



CTC SOURCE  
PROTECTION  
REGION



CTC SOURCE PROTECTION COMMITTEE

## Source Protection Committee Meeting #6/12

Chair: Susan Self

Tuesday October 23, 2012  
10:00 AM to 1:00 PM

Black Creek Pioneer Village, South Theatre  
1000 Murray Ross Pkwy  
Toronto, ON M3J 2P3

### AGENDA

1. BUSINESS ARISING FROM THE MINUTES (Approval of Minutes deferred to next meeting)
2. DISCLOSURE OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF
3. DELEGATIONS
4. PRESENTATIONS
5. CORRESPONDENCE
6. ITEMS FOR COMMITTEE ACTION
  - 6.1 Supplementary Letter to the Minister of the Environment 3
7. ITEMS FOR COMMITTEE INFORMATION
  - 7.1 Update to Credit Valley Source Protection Area Assessment Report 19

7.2 Submission of the CTC Proposed Protection Plan to the Minister of the Environment

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7.3 Verbal Update by Ministry of the Environment Liaison Officer

**8. NEW BUSINESS**

**Next meeting of the Source Protection Committee #7/12, will be held on Tuesday November 27, 2012, at 10:00 AM Black Creek Pioneer Village.**

Following the meeting there will be a photo session and lunch will be served.

/jm

## Item 6.1

TO: **Chair and Members of the Source Protection Committee  
Meeting #6/12, October 23, 2012**

FROM: **Susan Self, Chair, CTC SPC**

RE: **Supplementary Letter to the Minister of the Environment**

KEY ISSUE: CTC SPC approval of supplementary recommendations to Minister of the Environment that are beyond the scope of what can be included in the Source Protection Plan and Explanatory Document.

### **RECOMMENDATION**

**THAT the CTC SPC approves the supplementary recommendations found in Attachment 1;**

**AND FURTHER THAT the Chair be directed to send the letter (Attachment 1) and supplementary recommendations as approved, to Minister for his consideration when approving the CTC Source Protection Plan and in determining future improvements to the source protection program.**

### **BACKGROUND**

Following the approval of the Proposed Source Protection Plan policies by the CTC SPC at Meeting #5/12 held on August 14, 2012, staff prepared and distributed a first draft of the supplementary recommendations to be sent to the Minister of the Environment. This draft was sent to SPC members on August 21, 2012 with a request for comments to be sent by September 28, 2012 in order that the final draft could be brought forward for CTC SPC approval at meeting #6/12 to be held October 23, 2012. It is intended that the approved supplementary recommendations be sent to the Minister as soon as possible following submission of the Proposed Source Protection Plan to the Minister jointly by the three Source Protection Authorities.

During the development of the source protection plan policies, Ministry of the Environment staff have advised that matters which are considered "out of scope" for inclusion in the Plan or Explanatory Document, may be brought to the Minister's attention through a "supplementary" letter. The content of policies and the documents required pursuant to the *Clean Water Act, 2006* and associated regulations is very prescribed. The supplementary letter to the minister provides the SPC to raise any matters which they wish to bring forward.

The CTC SPC has already written to the Minister previously regarding Lake Ontario policies (reference Agenda Item 4.2 from Meeting #5/12). A reply was received from Maryanne Covelli, then Director of the Source Protection Programs Branch (reference Agenda Item 4.5 from Meeting #5/12). In reviewing comments and approving the policies, the SPC directed staff to keep some of the "out of scope" policies in the plan and also deal with the concern again in the correspondence to the Minister.

### **Supplementary Recommendations and Cover Letter**

The matters raised in the supplementary recommendations were prepared by staff based on notes and discussions with the CTC SPC during the preparation of and consultation on source protection plan policies. The main changes from the first draft are the inclusion of the Lake Ontario items and editing to more clearly set out recommendations (shown in bold) for each matter raised. Comments were received from SPC members Bob Burnside, Doug Brown, David Kentner, Jessica Ginsburg and Lynne Moore. In the case of the latter three members, an additional item and /or recommendation has been added based on input from each and shown highlighted in Attachment 1 to facilitate review and decision on inclusion by the CTC SPC.

The revised draft and covering letter has been reviewed by Chair Self.

### **Next Steps**

Staff will make any revisions as directed by the CTC SPC and provide the final letter and supplementary recommendations to Chair Self for final approval, signature and transmission to the Minister of the Environment as soon as possible. CTC SPC members will receive a copy as sent.

