



STAFF REPORT

File No. SPC Report-14/11

Date: May 9, 2011

To: Source Protection Committee

From: Andrew Doiron, Source Protection Planning Coordinator

RE: Draft Policy Wordings – Sewage Systems

Draft policy wordings to address the significant drinking water threats related to sewage systems (i.e. “the establishment, operation or maintenance of a system that collects, stores, transmits, or disposes of sewage”) have been reviewed by the municipal working groups.

The wordings have been updated to reflect the comments where appropriate. The intent, rationale, policy text, and any outstanding issues related to the policy wordings for this drinking water threat are attached.

Staff Recommendation:

Approve the attached policies for pre-consultation.

Policy 2-1: Inspection of Residential On-site Sewage Systems (i.e. <10,000L)

Intent: Support the mandatory sewage maintenance inspection program required by the recent Building Code amendment by requiring the Principal Authority for that program to report annually to the Source Protection Committee.

Rationale: Inspection of on-site sewage systems with a daily flow of 10,000 L/day or less that are located in vulnerable areas is now a legislated requirement of the Principal Authority (municipality, Health Unit, Conservation Authority, planning board, or Crown, as applicable). Inspections must be carried out within five years of the approval of the Source Protection Plan and every five years thereafter. The inspector has authority under the *Building Code Act, 1992* to issue orders for the maintenance, replacement, or upgrading of a system that is not functioning as designed. This policy provides the Source Protection Committee with documentation to track the ongoing implementation of this program.

Policy Text: Where a sewage system as defined in section 1 of O. Reg. 350/06 (Building Code) made under the *Building Code Act, 1992* has been identified as a significant drinking water threat in the Assessment Report:

- a) The Principal Authority as defined in Section 1.(1) of the *Building Code Act, 1992* will report annually to the Source Protection Committee on the implementation of the mandatory maintenance inspection program. The report must include the following minimum information:
 - i) The number of inspections carried out under the maintenance inspection program during the reporting year;
 - ii) The number of inspections that were not compliant with the septic inspection guideline; and
 - iii) For the properties identified in (ii), a description of the deficiencies in the system, the orders issued by the inspector, and any follow-up with the system owner.

Outstanding Comments:

- Policy will need to be revisited once the septic inspection program guidelines are available
- There may not be sufficient capacity at the municipal or health unit level to implement the mandatory inspection program

Policy 2-2: Review of Existing Certificates of Approval for Sewage Systems (i.e. >10,000L)

Intent: Require the Ministry of the Environment to review existing Certificates of Approval for sewage systems that are regulated by the Ontario Water Resources Act (i.e. flow of 10,000L/day or greater). Further, the policy requires the MOE to circulate monitoring data on an ongoing basis and to report annually to the Source Protection Committee.

Rationale: Sewage systems with a flow of greater than 10,000L/day are managed by the existing approvals process. Requiring the issuer to review existing Certificates of Approval and to consider the issuance of future Certificates of Approval in light of the requirements of the Clean Water Act will serve to ensure that these activities do not result in significant drinking water threats. Further, the Part IV tools of the *Clean Water Act* cannot be used to address this threat.

Policy Text: **Existing Certificates of Approval**

Where a sewage works as defined in section 1 of the *Ontario Water Resources Act* that requires a Certificate of Approval is identified as a significant drinking water threat in the Assessment Report:

- a) The Ministry of the Environment will:
- i) Review any existing Certificate of Approval within one year to determine if it is adequate to ensure that the activity is not a significant drinking water threat. If the Certificate of Approval is deemed to be inadequate for this purpose, it will be amended to include additional conditions that will ensure that the activity ceases to be a significant drinking water threat.
 - ii) Provide all monitoring data required by any Certificate of Approval to the Conservation Authority and municipality in which the sewage works is located as they become available; and
 - iii) Report annually to the Source Protection Committee on compliance with the conditions of any Certificates of Approval.

Future Certificates of Approval

Where a sewage works as defined in section 1 of the Ontario Water Resources Act that requires a Certificate of Approval is identified in the Assessment Report as an activity that would be a significant drinking water threat if it were established in the future:

- b) The Ministry of the Environment will:
- i) Ensure that any future Certificate of Approval contains conditions to ensure that the activity is not a significant drinking water threat and does not become a significant drinking water threat through expansion;
 - ii) Inform the affected municipality of any application for a Certificate of Approval for a sewage works; and
 - iii) Implement the requirements of subsections (a)(ii) and (iii).

