

THE CORPORATION OF TAY VALLEY TOWNSHIP

BY-LAW NO. 2012-009

SEWAGE SYSTEM MAINTENANCE INSPECTION PROGRAMS

WHEREAS, malfunctioning on-site sewage systems can have significant negative impacts on both human health and the environment;

AND WHEREAS, in 2000, the Corporation of Tay Valley Township (the “Township”), implemented a septic tank re-inspection program for waterfront properties based on voluntary participation by property owners;

AND WHEREAS, Section 7(1)(b.1) of the *Building Code Act, 1992*, S.O. 1992, c. 23, as amended (the “Act”), authorizes the council of a municipality to pass by-laws establishing and governing sewage system maintenance inspection programs in accordance with Division C, Part 1, Section 1.10 of the *Building Code Act, 1992 - Ontario Regulation 350/06*, as amended (the “Building Code”);

AND WHEREAS, the Township Council considers it desirable for the protection of the health, safety and well-being of persons and the environmental well-being of the municipality to exercise its authority to implement a mandatory sewage system maintenance inspection program which will apply to all waterfront properties located in the areas described in Schedule “A” to this By-Law ;

AND WHEREAS, the Township Council considers it desirable for the protection of the health, safety and well-being of persons and the environmental well-being of the municipality to continue to offer a voluntary sewage system maintenance program to owners of waterfront properties located in the areas described in Schedule “B” to this By-Law;

AND WHEREAS, the above referenced mandatory and voluntary sewage system maintenance inspection programs (collectively the “Sewage System Maintenance Inspection Programs”) are described in the Septic System Re-Inspection Program document attached as Schedule “C” to this By-Law;

AND WHEREAS, the Township has entered into an agreement with the Mississippi Valley Conservation Authority in accordance with Section 6.2 of the Act to provide for the enforcement of the provisions of the Act and the Building Code relating to sewage systems and to allow the Mississippi Valley Conservation Authority, through its Mississippi Rideau Septic System Office (the “MRSSO”) to deliver the Sewage System Maintenance Inspection Programs on behalf of the Township;

**THE CORPORATION OF TAY VALLEY TOWNSHIP
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NOW THEREFORE BE IT RESOLVED THAT, the Council of the Corporation of Tay Valley Township enacts as follows:

1. GENERAL REGULATIONS

- 1.1 **THAT**, the mandatory sewage system maintenance inspection program will apply to all waterfront properties located in the areas described in Schedule "A" to this By-Law.
- 1.2 **THAT**, the voluntary sewage system maintenance inspection program will apply to all waterfront properties located in the areas described in Schedule "B" to this By-Law.
- 1.3 **THAT**, the Septic System Re-Inspection Program, attached hereto as Schedule "C", be adopted.

2. BY-LAWS TO BE REPEALED

- 2.1 All by-laws or parts thereof and resolutions passed prior to this by-law which are in contravention of any terms of this by-law are hereby rescinded.

3. ULTRA VIRES

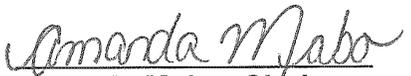
- 3.1 Should any sections of this by-law, including any section or part of any schedules attached hereto, be declared by a court of competent jurisdiction to be ultra vires, the remaining sections shall nevertheless remain valid and binding.

4. EFFECTIVE DATE

- 4.1 ENACTED AND PASSED this 13th day of March, 2012.

for 
Keith Kerr, Reeve




Amanda Mabo, Clerk

**THE CORPORATION OF TAY VALLEY TOWNSHIP
BY-LAW NO. 2012-009**

SCHEDULE "A"

MANDATORY

The mandatory re-inspection program will apply to all properties located on the following water bodies:

Lakes

Adam Lake
Farren Lake
Pike Lake

Bennett Lake
Long Lake

Bob's Lake
Otty Lake

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**SCHEDULE "B"
VOLUNTARY**

The voluntary re-inspection program will apply to all properties located on the following water bodies:

Creeks

Bolton Creek	Grant's Creek	Scotts Snye	Silver Lake Creek
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Lakes

Andrew Lake	Big Rideau Lake	Black Lake
Christie Lake	Clear Lake	Davern Lake
Deer Lake	Fagan Lake	Loon Lake
McLaren Lake	McGowan Lake	Mills Lake
Little Mud Lake	Lower Mud Lake	Upper Mud Lake
O'Brien Lake	Rainbow Lake	Rock Lake
Round Lake	Little Silver Lake	Silver Lake

Rivers

Fall River	Mississippi River	Tay River
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SCHEDULE "C"



Septic System Re-Inspection Program

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Background

In 1998, the responsibility for on-site sewage systems with a total daily design flow of less than 10,000 litres per day was transferred from the Ministry of Health to the Ministry of Municipal Affairs and Housing. In doing so, the Province of Ontario shifted responsibility for these systems from provincial jurisdiction to municipal jurisdiction with Part 8 of the Building Code requiring owner maintenance of on-site sewage systems. The transfer in jurisdiction made enforcement the municipality's obligation and responsibility.

