

Policy: Main Contact: Last Revision:	C-PS-05 – Sewage System Maintenance Inspection Policy Development Services and Environmental Sustainability October 12, 2022	
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### Purpose

The Township of Muskoka Lakes is committed to the protection of the health and integrity of the natural environment and the water quality of its lakes and rivers, which are all part of the Township's most valuable resources. To ensure that environmental protection meets the highest standards, the following policy expands on the Township's existing Sewage System Maintenance Re-inspection Program.

The Township of Muskoka Lakes enhanced Sewage System Maintenance Inspection Program is to be administered by the Building Division of the Development Services and Environmental Sustainability Department in accordance with the Building Code Act, Ontario Building Code and the Township of Muskoka Lakes Property Standards By-law 1999-34.



Through the Sewage System Maintenance Inspection Program, the Township will educate property owners about preventative maintenance measures including; pumping of systems; maintaining the leaching bed area and system components free from deep rooting vegetation; maintaining drainage to prevent erosion; and ensuring no structures are erected in the leaching bed area or within required setbacks from system components.

## Scope

The program will encompass all properties in the Township of Muskoka Lakes that are serviced by private on-site sewage systems with a daily flow of 10,000L/day or less in accordance with the Ontario Building Code (the "Code").

While the goal of the program will be to inspect every private sewage system on every property abutting a navigable waterway in the Township of Muskoka Lakes, the initial focus of the program will be private sewage systems that are identified in accordance with this policy as being High and Moderate Risk.

Through implementation of this Policy, maintenance inspection criteria and a reinspection cycle will be established to ensure that each private sewage system greater than 10 years old is inspected at least once in every 10 years.

The following classes of sewage system will be included:

Class 1 – Privy Class 2 – Greywater Class 3 – Cesspool Class 4 – Septic System Class 5 – Holding Tank

The program will include the following components:

- Document Review to determine the risk associated with each sewage system
- Site Inspections, Phase I &/or Phase II inspections
- Compliance Action (if required); and
- Documentation and Reporting

Each sewage system will be classified by reviewing available documentation for each property and the type of system installed. The classification will be as the scale below:



<u>Risk Level</u>		
High	Sewage systems:	Without any record on file; or, Utilizing steel tanks; or, Greater than 30 years old; or, Greater than 10 years old and Installed on a property abutting a waterbody where a water quality indicator has been confirmed in accordance with the policies of the Muskoka Official Plan.
Moderate	Sewage systems:	Between 10 and 30 years old; and, Installed on a property abutting a navigable waterbody where a water quality indicator has <u>not</u> been confirmed in accordance with the policies of the Muskoka Official Plan.
Low	Sewage systems:	Less than 10 years old; or, <u>Installed on a property not abutting a navigable</u> <u>waterway.</u>

The sewage system **Risk Level** classification will direct the type of inspection and the frequency schedule required.

<u>Risk Level</u>	Type of Inspection	<b>Frequency</b>
High	Phase II	every 5 years
Moderate	Phase I	every 10 years
Low	none	



## **Definitions and Examples**

"Building Code" and "Code" means the regulations made under Section 34 of the Ontario Building Code Act (the Act);

"Committee" means the Property Standards Appeal Committee established under Section 15 of the Act;

" Sewage System Maintenance Inspection Program, Policy and Procedures" means a policy approved by the Council of the Township of Muskoka Lakes;

"Effluent" means sanitary sewage that has passed through a treatment unit;

"Inspector" means a Property Standards Officer or other Township Staff appointed to enforce matters under the Property Standards By-law and the Ontario Building Code;

"Non-Residential Property" means a building or structure not occupied or capable of being occupied in whole or in part for residential occupancy and includes the lands and premises appurtenant thereto;

"Owner" means the person, for the time being, managing or receiving the rent of, or paying the municipal taxes on the land or premises, in connection with which the word is used, whether on his/her own account, or as agent, trustee, or any other person who would so receive the rent if such land and premises were let, and shall also include a lessee or occupant of the property, who under the terms of the lease is required to repair and maintain the property in accordance with the standards of maintenance and occupancy of the property;

"Person" means an individual, firm, corporation, association or partnership;

