Meeting Notes Greater Sudbury Watershed Alliance Private Drinking Water Protection Committee

2 November 2017, 12:00 to 1:30 pm Taphouse Bar & Grill

Present:Lesley Flowers, Lilly Noble, Margaret McLaughlin, David Young. Linda HeronRegrets:Richard Witham

1. Reviewed the 4 November 2015 Committee Meeting Notes

 Septic Social: <u>Bassim Abbassi</u>, Director of the Ontario Rural Wastewater Center, University of Guelph, informed back in 2016 that the Septic Socials Program had been suspended; but may accommodate with a special request. Follow-up request sent to Abbassi on 10 November 2016; however, there was no response. The <u>Ontario Rural Wastewater Centre courses and workshops</u> still appear to be inactive.

Action: Linda will reconnect with Abbassi to again explore the possibility of a Septic Social in Sudbury.

• Love Your Lake: Linda followed up with Lana on the Love Your Lake – Healthy Shorelines for Healthy Lakes, who shortly after presented to GSWA.

2. Discretionary and/or Mandatory Septic Inspection

- SB's documentation didn't offer anything new to the picture.
- The Board of Health for the Sudbury and District Health Unit (SDHU) is the principle authority under the Ontario Building Code (OBC) for septic inspection see **Appendix 1**.
- SDHU carries out Mandatory Maintenance Inspection (MMI) identified by the Drinking Water Source Protection Committee, formed under the Clean Water Act.
- SDHU is firm that it will not offer mandatory or discretionary septic system inspections outside of the mandated Drinking Water Source Protection Area.
- Best strategy is to advocate directly to Ministry of Municipal Affairs and Housing.
- Stephen Monet presented to the Watershed Advisory Panel on 15 December 2016 regarding the pros/cons of a mandatory septic pump out program versus a mandatory septic re-inspection program see **Appendix 2**.

Models to Explore:

- Tiny Township Septic Re-inspection Program
- North Bay Sewage System Program

Action: Margaret will ask Stephen Monet at the next WAP:

- How many private septic systems are there in the City of Greater Sudbury?
- Where can we access the map showing all private septic systems?

3. Next Steps

- GSWA should focus on an educational program to raise an awareness of steps homeowners can take to ensure their septic system is working effectively, as well as other mitigation measures geared towards improved water quality.
- Arrange for keynote speaker for Science North (or other) event:
 - Troubleshooting/signs of septic system issues

- Proper maintenance
- Repair of faulty field beds
- Continue pursuing and gathering information on mandatory and discretionary septic inspection programs.
- Invite Richard Denton to join the PDWPC.
- 4. Next Meeting: Thursday, 18 January 2018 11:45 to 1:30. Venue to be determined.
- 5. Meeting Adjourned: 1:30 pm

Appendix 1

Board of Health

The Sudbury & District Board of Health is the governing body of the Sudbury & District Health Unit and is established by the provincial public health legislation, the <u>Health Protection and</u> <u>Promotion Act (HPPA, e-Laws Ontario)</u>, RSO 1990, and regulations. Boards of health are the governing body and policy maker of health units<mark>. Boards of health monitor all operations within their health unit and are accountable to the community and to the Ministry of Health and Long-Term Care.</mark>

O. Reg. 350/06: BUILDING CODE

under Building Code Act, 1992, S.O. 1992, c. 23

Section 1.7. Enforcement of the Provisions of the Act and Building Code Related to Sewage Systems

1.7.1. General

1.7.1.1. General

(1) Pursuant to subsection 3.1 (1) of the Act, the boards of health and conservation authorities listed in Column 1 of Table 1.7.1.1. shall enforce the provisions of the Act and the *building code* related to *sewage systems* in the *municipalities* and the territory without municipal organization described in Column 2 of Table 1.7.1.1.

Table 1.7.1.1.Enforcement of the provisions of the Act and the Building Code Related
to Sewage Systems

Forming Part of Sentence 1.7.1.1.(1)

Column 1	Column 2
Board of Health or Conservation Authority	Geographic Area
Board of Health for the Sudbury and	All municipalities and territory without
District Health Unit	municipal organization located in the
	Sudbury and District Health Unit

Section 1.10. Sewage System Maintenance Inspection Programs

1.10.1. Discretionary Maintenance Inspection Programs

1.10.1.1. Scope

(1) This Subsection governs, for the purposes of subsection 34 (2.1) of the Act, *maintenance inspection programs* established under clause 7 (1) (b.1) of the Act in respect of sewage systems.