Many of the lakes and other water courses in Tay Valley Township were developed years ago. The original cottages were usually serviced with a privy, had no running water and were used for only a few weekends each year. Over the years these original cottages have been improved and are inhabited for longer durations over the year, with many now converted to permanent residences.

Tay Valley Township began conducting visual re-inspections of septic systems on waterfront properties in 2000, when a pilot program began on Christie Lake. Since 2000, the Township expanded its program to include all waterfront properties, on all water bodies, and in 2004 added a septic tank component, which consisted of an internal inspection of the tank. Since the program's inception, and up until the end of 2011, property owner participation has been voluntary.

Tay Valley Township has led the way locally for the sewage system re-inspection program as well as other initiatives that work towards protecting the quality of surface and ground water. Since the sewage system re-inspection pilot program, the Township has now inspected approximately 1,500 waterfront properties. The program combines the education of the homeowner regarding the maintenance of their sewage system with an inspection component. A follow-up component is also essential to ensure that the program effectively manages identified sewage system problems.

Executive Summary

In January 2011, through Ontario Regulation 315/10, the Ontario Ministry of Municipal Affairs and Housing amended the Ontario Building Code to establish mandatory on-site sewage system maintenance inspection programs for the Lake Simcoe area and for “vulnerable” areas” to be established in Source Water Protection Plans. These amendments “also govern discretionary on-site sewage system maintenance inspection programs established by local enforcement bodies”. This amendment has allowed Tay Valley Township the ability to make a portion of its current voluntary septic inspection program, a discretionary program. A discretionary program allows the Township to undertake mandatory maintenance inspections.

Introduction

A working sewage system is an integral part of any functioning home or cottage not serviced by the municipal sewer. As such, proper maintenance and operation of the sewage system is integral to the continued life of the system. A Septic System Re-Inspection Program provides:

1. Participants with information and advice regarding the proper operation and maintenance of their septic system;
2. A proactive approach to identifying risks to human health or the natural environment;
3. A database of inspected existing septic systems that can be used as a planning tool for municipalities.

Malfunctioning on-site sewage systems can have both human health and environmental impacts beyond the property on which it is located. Nutrient and bacteria-rich effluent can travel through soil and rock fractures to surface water bodies, and ground water sources. Contamination of surface water can cause excessive aquatic plant growth, depletion of oxygen in lakes, and impact the natural habitat for aquatic species. Ground water contamination can cause illness and even death. This makes it crucial that property owners be aware of the location and operation of their septic system. Under the Ontario Building Code it is the property owner’s responsibility to ensure that their sewage system is working properly, not only for their health, but also that of the surrounding community and environment.

PROGRAM ADMINISTRATION

VOLUNTARY VERSUS MANDATORY

In 2012, the decision was made to modify the current voluntary septic system re-inspection program to include a discretionary program with mandatory inspections. The mandatory component will apply to the following seven lakes: Adam, Bennett, Bob's, Farren, Long, Otty and Pike as outlined in Schedule "A" to By-Law No. 2012-009.

The steps taken for the septic re-inspection program are exactly the same for the voluntary and mandatory programs. The only difference is that property owners under the mandatory component will be required to participate in the program when their property has been identified, whereas property owners under the voluntary component can choose whether or not to participate.

INITIAL COMMUNICATION WITH THE PUBLIC

Letter

When an area for re-inspection has been determined, a letter will be sent to affected property owners informing them of the potential value of the program.

Program Description

An overview of what will be undertaken during a re-inspection will be included with the letter.

Questionnaire & Site Sketch

Property Owners will also be requested to complete and return a questionnaire and site sketch regarding their septic and well. While the Township may have some information about the septic or well, this information requires updating and old septic or well records are excellent resources for the more technical components of an inspection, as well as knowing the current locations of and distances between any septic components (tank, bed, privy, greywater pit), structures (house, shed, garage), water bodies (lakes, rivers, creeks, wetlands), farming activities, or wells. If required, additional documents will be requested (ex. Septic Use Permit).