"Property" means a building or structure, or part of a building or structure, and includes the premises appurtenant thereto and all mobile structures, outbuildings, fences and erections thereon, whether heretofore or hereafter erected;

"Repair" means the provision of such facilities and the making of additions or alterations, or the taking of such action as in restoring, renovating and mending, as may be required so that the property shall conform to standards established in this by-law;



"Residential Property" means any property that is used or designed for use of a domestic establishment, in which one or more persons usually sleep and prepare and serve meals, and includes any lands or buildings that are appurtenant to such establishment, and all stairways, walkways, driveways, parking spaces, and fences associated with the dwelling or its yard;

"Sanitary sewage" means liquid or water borne waste, a) of industrial or commercial origin, or b) of domestic origin, including human body waste, toilet or other bathroom waste, and shower, tub, culinary, sink and laundry waste;

"Sewage System" means,

a) a chemical toilet, an incinerating toilet, a recirculating toilet, a self-contained portable toilet and all forms of privy including a portable privy, an earth pit privy, a pail privy, a privy vault and a composting toilet system;

b) a greywater system;

c) a cesspool;

d) a leaching bed system; or

e) a system that requires or uses a holding tank for the retention of hauled sewage at the site where it is produced before its collection by a hauled sewage system; where these,

f) have a design capacity of 10,000 litres per day or less;

g) have, in total, a design capacity of 10,000 litres per day or less, where more than one of these are located on a lot or parcel of land; and

h) are located wholly within the boundaries of the lot or parcel of land on which is located the building or buildings they serve.

"Sewage" means sanitary sewage or storm sewage;

"Third-Party Inspector" is an inspector that is qualified by the Ontario Ministry of Municipal Affairs (MMAH) to issue a certificate under the Sewage System Maintenance Inspection Program approved by the Minister. A copy of which is included in Appendix "B" to this policy and as may be updated by MMAH from time to time.

"Treatment Unit" a device that, when designed, installed and operated in accordance with its design specification, provides a specific degree of sanitary sewage treatment to reduce the contaminant load from that of sanitary sewage to a given effluent quality;

"Township" means The Corporation of the Township of Muskoka Lakes.



## Responsibilities

The Chief Building Official has the authority to implement this Program and to establish the inspection cycle to ensure that the obligations under the OBC are met with respect to the Sewage System Maintenance Inspection Program.

The Chief Building Official, subject to the approval of the Director of Development Services and Environmental Sustainability, and in accordance with the OBC, is granted the authority to:

- i) modify the implementation procedures to clarify staff and property owner requirements and responsibilities;
- ii) modify Inspection Reports to enhance the quality of reporting; and,
- iii) update the policy references and forms based on changes to the OBC.

Phase I & Phase II Inspection Reports are to be completed by Township Staff or a Qualified Third-Party Inspector on-site during any of the Maintenance Inspections.

## **Procedures/Steps**

#### **Document Review/Risk Assessment**

Property files will be reviewed to determine the Risk Level classification of the sewage system. All Property owners of a sewage system with a Risk Level classification of high or moderate will be notified, in writing, of the Risk Level classification of their property, and the requirements of the property owner as outlined by this Policy.

If there are no records of a sewage system in the property files, contact will be made with the property owner to request sewage system records. Upon receipt and review of all required documentation, the Risk Level of the property may be re-assessed, and adjusted to a different classification, in which case Township records will be updated accordingly and the property owner so advised.

#### **On-Site Maintenance Inspection**

Inspections generally begin with a review of available material, including that collected in the document review/risk assessment phase, and any available reports from previous inspections.





#### Phase I Inspections

Where the risk level classification determines that a Phase I Inspection is required, this inspection will be undertaken by Township staff. Property owners will be notified of the results of a Phase I Inspection. Records of all inspections and any follow up will be maintained in the property file by the Township. A sample report and guide to Phase I Inspections is included in Appendix "I".

### Phase II Inspections

The Township will contract the services of a Third-Party consultant to undertake Phase II inspections throughout the Township. Where the risk level classification of the sewage system identifies that a Phase II Inspection is required, Phase II inspections will be completed within five years of the commencement of the contract. Five inspection 'zones' will be established within the Township, associated with the required five year Phase II inspection cycle.

