

## Thames – Sydenham and Region Drinking Water Source Protection Source Protection Committee Discussion Paper

**Report to** Chair and members  
Thames – Sydenham and Region  
Source Protection Committee

**Agenda #** 2011.05.7f.

**Cc** SP Management Committee

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**Re:** Source Protection Plan policy principles

### **Background**

The Thames-Sydenham Source Protection Committee engaged in several discussions around principles to guide decisions made by the SPC. In the development of the Terms of Reference and the Assessment Report, the Thames-Sydenham SPC guiding principles were developed as follows:

- Fair and reasonable solutions
- Consensus within our diverse area group
- Clarity of information
- Open communication
- Respecting diversity of opinion

The development of the Source Protection Plan (SPP) required further consideration of policy development guiding principles and evaluation criteria. Using established principles will aid the Thames-Sydenham SPC to meet the following SPP objectives as required under the CWA:

- Protect existing and future drinking water sources;
- Ensure that activities identified as *significant drinking water threats* either never become a threat or, if the activity is already taking place, the activity ceases to be a *significant* threat.

### **Source Protection Plan preparation principles**

In autumn 2010, the Thames Sydenham Source Protection Committee agreed upon the following principles in response to proposed questions about the Source Protection Plan.

- 1 Can education and outreach programs fit into the policies for protecting drinking water sources?
  - May be used to effectively reduce significant drinking water threats.
  - Required in all cases to compliment incentives and regulatory approaches.

- Regulation without education would be ineffective.
  - Incentives without promotion of the programs and supporting education would be ineffective.
- 2 How important is consistency and collaboration?
    - Policies need to be specific to the local situations
    - The Source Protection Committee should strive for policies which are consistent across the SPR.
    - General policies allow for flexibility for the various municipal tiers in applying the specifics.
    - Specific policies would reduce the local flexibility in the implementation of the policies.
    - In the development of policies it is very important to collaborate with MOE, other SPRs, municipalities, First Nations and stakeholders to maximize effectiveness and efficiency, and minimize duplication.
  - 3 How will existing efforts to manage the risks be considered in the development of policies?
    - Preference for existing measures over new;
    - Use of prescribed instruments preferred;
    - Develop new approaches where existing seen as ineffective;
    - Fine tune existing programs/measures rather than develop new initiatives;
    - When developing new policies, take from approaches proven to be effective elsewhere.
  - 4 How can Risk Management Plans be specified in the SPP?
    - General reference which leaves RMP details to a Risk Management Official based on the Risk Management Catalogue.
    - Very specific RMP policies to include allowable Risk Management tools or specifications.
    - The SPC can re-evaluate RMP policies after seeing how implementation unfolds through monitoring and reporting.
    - RMP should only be considered if less regulatory measures will not work to mitigate the risks of existing and future uses.
    - RMP should only be considered for existing threats; more restrictive controls should be used for future threats.
  - 5 How would the Source Protection Committee prefer to consider the prohibition of an activity?
    - Rely on voluntary approaches as much as possible.
    - Prohibit for future activities only.
    - Prohibit for existing activities only when all other measures fail to address risk of significant threat.
    - Prohibiting activities which are unlikely to occur is the preferred tool for dealing with these future threats.
    - Apply prohibition through land use planning as preferred tool.
  - 6 Will a more or less regulatory approach protect drinking water sources?
    - Non-regulatory approaches can be as effective in reducing the risk as regulatory approaches.
    - Incentive approaches are ineffective in reducing risks.