DOCUMENTATION

Pre-Inspection

A review of the information provided by the property owner on the questionnaire and sketch will be reviewed, including any additional requested documentation. If records are not available due to the age of the septic system then a more thorough investigation will be undertaken by the Inspector.

Contact with the property is made to either confirm the date for the inspection that the property owner has suggested, or to let the property owner know when the inspector will be on site. If a third party inspector is used, who meets the requirements under Section 1.10.1.3 of Ontario Regulation 315/10, to conduct the inspection, the property owner will inform the Principal Authority of the name and company of the third party and the date of the inspection. The property owner will then forward a copy of the completed, Ministry approved, certificate to the Principal Authority within 5 business days of the inspection. The third party shall use the form provided by the Principal Authority, which satisfies the inspection requirements as outlined under "Scope of Inspections" in this document.

Post-Inspection

Once an inspection has been completed, it will be filed in the property file at the Municipal Office and entered into the geographic information system (GIS) database. This information is a valuable tool for generating statistics and follow-up correspondence.

Inspection Reports

An inspection report will be completed by the Inspector after every inspection with a copy of the report to be provided to the property owner and a copy to the municipality. The report is provided to the property owner as a record as to when the inspection was complete and the results.

At a minimum, the inspection report shall contain the following information:

Item	Information
Personal Information	name, address, property legal description
Existing Facilities	class of sewage system, leaching bed type
Observations	visual indications of components of an unsafe sewage system
Diagram	to identify septic tank components
Requirements	provide details on the remedial work required

Report to Property Owner

The property owner will be informed that their system is in need of remedial action or that there is no indication from the inspection of an unsafe system. If the system is in need of remedial action, the report will describe the deficiencies observed by the Inspector and who the property owner should contact for further information regarding their intentions to remedy the deficiencies. The record will indicate the link between the deficiencies and the specific provisions in the Ontario Building Code. The property owner will also be informed that if they do not respond within a specific time frame, they may be issued an Order to Remedy an Unsafe Building.

Records

Information pertaining to this program will be filed under the appropriate property file at the Municipal Office.

SCOPE OF INSPECTIONS

The inspection begins with a walk around the property looking for water sources and sewage system components. Measurements are taken between the sewage system components, structures and water bodies, as well as to drinking water sources. A GPS reading is taken of all sewage system components, and wells.

The operation or failure of the bed is assessed by looking for conditions of lush vegetation, wet areas, surface discharge, tree or root growth, side slopes and erosion control.

A visual inspection of the septic tank condition is made, and a measurement of the tank contents is taken using a Sludge Judge or similar device. The tank volume is also estimated. This information is used to determine if a pump out is required.

A visual inspection of the baffles is done, as well as a check that the partition wall is in working order and any signs of concrete corrosion should be recorded. If the solids in the second chamber are as high as the first chamber it can be an indication that the partition wall has suffered some damage. A check for roots in the tank and for the presence of effluent filters is conducted before replacing the lids and covering the tank.

INSPECTION ACTIVITIES

The following are items that may be undertaken during an inspection:

- Surface inspection of bed and tank
- Estimate tank volume
- Estimate sludge depth/volume
- Inspect interior plumbing
- Probe leaching bed area
- Excavate bed area
- Soil sampling/testing
- Well testing/water quality analysis
- Surface drainage assessment
- Property owner interview
- Estimate distribution pipe length
- Estimate setback distances
- Estimate daily design flow
- Inspect mechanical equipment
- Determine type of building, type of tank, type of system
- Evidence of sewage effluent visible and/or odour
- Evidence of erosion of septic bed side slopes
- If the sewage system/septic tank is properly located on the property
- Whether the sewage system bed had trees/vegetation growth
- Whether the system meets setbacks
- Whether the sewage system serves more than one building
- If the system uses a pump chamber

Deficiencies For Sewage System Classes

The following are examples of observable deficiencies during a visual re-inspection:

Class 1 (Privy)

- Absence of fill around the base of the privy
- Inadequate soil depth

Class 2 (Greywater)

- No evidence of a grey-water pit; pipe on surface of the ground
- Absence of fill around the base of an existing pit
- Inadequate cover

Class 3 (Cesspool)