Outstanding Comments:

- If a condition of the Certificate of Approval is changed such that the physical infrastructure must be upgraded or if significant new operational costs are imposed, the affordability of the facility could become a serious issue.
- There is no requirement for re-inspection of large systems as there is for small systems – consider making this a requirement of Certificates of Approval.

Policy 2-3: Education and Outreach Program for On-site Sewage System Owners

Intent: Supplement the existing septic system inspection requirements with a public education program.

Rationale: An education program will increase public awareness of the importance of maintaining their septic systems. This type of program may also increase public acceptance and facilitate the implementation of the mandatory septic system inspection program.

Policy Text: Where a sewage system as defined in section 1 of O. Reg. 350/06 (Building Code) made under the *Building Code Act, 1992* has been identified as a significant drinking water threat in the Assessment Report:

- a) Subject to (b), the Principal Authority as defined in Section 1.(1) of the *Building Code Act, 1992* will:
 - i) Develop and implement an education and outreach program for owners and operators of sewage systems within one year. The program will describe the mandatory requirements and best management practices for operation of the system, and can be harmonized with existing education and outreach programs where this would result in an increase in efficiency or cost-effectiveness; and
 - ii) Report annually on the activities undertaken as part of the education and outreach program defined in (a)(i) to the Source Protection Committee.
- b) The Principal Authority may enter into an agreement with a Conservation Authority or other party that identifies an alternate party that will undertake the requirements of (a) and (b).

Outstanding Comments:

- Add language to allow for cost recovery.

Policy 2-4: Connection to Municipal Sewage Collection Systems / Future Construction on Lots of Record

Intent: Require that properties with existing on-site systems connect to a municipal sewage collection system where feasible. Require that new lots and new construction on existing lots of record located in vulnerable areas connect to a municipal sewage collection system where feasible. Where this is not feasible, they will be required to install a tertiary on-site sewage treatment system.

Rationale: The outright prohibition of future septic systems may restrict development in some communities. This policy allows future development provided that new lots (or new construction on existing lots of record) are serviced by municipal sewage collection systems (where available) or by a more advanced sewage treatment system. Existing lots of record that currently have septic systems are addressed by the mandatory inspection program (Policy 2-1) and the public education program (Policy 2-3).

Policy Text: **Existing On-site Sewage Systems**

Where a sewage system as defined in section 1 of O. Reg. 350/06 (Building Code) made under the *Building Code Act, 1992* has been identified as a significant drinking water threat in the Assessment report:

- a) The municipality served by the drinking water system will amend their Official Plan and/or create a bylaw within one year to require that the affected properties connect to a municipal sewage collection system where feasible.

Future On-site Sewage Systems

Where a sewage system as defined in section 1 of O. Reg. 350/06 (Building Code) made under the *Building Code Act, 1992* has been identified in the Assessment Report as an activity that would be a significant drinking water threat to a drinking water system if undertaken in the future:

- b) The municipality served by the drinking water system will amend their Official Plan and/or land use bylaw within one year to require that:
 - i) Where connection to a municipal sewage collection system is feasible, new lots and construction on existing lots of record will be serviced by a municipal sewage collection system; or
 - ii) Where connection to a municipal sewage collection system is not feasible, new lots and construction on existing lots of record will be serviced by a tertiary on-site sewage disposal system.

Outstanding Comments:

- Consider prohibiting new lot creation where a connection to a municipal collection system is not feasible.

Policy 2-5: Wastewater collection facilities excluding storage (i.e. sewer pipes)

Intent: Ensure that sewage pipes in vulnerable areas are prioritized for maintenance and there are sufficient emergency response measures in place to respond to a system failure that could result in a contamination event. Further, any sewage pipes installed in the future must be constructed to a set of enhanced standards.

Rationale: It would not be feasible to remove existing infrastructure. It was also felt that sewage infrastructure is already well regulated through the existing approvals process. It was felt that **existing** occurrences of this threat could be adequately managed by ensuring that sewage collection infrastructure in vulnerable areas is given priority in asset management activities and that sufficient emergency response measures are in place to respond to a system failure. As Part IV tools cannot be used for this threat, it was felt that the best way to manage future instances of this threat are by ensuring that any future of sewage infrastructure that could be a drinking water threat is constructed to enhanced standards.

Policy Text: ***Existing Sewage Systems***

Where a wastewater collection facility that collects or transmits sewage containing human waste, excluding any part of the facility that is a sewage storage tank or works used to carry out a designed bypass, has been identified as a significant drinking water threat in the Assessment Report:

- a) Within two years, the municipality that owns the system will ensure that there is an emergency response plan in place that is suitable to respond to a system failure that could result in the introduction of pathogens into surface water.
- b) The municipality that owns the system will report annually to the Source Protection Committee on activities related to the emergency response plan. Reporting can include, but is not limited to:
 - i) Updates or amendments to the plan
 - ii) Summary of training undertaken in support of the plan
 - iii) Summary of incidents that required the use of the of the emergency response plan
- c) The municipality that owns the system will prioritize any maintenance and asset management activities to ensure that facilities located in vulnerable areas are given adequate priority.