- Education programs are effective in reducing the risk to drinking water (refer to separate question on education programs).
  - Without adequate enforcement, regulatory policies will be ineffective.
  - There will always be a level of non-compliance in voluntary approaches that needs to be addressed through regulatory means.
- 7 Should water quantity policies be deferred until next SPP?
- Policies for threats to water quantity cannot be developed until technical work is developed and included in an Assessment Report.
- 8 How does the SPC want to address impacts of the policies in our SPP on others?
- Minimize fiscal, social, and economic impact to extent feasible on landowners, municipalities and other stakeholders.
  - Implementation costs should be a multi-partner responsibility.
  - Those engaged in activities which pose a risk to drinking water should be responsible for the cost of the risk reduction.
  - Those relying on the drinking water source should share in the costs of reducing the risks.
  - Fair and reasonable solutions are always preferred. (Already one of our guiding principles).
  - Engage those responsible for policy implementation in policy development process.
  - Engage those whose activities will be affected by the policies where possible.
- 9 How does the SPC want to address the various threats in the range of vulnerable areas?
- Consider only mandatory policies to be included in the SPP such as significant threat and monitoring policies.
  - Consider policies related to moderate and low threats (e.g. education and outreach policies)
  - Address moderate and low threats only where they may become significant.
  - Consider optional policies related to spills, transportation corridors, and transport pathways.
  - Consider policies in HVAs and SGRAs including for drinking water systems not in the terms of reference.
- 10 How will the committee address meeting the objective, *to protect future and existing drinking water*, and effectively develop policies within the timelines as governed under the CWA?
- Keep focused on priorities as decided upon in framework and work plan (refer to framework discussion paper on setting priorities on policy development).
  - Develop a parking lot for items which are not mandatory and which cannot be addressed within the timeframe available to develop the first proposed SPP.
  - Support collaboration as much as possible.

## ***Source Protection Plan policy evaluation criteria***

The SPC also agreed to consider evaluation criteria when assessing the policy choices to be included in the Source Protection Plan. The following criteria were considered.

### *Economic criteria*

- Financial capacity:
  - The financial burden on the delivery agent to implement the policy
  - The effect on the person engaged in the activity
  - Comparison to requirements outside vulnerable areas
- Comparison of net costs to benefits
  - Direct and indirect financial costs and benefits for landowners, business operators, First Nations and municipalities. This would include the avoidance of future costs and the benefit of maintained or improved water quality.
  - Consideration of beneficiary and funder
- Monitoring requirements
  - The level of monitoring required to demonstrate the effectiveness of the policy
  - The administrative capacity of the delivery agent to implement the policy, including compliance monitoring.

### *Effectiveness criteria*

- Adequacy:
  - How adequate the policy will be to manage site specific activities or land uses that are or could be threats
- Timeliness:
  - How much time will be required to implement the policy and to address the threat in order to reduce the risk the threat poses to people and the environment

### *Appropriateness criteria*

- Consistency
  - How consistent the policy with those in neighbouring regions
  - Consistency within the municipality
  - Consistency with other policies within the region
  - Comparison with requirements outside of the vulnerable areas
- Scale
  - Is the scale of the policy suitable for the scale of the threat
- Community acceptance
  - The potential for the policy to be accepted by the community, to raise awareness and participation
  - Need to consider acceptance by both the users of the water and those who will be engaged in the activity

## **Source Protection Plan policy approaches concepts**

In April of 2011, the Thames Sydenham SPC, using the preparation principles, reviewed each policy tool/approach and came to general agreement on how each tool would be used in developing policies. The following table provides an outline of the SPC's choices, and will serve to provide a baseline for policies when they are developed on a threat by threat basis. There may be variation in policies once the specifics of each threat are considered.

Policy Tools/Approaches	Policy Concepts
Education and Outreach	<ul style="list-style-type: none"> <li>• Education and outreach policies should be included for all threats to complement incentive and regulatory approaches</li> <li>• Will incorporate source water messaging into existing education and outreach programs whenever possible</li> <li>• New education and outreach efforts may be necessary</li> <li>• Promote threat and/or industry specific known Best Management Practices that reduce risks to drinking water</li> </ul>
Incentive Programs	<ul style="list-style-type: none"> <li>• Policy should support existing incentive programs (e.g. EFP, Clean Water Program)</li> <li>• Incentive programs should continue to be supported on a long-term basis</li> <li>• Encourage/Recommend new incentives to reduce risk of significant threats (as identified in Assessment Reports)</li> <li>• Highly recommend that Ontario Drinking Water Stewardship Program continue to adequately fund risk mitigation practices for significant threats</li> </ul>
Land Use Planning	<ul style="list-style-type: none"> <li>• New land uses will be prohibited from locating in WHPA–A,B,C and IPZ-1 areas where they will be a significant threat</li> <li>• Expansions or replacements on existing significant threats will be permitted if the expansion allows for a reduction in risk over the existing.</li> <li>• Expansion of current land use will not be permitted if it becomes a significant threat unless the threat can be managed</li> <li>• Land use planning policies will include prohibiting future activities which are unlikely to occur in our SPR's vulnerable areas (e.g. aircraft de-icing)</li> </ul>
Prescribed Instruments	<ul style="list-style-type: none"> <li>• Prescribed Instruments, as an existing tool, will used as a first preference for managing the threat.</li> <li>• A particular prescribed instrument will be examined and amended by the issuing agency if necessary to ensure a particular activity ceases to be a significant threat.</li> <li>• Limitations of the Prescribed Instrument will be considered</li> </ul>