Each property owner will receive an information package in the spring of their inspection year to detail how and when to contact the Third-Party consultant to arrange for a preferred inspection date and time. The information package will also include an overview of what to expect during the inspection process and a questionnaire about their septic system that owners are recommended to fill out and return to the Third-Party consultant prior to, or during, the inspection.

As an alternative to utilizing the services of the Third-Party consultant, a property owner may directly contract the services of a qualified Third-Party inspector to conduct a Phase II inspection of their sewage system. The property owner will be required to notify the Township of their intention to directly contract this service by April 1<sup>st</sup> of the year the inspection is taking place in their 'zone', and shall provide a copy of their Certificate by July 31<sup>st</sup> of the same year. If the Township is not notified, or if a Certificate is not provided, the Third-Party consultant contracted directly by the Township shall be required to undertake the Phase II inspection.

Upon completion of the Third-Party Inspection, the Phase II Inspection Report shall be submitted to the Township. Should the Third-Party Inspector find the system to be in good working order, a Certificate, issued under the Sewage System Maintenance Inspection Program as approved by MMAH shall be provided to the Township. Records of all inspections and any follow up will be maintained in the property file by the Township. A guide, and Certificate for Phase II Inspections are included in Appendix "II".

Where a Phase II Inspection identifies a sewage system to be non-compliant with the original system approval or unsafe, the property owner will be notified in writing. Issuance of Orders and further legal action may be required.





#### Septic Tanks

Where it is found that a Sewage System includes a steel septic and/or steel holding tank, it may be required to be replaced <u>unless proven to be in good working order</u>. The replacement of a septic or holding tank is required to be completed through the issuance of a building permit.

Where it is found that a septic tank 30 years and older exists, a further Septic Tank Integrity Inspection will be required as part of the **Phase I** or **Phase II** Inspection. An Inspection form is included in Appendix "III". A copy of this form shall be submitted with all Phase II inspection report documents. It is the responsibility of the property owner to provide the Septic Tank Integrity Inspection Report to the Township.

#### **Treatment Units**

In the case of Tertiary Treatment Units that fall within the high risk level classification and are identified by the OBC to require annual maintenance agreements, a **Phase II Report & Certificate will** be provided as part of the required annual maintenance inspection at the required frequency as noted in this policy.

#### **Compliance Action/Owner Notification**

If a system is in need of remedial action, a letter will be sent to the property owner to describe the deficiencies identified by the Inspector, and to provide the property owner with the contact information for the Inspector in order to obtain further information and to outline their intentions to remedy the deficiencies.

The owner will also be informed that if they do not respond within a specified time frame, they may be issued an Order to Comply or Remedy under the Township's Property Standards By-law.

Should a property owner require a copy of the Sewage System Maintenance Inspection Report, it may be requested from the Township. Any fees for a copy of the report will be charged in accordance with the Township's Fees and Charges By-law.

#### **Immediate Orders**

Based on the Document Review, Phase I or Phase II Maintenance Inspection, an Order to Remedy may immediately be issued by the Township Inspector if there is any evidence of failure of the sewage system.





## **Records Management and Privacy**

All records relating to any issue pursuant to this policy shall be maintained in accordance with the Municipality's record retention schedule. Throughout all processes outlined in this policy, all Members of Council and municipal employees shall adhere to all applicable legislation regarding privacy in accordance with the Municipal Freedom of Information and Protection of Privacy Act (MFIPPA). Individuals should be aware that certain circumstances may identify them during an investigation.

## **Change History**

Policy Number & Name	Effective Date	Significant Changes	By-law/Resolution No.
C-PS-05 - Sewage System	12/10/2022		PLN-4-15/09/22
Maintenance Inspection			C-2-12/10/22
Policy			Conf BL 2022-173

### Phase I – Maintenance Inspections

Inspections generally begin with a review of available material, including material collected in the identification phase, and reports from previous inspections.

The purpose of Phase I maintenance inspections is to:

a) Obtain the most recent information on the system, as well as the size of the building and the number of fixtures and bedrooms that it is servicing;

b) Locate the sewage system's components;

c) Identify any obvious or outward signs of malfunction or failure; and

d) Identify systems that are at risk of malfunction or failure.

