[GUIDELINES ATTACHMENT]

MAINE

SEPTIC SYSTEM INSPECTION

GUIDELINES

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Albert Frick,MASE TRC Chairman,SE,CSS
Richard Babine, S.E.
Paul Beers, S.E.
Bill Brown, S.E., P.E.
Mark Cenci, S.E., C.G.
Gene Dube, S.E., LPI, Pumper
Larry Frost, Pumper, Pres MAWHS
Jay Hardcastle, S.E., DHE
Dave Kamila, S.E., P.E.
Fred Kinney, Pumper, Installer
Paul Lawrence, S.E.
James Logan, S.E., C.S.S.
Russell Martin, S.E., P.E., DHE
Tom Milligan, S.E., P.E.
David Moyse, S.E., C.S.S.
Earl Rafuse, S.E., LPI, Sanitarian
Doug Riley, S.E., P.E.
David Rocque, S.E., C.S.S.
Richard Sweet, S.E., C.G.
Clough Toppan, S.E., P.E., DHE
Don Witherall, S.E., DEP

INTRODUCTION

There are more than 600,000 dwellings in the State of Maine. Approximately 270,000 of the dwellings are connected to public sewer with the remaining approximate 330,000 dwellings relying on subsurface wastewater disposal. The wastewater volume generated from the dwellings on subsurface wastewater disposal is approximately 89 million gallons/day (based on theoretical wastewater flow projections). The cumulative volume of on-site subsurface wastewater disposal becomes the largest wastewater treatment system in the State of Maine. It is therefore very important to assure that septic systems are functioning properly to assure environmental sanitation.

The *State of Maine Subsurface Wastewater Disposal Rules* are promulgated to assure environmental sanitation on Maine. Maine has been a forerunner in progressiveness of its' administration of subsurface wastewater disposal. The *United States Environmental Protection Agency* reviewed *Maine's Subsurface Wastewater Disposal Rules* and administration program and found it to be acceptable. However, one deficiency noted was the lack of an ongoing septic inspection program.

The *State of Maine Division of Health Engineering* and the *Department of Environmental Protection* requested the *Maine Site Evaluators Association [Technical Review Committee (MASE TRC)]* to investigate this issue and consider developing minimum voluntary standards to guide septic system inspections.

MASE TRC held several workshops and met with MASE membership to discuss. MASE TRC also elicited representation from the *Maine Association of Waste Haulers, Septic Tank Pumpers, Building Inspectors,* and *Local Plumbing Inspectors* to provide input.

Following are the minimum standards for septic system, inspections.

TIMING OF INSPECTION (recommended)

When Septic System Inspections Should Be Done?:

MASE TRC strongly recommends that septic system inspections should be done upon the sale of property. MASE TRC believes this time is appropriate when there is at least one interested party requesting an objective review of the system status. There is an excellent vehicle to assess the property (i.e. purchase and sale agreement and should the septic system be found deficient, it is more convenient to finance the septic system construction in the appreciated value of the land, purchase price of the property, negotiated buyer/seller contribution, etc.)

MASE TRC strongly recommends that Maine DEP/DHE not require periodic septic system inspections outside of the sale of properties due to a number of logistical problems.

QUALIFICATIONS

Who Should Perform Septic System Inspections?:

MASE TRC agrees that septic system inspections should be done only by qualified individuals who are knowledgeable in the field of subsurface wastewater disposal (i.e. Licensed Site Evaluators, Professional Engineers, Local Plumbing Inspectors, Septic System Pumpers, Certified Building Inspectors). MASE TRC is of the opinion that restricting inspections to licensed Site Evaluators would be inappropriate unless soil treatment analysis was the major concern.

LEVEL 1 Basic Septic Inspection:

Septic Tank Pumpers, Septic Tank Installers, Building Inspectors, Site Evaluators

LEVEL 2 Comprehensive Septic Inspection:

Site Evaluators, Professional Engineers, and other qualified individuals with some advanced training in system functionality.

MINIMUM STANDARDS:

The following are guidelines established by *Maine Association of Site Evaluators* that describe suggested minimum standards. This document is intended to be revisited with time to upgrade and modify as needed, based on expertise, improvement of industry and private sector demands.

LEVEL 1 (Basic Septic Inspection)

Plan, Permit Review

- A search of the Town municipal records for a copy of the subsurface wastewater disposal permit (HHE-200 form), certificate of approval, etc.
- A review of Town records and/or real estate disclosure statement for declaration of number of bedrooms and septic site condition, recorded use of dwelling (i.e. seasonal/year-round)

Internal Review/Plumbing Connections

- Verification of laundry system hook-up to sanitary septic system
- Identification of water treatment system, etc., and disposal method for disclosure
- If pump station utilized, proper identification of separate pump electrical circuit and high water alarm

Septic Tank

- Locate and inspect the septic tank with observation of outlet baffle to record and report sludge/scum build-up, integrity of baffle, working liquid capacity, general integrity of tank size, type, existence or lack of risers and covers if required.