	<p>on a threat by threat basis.</p> <ul style="list-style-type: none"> <li>• If a prescribed instrument is determined not to mitigate the significant threat, an SPP policy may include details to change the prescribed instrument content.</li> </ul>
<p>Risk Management Plans (sec 58 Part IV)</p>	<ul style="list-style-type: none"> <li>• RMP shall generally be used to manage existing and expanding significant threats</li> <li>• RMP shall be used to manage future threats where the threat is an activity that cannot be prohibited under the land use planning tool</li> <li>• Risk Management Plans must allow for the incorporation of new technologies and Best Management Practices as they arise</li> <li>• The RMP details will be left to a Risk Management Official to negotiate with the individuals/businesses engaged in a significant threat based on the techniques outlined in the Risk Management Catalogue. However, policy must allow for flexibility in risk management measures not highlighted in the RMC if they are deemed effective in managing the significant risk.</li> <li>• A policy should be written to direct the province to allow an individual or business to have someone they can consult with if negotiations with the RMO are not proceeding in a fair and reasonable manner.</li> <li>• If a prescribed instrument applies to a particular threat and is deemed effective in mitigating the significant risk, but does not apply to all individuals and/or businesses engaged in the significant risk activity, then a RMP will apply to those individuals/ businesses not covered under the prescribed instrument. The RMP in these instances must match the risk management measures outlined in the prescribed instrument.</li> <li>• Individuals and/or businesses subject to a RMP should have the ability to access expertise outside of the Risk Management Official.</li> </ul>
<p>Prohibition (sec 57 Part IV)</p>	<ul style="list-style-type: none"> <li>• Prohibit for existing activities only when all other measures fail to address risk of significant threat.</li> <li>• Apply prohibition for future threats through land use planning as preferred tool.</li> </ul>
<p>Restricted Land use (sec 59 Part IV)</p>	<ul style="list-style-type: none"> <li>• Links Prohibition (sec 57) or Risk Management Plans (sec 58) to land uses where the activities addressed by these policies could occur. Land uses named in policy must match the names that appear in local Official Plans or zoning by-laws.</li> <li>• When used in a SPP, applications under the Planning Act or Building Code within the designated land uses areas and</li> </ul>

	<p>related to activities that could be a significant threat would be subject to certain conditions</p> <ul style="list-style-type: none"> <li>● “screening tool” that provides municipalities with an administrative procedure to avoid inadvertently approving applications/ building permits for activities that would conflict with PART IV policies in the SPP.</li> <li>● Individuals/Businesses would need a notice from the municipality to proceed with an application.</li> </ul>
<p>Specify Action Tools</p> <ul style="list-style-type: none"> <li>- Land Securement</li> <li>- Establish Pilot projects</li> <li>- Govern Research</li> <li>- Municipal Act</li> <li>- Recommendations outside of prescribed instruments authority</li> </ul>	<ul style="list-style-type: none"> <li>● The information gleaned from innovative individuals, pilot projects and research should be passed on to decision makers and implementers as part of two way education.</li> <li>● Where timelines for inspections cannot be made under a prescribed instrument, these timelines will be highly recommended using a specify action approach.</li> <li>● The Municipal Act will be considered where it is the applicable enabling legislation on municipal implementation that does not fall under Land Use Planning.</li> <li>● Specify Action policies will be used to make recommendations that fall outside of the authority of one of the other tools and may be extended to include policies for moderate and low threats.</li> </ul>