- Inadequate soil mounding
- Inadequate construction

Class 4 (Septic System)

- No existing system; pipes on surface of the ground, or slightly buried
- Old tanks in need of replacement
- No indication of leaching bed; outlet pipe from ground extending into/onto ground
- Leaching bed completely overgrown, in need of replacement
- System completely buried; requires information

Class 5 (Holding Tank)

- Corroded access cover
- Holes in holding tank
- Access openings not properly sealed

General

- Extra plant growth over the leaching bed area
- Foul odours outside
- Effluent breaking out to the ground surface

PROPERTY SELECTION

Participants in the program are chosen based on the following criteria:

- 1) Properties that either have a septic permit that is 10 years or greater or does not have permit information, has not been re-inspected in the past, and is not undeveloped.
- 2) Are due for a re-inspection after 10 years.

A septic system with registered complaints against it will have already been dealt with outside the re-inspection program.

An administrative procedure will be developed to describe the step by step process for property selection.

INSPECTION SCHEDULE

The program will focus on conducting inspections from May to September given the Township's high seasonal population; however inspections will be conducted between April and November each year, with weather permitting.

The program will strive to complete 200 inspections per year, with a 10-year re-inspection timeframe. The focus will be to complete inspections on the seven mandatory lakes within the first four years of the program. This figure does not take into account the number of properties that will undergo inspections unrelated to this program but does include enforcement and follow-up.

INSPECTION ROTATION

Mandatory Re-Inspection

The Inspection Rotation for mandatory water bodies will be re-evaluated each year to accommodate any unforeseen circumstances that may require adjustment to the rotation schedule and/or to include additional water bodies to the mandatory component, as approved by Council. The addition of water bodies to the mandatory program will require an amendment to the program; however other annual adjustments to the rotation schedule will be included in the annual report.

Year 1 (2012)		Year 2 (2013)		Year 3 (2014)		Year 4 (2015)	
Lake	# of Properties	Lake	# of Properties	Lake	# of Properties	Lake	# of Properties
Adams	12	Adams	<i>completed</i>	Adams	<i>completed</i>	Adams	<i>completed</i>
Bennett	10	Bennett	10	Bennett	44	Bennett	23
Bob's	10	Bob's	10	Bob's	19	Bob's	<i>completed</i>
Farren	20	Farren	25	Farren	<i>completed</i>	Farren	<i>completed</i>
Long	14	Long	<i>completed</i>	Long	<i>completed</i>	Long	<i>completed</i>
Otty	10	Otty	28	Otty	<i>completed</i>	Otty	<i>completed</i>
Pike	10	Pike	10	Pike	10	Pike	63
Total = 86		Total = 83		Total = 83		Total = 86	

* property information based on CGIS data in 2011 (best available data)

* undeveloped properties removed

* the number of properties shown represents those that have never been inspected under the program

* the original program began in 2002, therefore the 10 year re-inspection requirement will begin to apply to the mandatory water bodies in 2012, resulting in additional properties on the mandatory water bodies being re-inspected from 2012 forward

* inspections each year will occur first on the properties under the mandatory program, then on properties that are up for re-inspection under the 10-year timeframe, then inspections will occur on properties under the voluntary program to bring the total properties inspected to 200 per year

Voluntary Re-Inspection

Voluntary re-inspections will be scheduled based on responses to the letter of invitation to conduct a re-inspection.

INSPECTION AGENCY

The Mississippi Rideau Septic System Office (MRSSO) through the Mississippi Valley Conservation Authority, has been delegated the responsibility with respect to sewage systems (with a capacity of less than 10,000 litres per day) and will administer the Septic System Re-Inspection Program on behalf of the municipality. An annual progress report will be provided to Council on the septic system re-inspection program.

If a third party inspector is used to conduct the inspection, the contractual arrangement is between the property owner and the third party.

ENFORCEMENT

The authority to deliver and enforce this program resides with the *Building Code Act, 1992*.

FINANCIAL ASSISTANCE

Repairs and replacement of systems under this program are the responsibility of the property owner.

Funding may be available from other organizations such as:

- Lanark County
- Canadian Mortgage and Housing Corporation
- Rideau Valley Clean Water Program

PUBLIC EDUCATION

Information related to this program will be posted on the Township website. In addition, the MRSSO and/or a Township Staff member will attend at least two separate Lake Association meetings each year in order to educate the public on septic systems and the purpose of the septic re-inspection program.