Disposal Area

- Field inspection and walk over/around property for observation of septic system breakout.

Classification/Conclusion (LEVEL 1, Basic Septic Inspection)

The septic system inspection shall culminate in a basic written report of the conditions observed of the septic system components, and a sketch plan showing location of septic tank/cesspool found and suspected location of disposal area, if there are indications. Ties to septic tank should be included.

LEVEL 2, Comprehensive Septic Inspection:

Plan, Permit Review

- A search of the Town municipal records for a copy of the subsurface wastewater disposal permit (HHE-200 form), certificate of approval, etc.
- A review of Town records and/or real estate disclosure statement for declaration of number of bedrooms and septic site condition, recorded use of dwelling (i.e. seasonal/year-round)

Internal Review/Plumbing Connections

- Verification of laundry system hook-up to sanitary septic system
- Identification of water treatment system, etc., and disposal method for disclosure
- If pump station utilized, proper identification of separate pump electrical circuit and high water alarm

Septic Tank

- Locate and inspect the septic tank with observation of outlet baffle to record and report sludge/scum build-up, integrity of baffle, working liquid capacity, general integrity of tank size, type, existence or lack of risers and covers if required.

Pump Station (if component of system)

- Locate, excavate and remove cover.
- Activate pump to observe pump activity.
- Inspect electrical connections, high water alarms, ground/surface water infiltration.

Distribution Box (Optional)

- It is recommended that an attempt be made to locate the distribution box if used in construction of the system and uncover and inspect, record and report liquid level, solids accumulation if any, evidence of high previous liquid levels if evident.

Sewer Ejector Pump (if part of system)

- Locate, excavate and remove cover or activate pump to assure workability.

Grease Trap (if part of system)

- Locate, excavate and remove cover over outlet baffle to inspect baffle and grease content.
- Observe, record and report appropriate grease trapping outlet baffle.

Disposal Area

- Location and identification of the approximate size and type of disposal system (i.e. trench, bed, chambers (concrete/plastic) or other proprietary leaching device.) An excavation by hand shovel or auger into the stone of a bed or trench system, or directly alongside of chamber, proprietary leaching device, bed/trench to determine liquid level, potential evaluation of previous liquid levels if system not in use).
- Observation of cover, fill extension, fill shoulder, if appropriate.

Classification/Conclusion LEVEL 2, COMPREHENSIVE SEPTIC SYSTEM INSPECTION

Level 2, Comprehensive septic system inspection shall result in a written report of the inspector's observations with a declaration of the system's performance status. [i.e. ***Satisfactory*** (*properly functioning*), ***Failing*** (*improperly functioning*) or ***Other*** (*qualified limited functional*)] with comments or summary of the major deficiencies or issues. A determination of the adequacy of the disposal system and component size in relation to the anticipated flows should be addressed.

The classes of the system performance standards are defined as follows:

SATISFACTORY *(properly performing*)

Following conditions were observed:

1) System in operation at time of use and septic tank not recently pumped to influence normal water levels at time of inspection.
2) Liquid level of wastewater in septic tank was observed at invert of septic tank outlet.
3) Liquid level observed in stone bed was below top of stone, and liquid level in proprietary leaching device was at or below invert of inlet/outlet of device(s).
4) No signs of previous high water levels (e.g. staining), previous outbreaks o backups.

FAILURE *(improperly performing*)

One or more of the following conditions observed:

1) Outbreak of wastewater effluent observed at the ground surface or in overflow pipe discharging to ditch, water body, or ground surface.
2) Liquid level in septic tank above invert of outlet.
3) Liquid level in disposal area above stone or proprietary leaching device(s).
4) Backup of sewage into household, other than a temporary blockage (Definition by Code).
5) Pollution to the surface wasters or ground waters (Definition by Code).

OTHER *(qualified limited functional*)

A system that is observed to not fully comply with either SATISFACTORY or FAILURE categories.

The Inspector is responsible, if classifying the disposal system as OTHER, to comment on the reason(s) for this classification.

The following situations may be cause for “OTHER” classification (but not limited to):

- Inactive system
- Recently pumped septic tank that has not had sufficient time to reach its full operational level
- Excessively high water usage conditions
- Special conditions that need to be clarified by further testing

SEPTIC SYSTEM INSPECTION CERTIFICATION

I, _____, have conducted a septic system
Printed name of Septic System Inspector

inspection that complies with the minimum standards published by the Maine

Association of Site Evaluators below.

☐	LEVEL 1	Basic Septic System Inspection
☐	LEVEL 2	Comprehensive Septic Inspection

This certifies that I observed all the necessary components prescribed and conducted an objective professional inspection to record and report the factual observations and appropriate inferences.

_____ _____

Signature date