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**Date: October 15, 2012**

**Attachments: 2 - Cover letter and supplementary recommendations**

## **ATTACHMENT 1: Draft Letter to Minister**

October, 2012

The Hon. Jim Bradley  
Minister of the Environment  
11<sup>th</sup> Floor, Ferguson Block  
77 Wellesley Street West  
Toronto, Ontario, M7A 2T5

Dear Mr. Bradley:

I am writing as Chair on behalf of the CTC (Credit Valley, Toronto Region and Central Lake Ontario) Source Protection Committee (SPC) to provide you with the recommendations and advice of my Source Protection Committee which are supplementary to the proposed source protection plan policies. The CTC SPC at their Meeting #6/12 held on October 23, 2012 directed by Resolution A#### that this letter and Attachment be sent. The CTC Source Protection Plan covering our three source protection areas is being submitted to you jointly by the Credit Valley, Toronto and Region and Central Lake Ontario Source Protection Authorities for your approval.

The Attachment enclosed with this letter sets out a number of matters and recommendations which the CTC SPC encourages you to consider in both your review and approval of our Source Protection Plan and also in determining how to improve the source water protection process through implementation and future program improvements.

The members and myself have spent the last five years learning about the source water protection opportunities and challenges in our region. We have consulted extensively with municipal and economic sector representatives and landowners. We have also been very fortunate in having as some of our municipal committee members, senior municipal staff who have direct responsibility for water in the Regions of Peel, York and Durham and the City of Toronto who have shared their knowledge and expertise. The capacity and challenges to protect municipal drinking water in the CTC Source Protection Region are extremely varied. In addition the CTC Source Protection Region is covered in part by a number of other special area planning requirements: the Oak Ridges Moraine Conservation Plan, the Niagara Escarpment Plan, the Greenbelt Plan and Places to Grow Act.

In the southern portion bordering Lake Ontario we have the greatest population concentration in the province with large, sophisticated single tier and regional governments responsible for provision of water from Lake Ontario. In the northwest corner we have lower tier municipalities with small population and tax base that provide municipal water relying solely on wells. In some of these areas significant water quantity stress has been identified that affects the potential for servicing increased demand. And in the areas between, we have regional governments supplying water sourced from groundwater or a blended supply of water from wells and Lake Ontario.

Our SPC has been very active in reviewing and understanding the technical information and using this knowledge in recommending the policies and tools which we think are best suited to ensuring that existing and future activities cease to be or do not become significant drinking water threats. In the course of this work, we have found that the requirements of the *Clean Water Act, 2006* , associated regulations and technical rules do not always provide the flexibility to address the threats in our region. This is particularly the case with developing policies governing activities that pose drinking water threats in Lake Ontario, which is the single most important source of water in terms of the population served in Ontario. We have also found that there are and will be challenges to protecting groundwater where the Well-Head Protection Areas and Local Areas (related to water quantity stress) cross municipal and/or adjacent source protection region boundaries.

I trust that you and your staff will give careful consideration to both the Proposed Source Protection Plan and the recommendations in this Attachment. I would like to thank you for your attention to this matter and ongoing support from your staff in the development of source water protection plans. If you have any questions or concerns with these comments, please contact myself.

Yours respectfully,

Susan Self  
Chair, CTC Source Protection Committee

Attachment

cc: CTC SPC Members  
Lake Ontario Collaborative SPC Chairs and Project Managers  
Gerri Lynn O'Connor, Chair, Toronto and Region Source Protection Authority  
Pat Mullin, Chair, Credit Valley Source Protection Authority  
Pat Perkins, Chair, Central Lake Ontario Source Protection Authority  
Ling Mark, Director Source Protection Programs Branch

## **ATTACHMENT 2:**

### **Supplementary Information and Recommendations from the CTC SPC**

to the Proposed Source Protection Plan for the CTC Source Protection Region,  
Submitted October 22, 2012

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#### **Purpose**

This Attachment has been prepared by the CTC Source Protection Committee (SPC) to provide additional information and recommendations to supplement the Proposed Source Protection Plan. The Plan is being submitted October 22, 2012 jointly from the Chairs of the Toronto and Region, Credit Valley and Central Lake Ontario Source Protection Authorities to the Minister of the Environment for approval pursuant to the requirements of the *Clean Water Act, 2006* (the Act). The matters included in this Attachment are beyond the scope of the allowed content in a Source Protection Plan and Explanatory Document as prescribed under the Act and regulations. The CTC SPC encourages the Minister and staff to consider these matters in the review and approval of the Proposed Source Protection Plan and in determining future improvements to the development and implementation of the source water protection program.

#### **1) Lake Ontario Policies**

Through the consultation process on the draft policies, Ministry of the Environment staff has advised that a number of the proposed policies are considered to be “out of scope” for inclusion in a Source Protection Plan based on the Act and its regulations. These “out of scope” policies however have been identified as actions that are critical to achieving the objective of protecting Lake Ontario as a source of municipal drinking water. Accordingly, the CTC SPC chose to include these policies in the Proposed Plan to ensure that they are given serious consideration and if necessary that the Ministry determines how they could be implemented outside of the Act or amends the legislation or regulation so that they become “in scope”.