1.10.1.2. Application and Inspections

(1) A maintenance inspection program referred to in Sentence 1.10.1.1.(1) shall apply to all sewage systems in the area affected by the maintenance inspection program.

(2) A maintenance inspection program referred to in Sentence 1.10.1.1.(1) shall provide that, subject to Article 1.10.1.3., an inspector shall inspect all sewage systems affected by the maintenance inspection program for compliance with the standards prescribed under clause 34 (2) (b) of the Act in relation to sewage systems that are enforced by the program.

1.10.1.3. Certificate as Alternative to Maintenance Inspection

(1) A *principal authority* that establishes a *maintenance inspection program* in respect of *sewage systems* may, as an alternative to conducting an inspection of a *sewage system* required under Sentence 1.10.1.2.(2) accept a certificate described in Sentence (2) from the owner of the property on which the *sewage system* is located.

(2) The certificate referred to in Sentence (1) shall,

(a) be in a form approved by the Minister,

(b) be signed by a person described in Sentence (3), and

(c) confirm that the person,

(i) has conducted an inspection of the sewage system to which the certificate relates, and

(ii) is satisfied on reasonable grounds that, on the date on which the certificate is signed, the *sewage system* to which the certificate relates is in compliance with the standards prescribed under clause 34 (2) (b) of the Act in relation to *sewage systems* that are enforced by the *maintenance inspection program*.

(3) Subject to Sentence (4), the following persons are authorized to sign a certificate referred to in Sentence (1):

(a) a person registered under Article 3.2.4.2. in the class of registration set out in Column 2 of Row 10 of Table 3.5.2.1.,

(b) a person registered under Article 3.3.3.2.,

(c) an architect,

(d) a professional engineer.

(4) A person shall not sign a certificate referred to in Sentence (1) if the person would be in a conflict of interest.

(5) For the purposes of Sentence (4), a person would be in a conflict of interest if the person, or an officer, director, partner or employee of the person (where the person is a corporation or partnership), or any person engaged by the person to perform functions for the person,

(a) has participated or participates, in any capacity, in *design activities* or *construction* relating to any part of the *sewage system* to which the certificate relates,

(b) is or has been employed within the previous 180 days by a person who carried out *design activities* or *construction* relating to any part of the *sewage system* to which the certificate relates,

(c) has a professional or financial interest in,

(i) the *construction* of the *sewage system* to which the certificate relates,

(ii) the sewage system to which the certificate relates, or

(iii) the person responsible for the design of the *sewage system* to which the certificate relates, or

(d) is an elected official, officer or employee of a *principal authority*.

1.10.2. Mandatory Maintenance Inspection Program

1.10.2.1. Scope

 (1) This Subsection establishes and governs, for the purposes of subsection 34 (2.2) of the Act, a *maintenance inspection program* in respect of standards prescribed under clause 34
 (2) (b) of the Act in relation to *sewage systems*.

1.10.2.2. Administration of Maintenance Inspection Program

(1) The *principal authority* that has jurisdiction in an area affected by the *maintenance inspection program* established under Sentence 1.10.2.3.(1) shall administer the program for that area and shall conduct inspections under the program in accordance with this Subsection.

1.10.2.3. Maintenance Inspection Program

(1) Subject to Article 1.10.2.5., an *inspector* shall inspect all *sewage systems* located in whole or in part in the areas set out in Sentence (2) for compliance with the requirements of Section 8.9. of Division B.