Phase I maintenance inspections generally avoid significant disturbance to the system and the surrounding soil area. During the course of a Phase I maintenance inspection, the inspector would normally identify:

a) The type of occupancy to determine the source and type of the sanitary sewage;

b) The source of water supply (municipal, well, lake, etc);

c) The approximate volume of sewage generated;

d) The use of special devices such as garbage grinders or water softeners;

e) The general nature of the system (class, components, type, layout, etc);

f) The location of the system's components with respect to wells, surface water, and other environmental features;

g) The approximate level of ground water: This may be achieved by:

i. reviewing local maps and records of ground water elevation observed on site or nearby properties, including the local assessment report, if available;

ii. Observing the conditions of the septic tank and the distribution box for indications

of ground water infiltration;

iii. Observing the elevation of nearby water body, or evidence of ground water infiltration in other subsurface structures; or

iv. The use of hand augering;

h) The size, material and the condition of the septic tank, or the holding tank;

i) The frequency of tank pump-out and the last time the tank was cleaned;

j) Any indication of sewage system failure, including:

i. Evidence of backup of effluent;

ii. Signs of hydraulic failure (breakout of sewage, wetting conditions in the leaching

bed area);

iii. Condition of surface vegetation; and

iv. Odour problems;

k) Documentation of previous effluent sampling test results where required (i.e., under Article 8.9.2.4. of the Building Code).

C-PS-05 Appendix II

### Phase II – Follow-Up Maintenance Inspections

It may be appropriate to undertake more intensive follow-up maintenance inspections where:

a) The Phase I maintenance inspection has identified that the septic system is at risk of future malfunction or failure, or

b) The Phase I inspection detected a malfunction or failure, but did not reveal the reason (e.g., location or nature) of malfunction or failure.

Phase II inspections will be familiar to Principal Authorities in terms of usual Building Code enforcement activities (i.e., investigation of potentially failing sewage systems, inspections due to neighbour complaints). These inspections may typically include examinations of the following elements:

a) The depth of the sludge layer and the distance from the top of the sludge layer and the outlet tee;

b) The thickness of the scum layers;

c) The distance between the bottom of the scum/grease layer and the bottom of the outlet tee;

d) The distance between the top of the scum layer and the top of the outlet tee;

e) The physical condition of the inlet and outlet; and

f) The condition of the effluent filter, if utilized.

For sewage systems utilizing treatment units, Phase II inspections may also include a review of:

a) The existence of a maintenance agreement and the date of latest servicing;

b) The test results of a new round of effluent sampling (if otherwise required by the Building Code, or by an authorization issued by the BMEC); and

c) Operational problems or system malfunction before or, at the time of inspection. Where used in sewage systems, distribution boxes, dosing tanks and pumps may be inspected to determine their condition and functionality.

Phase II inspections of leaching beds may also consider:

a) Clearance distances to environmental features, wells and surface water intakes;

b) Soil type and its permeability;

c) Additional sources of hydraulic loading (e.g. surface discharge, roof drains);

d) Evidence of ponding;

e) Encroachments into the leaching bed area (e.g. building additions, patios, driveways, pools);and

f) Trees and deep rooting shrubs in the vicinity of the bed.

Blockages in the leaching bed and pollution sources may be identified by measures including:

a) Evaluation of in-home plumbing and estimates of water usage;

b) Conducting a leak diagnostics;

c) Conducting a flow trial;

d) Conducting a dye tracing test; or

e) Excavating a cross section of the leaching bed.

### Septic Tank Integrity Inspection

1.	Are all risers/lids accessible?	_Yes	_No
2.	Are concrete lids and tank free of spalling, cracks		
	or visible damage, or allow for surface water infiltration?	_Yes	NoNot present
3.	Where is the liquid level in the tank?	Base of outlet	
		Above	e outlet pipe
		Below outlet pipe	
4.	Does the scum layer look like living, healthy soil, musky odour?	Yes	No
5.	Can you clearly see baffles above the scum layer?	Yes	No
6.	Are baffles in place?	Yes	No
	(If concrete, is it intact and not corroded?)		<u> </u>
7.	Are inlet and outlet pipes visible with no sign of settling?	Yes	No