Future Sewage Systems

Where a wastewater collection facility that collects or transmits sewage containing human waste, excluding any part of the facility that is a sewage storage tank or works used to carry out a designed bypass, has been identified in the Assessment Report as an activity that would be a significant drinking water if it were undertaken in the future:

- d) The municipality that owns the system will amend their Official Plan and/or or create a bylaw to require that any sewage infrastructure complies with construction standards that will ensure that the activity is not a significant drinking water threat.

Outstanding Comments:

- Consider use of development services standards or a water/wastewater bylaw

Policy 2-6: Discharge of untreated stormwater from a stormwater management facility

Intent: Require the issuer of Certificates of Approval for stormwater management facilities to provide any related monitoring data to the Conservation Authority and municipality on an ongoing basis, and to report annually to the Source Protection Committee on compliance with the conditions of Certificates of Approval. Further, the policy also requires that any Certificates of Approval issued in the **future** contain similar conditions and reporting requirements.

Rationale: Stormwater management facilities regulated under the *Ontario Water Resources Act* are managed by the existing approvals process. Requiring the issuer to review the **existing** Certificate of Approval (there is only one, in this case) and to consider the issuance of **future** Certificates of Approval in light of the requirements of the *Clean Water Act* will serve to ensure that these activities do not result in significant drinking water threats. Further, the Part IV tools of the *Clean Water Act* cannot be used to address this threat.

Policy Text: Where the discharge of untreated stormwater from a stormwater management facility as defined in section 1 of O. Reg. 525/98 (Approval Exemptions) made under the *Ontario Water Resources Act* is identified as a significant drinking water threat in the Assessment Report:

- a) The Ministry of the Environment will:
 - i) Review the Certificate of Approval for the stormwater management facility within one year to determine if it is adequate to ensure that the activity is not a significant drinking water threat. If the Certificate of Approval is deemed to be inadequate for this purpose, it will be amended to include additional conditions that will ensure that the activity ceases to be a significant drinking water threat.
 - ii) Provide all monitoring data required by the Certificate of Approval for the stormwater management facility to the Conservation Authority and municipality in which the system is located as they become available; and
 - iii) Report annually to the Source Protection Committee on compliance with the conditions of the Certificate of Approval for the stormwater management facility.
- b) The municipality in which the system is located will:
 - i) Develop and implement a stormwater management facility maintenance program within two years. The program will require regular inspection of stormwater management facilities to ensure that they are being sufficiently maintained such that the facility is not a significant drinking water threat.

Outstanding Comments:

- Consider requiring operational and maintenance requirements for Certificates of Approval
- Some municipalities may not have the capacity or expertise to develop a maintenance program

Policy 2-7: Prohibitions of Future Activities (refers to policies 2-8 through 2-12)

Intent: Use planning tools to ensure that future sewage systems that are not currently identified as significant drinking water threats are not allowed in the future.

Rationale: Sewage systems cannot be prohibited under Section 57 of the *Clean Water Act*. Use of planning tools is the only approach available to discourage the establishment of these activities in the future.

Policy Text: Where any of the following activities is identified in the Assessment Report as a significant threat that may occur in the future, any Municipality in which the threat is so identified will amend their Official Plan and/or create a bylaw within two years to ensure that they are prohibited in the future:

- a) The system is a combined sewer that may discharge sanitary sewage containing human waste to surface water.
- b) A sewage system that discharges to surface water and has as its primary function the collection, transmission or treatment of industrial sewage;
- c) A treatment tank or storage tank that is part of a sewage works within the meaning of the *Ontario Water Resources Act*, the tank treats or stores sanitary sewage containing human waste;
- d) A wastewater treatment facility that may discharge sanitary sewage containing human waste to surface water by way of a designed bypass.
- e) A wastewater treatment facility that discharges to surface water through a means other than a designed bypass.

Outstanding Comments:

- Policy does not address future occurrences of threats that are not currently identified as significant drinking water threats in the Assessment Report (*i.e. expand to include all future sewage systems that could be significant drinking water threats?*)
- It was suggested that Official Plans and land use bylaws may not be suited to handle these threats (*i.e. consider site plan control, sewer use bylaw, or site alteration bylaw*).