(2) The areas referred to in Sentence (1) are:

(a) the strip of land that is located along the *Lake Simcoe shoreline* and that is 100 m wide measured horizontally and perpendicular to and upland from the *Lake Simcoe shoreline*, except for the portions of the strip of land that are described in Sentence (3), and

Note: On January 1, 2016, Sentence (2) is amended by striking out "and" at the end of Clause (a) and by adding the following Clauses:

(a.1) portions of the strip of land along the Lake Simcoe shoreline described in Sentence (3),

(a.2) the strip of land that is located along each of the following rivers, streams, lakes or ponds and that is 100 m wide measured horizontally and perpendicular to and upland from the river, stream, lake or pond,

(i) any river or stream in the Lake Simcoe watershed that continually flows in an average year,

(ii) any lake or pond in the *Lake Simcoe watershed* that is connected on the surface to a river or stream described in Subclause (i), and

(iii) any other lake or pond in the *Lake Simcoe watershed* that has a surface area greater than 8 hectares, and

See: O. Reg. 315/10, ss. 3 (2), 7 (2).

(b) areas within a *vulnerable area* that are located in a *source protection area* and that are identified in the most recent of the following documents as the areas where an activity described in Sentence (4) is or would be a *significant drinking water threat*:

(i) the assessment report for the *source protection area*, as initially approved under the *Clean Water Act, 2006* or as most recently approved following any updating under that Act, or

(ii) the *source protection plan* for the *source protection area*, as initially approved under the *Clean Water Act, 2006* or as most recently approved following any amendments or reviews under that Act.

(3) The excepted portions of the strip of land along the *Lake Simcoe shoreline* referred to in Clause (2)(a) are:

(a) that portion of the strip of land in the geographic Township of Oro, now in the municipal Township of Oro-Medonte, in the County of Simcoe, and in the geographic Townships of Innisfil and Vespra, now in the City of Barrie, being bounded on the north by the east limit of Lot 1, Concession 1 East Penetanguishene Road of the said geographic Township of Oro and its southerly prolongation and on the south by the east limit of Lot 14, Concession 13 of the said geographic Township of Innisfil and its northerly prolongation,

(b) that portion of the strip of land in the geographic Townships of North Gwillimbury and Georgina, now in the Town of Georgina, and in the geographic Township of East Gwillimbury, now in the Town of East Gwillimbury, all in The Regional Municipality of York, being bounded on the west by the west limit of Lot 6, Concession 1 of the said geographic Township of North Gwillimbury and its northerly prolongation and on the east by the east limit of Lot 3, Concession 8 of the said geographic Township of Georgina and its northerly prolongation, and

(c) that portion of the strip of land in the geographic Township of Mara, now in the municipal Township of Ramara, in the County of Simcoe, and in the geographic Township of Thorah, now in the municipal Township of Brock, in The Regional Municipality of Durham, being bounded on the north by the west limit of Lot 13, Concession C of the said geographic Township of Mara and its southerly prolongation and on the south by the west limit of Lot 14, Concession 6 of the said geographic Township of Thorah and its northerly prolongation.

(4) The activity referred to in Clause (2)(b) is an activity that is subject to the Act and that is described in paragraph 2 of subsection 1.1 (1) of Ontario Regulation 287/07 (General) made under the *Clean Water Act, 2006*.

1.10.2.4. Time Periods for Maintenance Inspections

(1) An inspection required under Sentence 1.10.2.3.(1) shall be conducted in respect of a *sewage system* in an area described in Clause 1.10.2.3.(2)(a),

(a) initially, no later than,

(i) January 1, 2016, in the case of a sewage system constructed before January 1, 2011, or

(ii) five years after the *construction* of the *sewage system*, in the case of a *sewage system constructed* on or after January 1, 2011, and

(b) thereafter, every five years after the most recent inspection of the *sewage system* has been conducted.

Note: On January 1, 2016, Article 1.10.2.4. is amended by adding the following Sentence:

(1.1) An inspection required under Sentence 1.10.2.3.(1) shall be conducted in respect of a *sewage system* in an area described in Clause 1.10.2.3.(2)(a.1) or (a.2),

(a) initially, no later than,

(i) January 1, 2021, in the case of a sewage system constructed before January 1, 2016, or

(ii) five years after the *construction* of the *sewage system*, in the case of a *sewage system constructed* on or after January 1, 2016, and

(b) thereafter, every five years after the most recent inspection of the *sewage system* has been conducted.

See: O. Reg. 315/10, ss. 3 (3), 7 (2).

