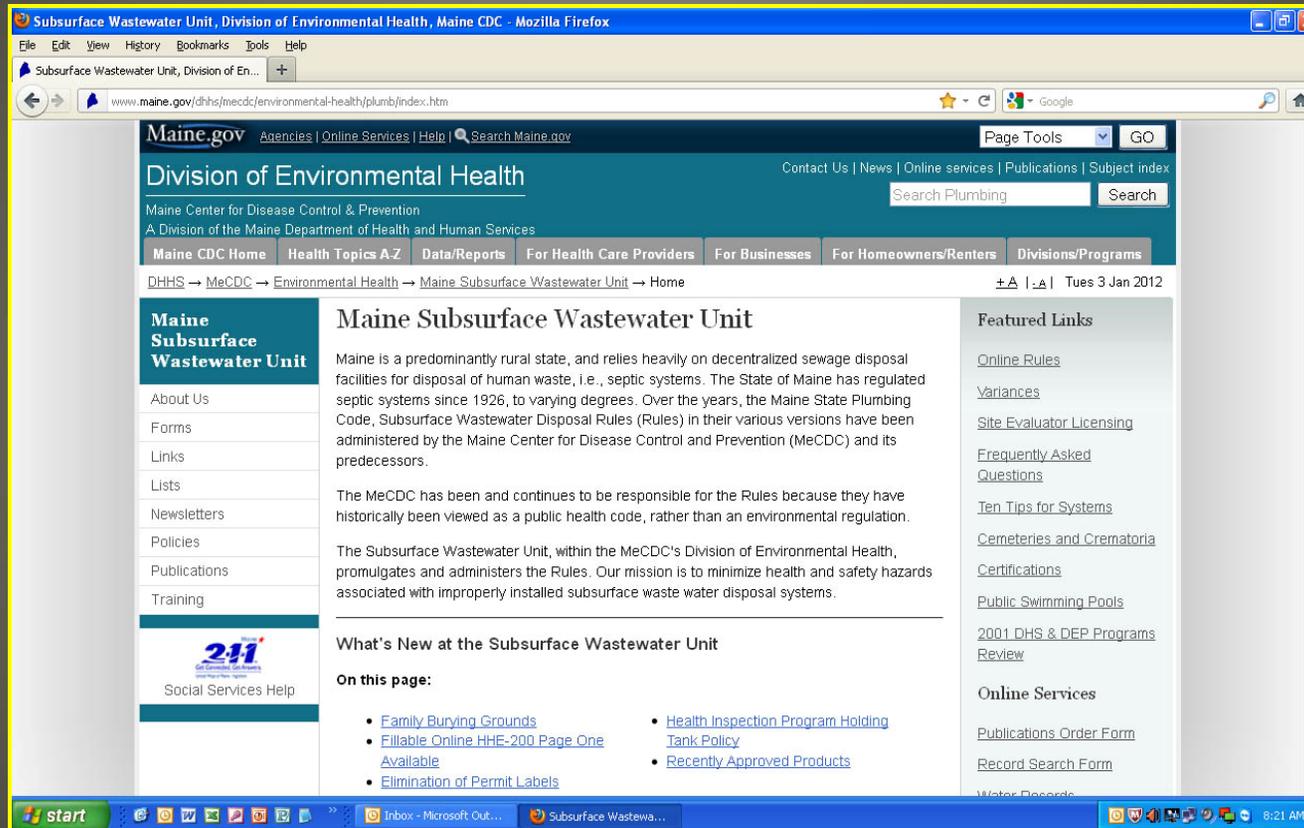
James Jacobsen 287-5695
james.jacobsen@maine.gov

Brent Lawson 592-7376
brent.lawson@maine.gov

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The screenshot shows a Mozilla Firefox browser window displaying the website for the Subsurface Wastewater Unit, Division of Environmental Health, Maine CDC. The URL in the address bar is www.maine.gov/dhhs/mecdc/environmental-health/plumbj/index.htm. The page features a navigation menu with links for 'Maine CDC Home', 'Health Topics A-Z', 'Data/Reports', 'For Health Care Providers', 'For Businesses', 'For Homeowners/Renters', and 'Divisions/Programs'. The main content area is titled 'Maine Subsurface Wastewater Unit' and includes a search bar with the text 'Search Plumbing'. The page content describes the unit's role in regulating septic systems and provides links to various resources such as 'Online Rules', 'Variances', 'Site Evaluator Licensing', 'Frequently Asked Questions', 'Ten Tips for Systems', 'Cemeteries and Crematoria', 'Certifications', 'Public Swimming Pools', '2001 DHS & DEP Programs Review', and 'Online Services'. A 'What's New at the Subsurface Wastewater Unit' section lists recent updates like 'Family Burying Grounds', 'Fillable Online HHE-200 Page One Available', and 'Elimination of Permit Labels'. The page also includes a sidebar with 'Maine Subsurface Wastewater Unit' navigation links and a '211 Social Services Help' logo.

www.mainepublichealth.gov/septic-systems

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