(2) An inspection required under Sentence 1.10.2.3.(1) shall be conducted in respect of a sewage system in an area affected by a significant drinking water threat,

(a) initially, no later than,

(i) five years after the date on which notice of the approval of one of the following documents is published on the environmental registry under the *Clean Water Act, 2006*, in the case of a *sewage system constructed* before the date of publication,

(A) the assessment report for the *source protection area*, if the *source protection plan* is one prepared under section 22 of the *Clean Water Act, 2006*, or

(B) the *source protection plan* for the *source protection area*, if the *source protection plan* is one prepared under section 26 or 33 of the *Clean Water Act, 2006*, or

(ii) five years after the *construction* of the *sewage system*, in the case of a *sewage system constructed* on or after the date of publication, and

(b) thereafter, every five years after the most recent inspection of the *sewage system* has been conducted.

(3) If additional areas affected by a significant drinking water threat are identified for a source protection area after the date of publication referred to in Clause (2)(a), an inspection

required under Sentence 1.10.2.3.(1) shall be conducted in respect of a *sewage system* in those additional areas,

(a) initially, no later than,

(i) five years after the following date of approval or publication, as applicable, in the case of a *sewage system constructed* before that date,

(A) the date of approval under section 19 of the *Clean Water Act, 2006* of the updated assessment report in which the additional areas are identified, or

(B) the date of publication on the environmental registry under the *Clean Water Act, 2006* of notice of the approval of the amended or updated *source protection plan* in which the additional areas are identified, or

(ii) five years after the *construction* of the *sewage system*, in the case of a *sewage system constructed* on or after the date of approval or publication, as applicable, and

(b) thereafter, every five years after the most recent inspection of the *sewage system* has been conducted.

1.10.2.5. Certificate as Alternative to Maintenance Inspection

(1) The *principal authority* that administers the *maintenance inspection program* established under Sentence 1.10.2.3.(1), may, as an alternative to conducting an inspection of a *sewage system* required under Sentence 1.10.2.3.(1), accept a certificate described in Sentence (2) from the owner of the property on which the *sewage system* is located.

(2) The certificate required by Sentence (1) shall satisfy the requirements of Sentence 1.10.1.3.(2) and for these purposes Sentences 1.10.1.3.(3) to (5) apply with necessary modifications.

O. Reg. 350/06, Division C, Part 1; O. Reg. 423/06, s. 2; O. Reg. 137/07, ss. 73-75; O. Reg. 503/09, ss. 220-230; O. Reg. 315/10, ss. 2, 3 (1).

Appendix 2

Excerpt from 15 December 2016 WAP Draft Meeting Notes:

Pros & Cons of a mandatory septic pump out vs. mandatory septic re-inspection program:

- Stephen Monet explained the need to discuss the relative merits of a mandatory septic system pump out program versus a mandatory septic system re-inspection program. The Sudbury & District Health Unit (SDHU) is the principal authority in our area with full responsibilities of Part 8 of the Ontario Building Code. The SDHU have indicated in the past that they would not be initiating a septic system re-inspection program other than that required by the Greater Sudbury Source Protection Plan. It seemed appropriate at this time to explore another option that would serve to systematically assess septic systems in the City. Although not without its challenges, a mandatory septic system pump out program might provide a level playing field for all residences not connected to municipal wastewater services. It is also important to more fully understand what is involved in a septic system re-inspection and explore the trade-offs and similarities of a mandatory septic system pump out program.
- Stephen Monet provided an overview of the Ministry of Municipal Affairs and Housing (MMAH) septic system re-inspection guidelines. Principal Authorities (can be municipalities, health units or conservation authorities depending on the area) have considerable flexibility in how the re-inspections are undertaken. These inspections can involve visual assessments of the tile bed and covered septic tank only or can request the homeowner to remove the cover of the septic tank in advance to allow the inspector to assess the condition of the inside of the tank and depth of sludge layer.

Some inspections require the septic tank to be pumped prior to inspection. Others involve up to two phases: a visual inspection of the tile field and covered tank first and, if remedial actions or further investigations are required, a second, more detailed involved inspection is conducted. Septic system re-inspections generally cost a homeowner between \$120 and \$150. The frequency of the re-inspections is at the discretion of the principle authority but are generally conducted every three years for permanent residences and every five years for seasonal ones. A 2011 MMAH document entitled "On-Site Sewage System Maintenance Inspections" can be found downloaded from: http://www.mah.gov.on.ca/Asset9158.aspx.

The specific case of Wellington County was presented based on a report prepared by • WSP, the firm that is contracted in that municipality to administer and undertake the septic system re-inspections. In that municipality, homeowners are issued a certificate if no visible indications of an unsafe sewage system are noticed following a visual inspection and an inspection of the uncovered septic tank. If remedial actions are required, homeowners receive a letter outlining the remedial actions that need to be acted on within a certain time frame. WSP reports that in 2015, of the 428 systems inspected, a total of 86 remedial action letters were issued representing 20% of the total number of systems inspected. This percentage falls within the general range of 20% to 25% for remedial action requirements following re-inspections as reported in other jurisdictions. WSP further reports that a total of 83% of the remedial actions are associated with regular maintenance issues (i.e., septic tanks requiring pump outs or entering into service agreements with haulers for holding tanks or with installers for tertiary treatment systems. Seventeen percent of the remedial actions may result in more substantial studies, repairs or replacements. Again, these percentages are within the typical range of those reported in other jurisdictions. The WSP report can be

downloaded from: http://wellingtonwater.ca/wp-content/uploads/2015/06/WSPSeptic-Socials-2016.pdf.

• A mandatory septic system pump out program could be evaluated as an alternative to a mandatory septic system re-inspection program. The municipalities of North Bay, Callander, and East Ferris currently have by-laws for mandatory septic pump outs.

A consideration would need to be whether the program would apply area-wide or to specific, high risk areas. Haulers are currently required to fill out a manifest when bringing material to the biosolids plant. The manifest contains, among other information, the address of the residence where sewage was pumped as well as whether the inside of the tank was 'good' or 'poor'. By the nature of their work, haulers are assessing, at a certain level, the proper functioning of the septic system that they are pumping out. There is the potential for additional information to be included on the manifest. A mandatory septic pump out program would not result in extra inspection costs to the homeowners since pump outs should be done routinely to maintain a septic system in proper working order. Given that haulers are required to provide a manifest, homeowners would not need to show proof that their septic system was pumped.

- During the discussion, the SDHU staff stated that a septic system pump out is beneficial to the effective lifespan of a septic system. In their opinion, whether a system is pumped out or not does not have any effect on the amount of nutrients that will enter the lake; all of the phosphorus and nitrogen present in the system will eventually reach the lake although it is possible that the nature of soils present in Greater Sudbury may effectively and permanently immobilize phosphorus near the tile fields. This possibility was also echoed by Ed Snucins based on advice from an academic researcher in the field (Dr. Will Robertson, University of Waterloo).
- Jeff Huska stated that a pump out program would not be as effective as a re-inspection
 program unless the hauler is given authority to ensure that any remedial actions are
 followed through within a reasonable time frame. This would not likely happen as this is
 not the haulers role. SDHU staff also expressed that the hauler may be in a conflict as
 they may lose business if they report system malfunctions. It is the duty of a hauler,
 however, to report a failed system wherein sewage is present on the ground. SDHU staff
 stated that sewage on the ground would not be tolerated by either the homeowner or
 by neighbours and would be reported to the SDHU anyhow.
- SDHU staff advised that many inspection programs are voluntary. The goals of a mandatory septic pump out program would need to be elaborated prior to program initiation. Also, the administrators of the program would need to determine which properties have septic systems. Finally, SDHU staff advised that the City may not have the legal authority to pass a by-law for a mandatory septic system pump out program since, in this geographic area, the SDHU is designated the principal authority by the Province.
- SDHU stated that if a person reported that a neighbour had a failed system, the person's name could not be discovered through another person applying for a Freedom of Information request. The SDHU does follow-up on anonymous complaints, however, once the complaint is given, SDHU staff cannot follow-up if additional information or questions arise.
- **ACTION:** Stephen Monet is tasked with identifying the number of properties that are serviced by private sewage systems in Greater Sudbury.