**The CTC SPC requests that the Ministry of the Environment considers future amendments to the *Clean Water Act* and regulations such that source protection plans could include a broader range of policies and measures necessary to protect the Great Lakes which are the single most important source of municipal drinking water in Ontario.**

The Lake Ontario policy recommendations that follow focus largely on the nearshore zone of Lake Ontario from the shoreline to approximately five kilometers offshore. The drinking water intakes along the north shore of Lake Ontario are all located within this zone which represents the primary source of drinking water for the majority of Ontario's population. The nearshore zone continues receive the discharge of contaminants from activities associated with urban, industrial and agricultural uses. These lands nearest Lake Ontario are also experiencing high levels of urban growth.

Based on identified threats, the CTC SPC is of the opinion that the proposed policies in the Source Protection Plan must be implemented to ensure that the activity ceases to be or does not become a significant drinking water threat. Recognizing that the significant threats identified are associated with potential spills from existing, critical industrial and municipal activities, the CTC SPC chose risk management rather than prohibition as the preferred approach. The threat activities identified are related to spills, not normal operation of the facilities. A critical element of the risk management activity following a spill is to know where the spill is going. The predictive modeling and in-line lake current monitors which are proposed would provide essential information that is needed for spill responders to take actions to ensure the threat ceases to be significant.

a) *Lake Ontario Modelling*

When the Act and regulations were initially introduced, the Great Lakes were not considered as at risk drinking water sources. The CTC municipalities who were part of the Lake Ontario Collaborative and CTC staff lobbied successfully to have the provisions amended to provide the opportunity to assess threats to drinking water systems sourced from Lake Ontario. Only through the spills modelling approach can a significant drinking water threat be identified to drinking water sourced in Lake Ontario. Due to the late inclusion of this provision, a full characterization of potential drinking water threats in the CTC for Lake Ontario based sources was not possible. Additional technical work is required. Further, for this work to be meaningful, it must be conducted on a broader scale than is possible at the municipal or source protection region level. The Lake Ontario Collaborative is a successful model of how the wider scale technical issues can be addressed by a group of municipalities, source protection authorities and technical experts from provincial and federal agencies. The one time technical studies funding provided by the Ministry of the Environment enabled the Lake Ontario Collaborative (LOC) to undertake meaningful work but that funding is now at an end which curtails the ongoing oversight and assessment of threats to Lake Ontario drinking water sources.

In addition, a centralized authority needs to maintain hydrodynamic modeling and other tools needed to forecast time of travel (from threat to intake), extent (duration), and estimated peak concentration (organism density, activity) at each potentially affected municipal water treatment plant intake. The MOE is the logical candidate to lead this modelling and ensure consistent application. The tool and results should be available to LOC member municipalities and responsible authorities for other threats to assist them in fulfilling their responsibilities. This on-going maintenance is also critical to ensuring that effective spill notification protocols are in place.

**The CTC SPC recommends that the Ministry of the Environment, in consultation with Environment Canada and the Source Protection Authority maintain and further develop the 3-D Hydrodynamic Circulation Model and in-lake monitoring capacity with particular focus on the near shore of Lake Ontario to determine which activities (existing or future) pose significant drinking water threats and to ensure such threat activities cease to be or do not become significant drinking water threats.**

b) *Pathogen Research*

The SPC strongly believes that further investigations are needed to understand risks to drinking water associated with pathogens in source water such as *Giardia* and *Cryptosporidium*. Wide-spread outbreaks of human disease associated with these pathogens in municipal drinking water have occurred in North America, including in other Great Lake areas. In response to a major incident in Milwaukee involving a large number of people who died or became ill because of *Cryptosporidium* in municipal drinking water, the US federal government required mandatory assessment by municipalities of source water to determine the incidence of these pathogens. Based on the assessment of risk, municipalities are required to implement specific measures to reduce the risk based on the source water characteristics.

**The CTC SPC recommends that the Ministry of the Environment, in consultation with Health Canada provide technical and financial support to the Lake Ontario Collaborative member municipalities to undertake a pathogen (not limited to E. coli) risk assessment.**

c) *Risk Assessment of Facilities Crossing Tributaries*

Through the spill scenario modelling approach to identify activities that could be drinking water threats, municipal and source protection authority staff became aware of a large number of pipe infrastructure (product pipelines, sanitary sewers) carrying large volumes of contaminants that would pose a threat to drinking water intakes in Lake Ontario if there were spills at tributary crossings. Most of this infrastructure is several decades old. Recently there have been instances of significant spills as a result of sewer breaks in the CTC and petroleum product pipelines elsewhere in North America. In addition, due to the increasing occurrence of localized intense storms and continuing urbanization upstream, a number of stream channels near Lake Ontario have been subject to erosion and change in channel location reducing cover over the pipes buried many years before in or adjacent to the channel. This results in the pipes becoming at greater risk for rupture.

**The CTC SPC recommends that the Ministry of the Environment compile an inventory of all pipe facilities which cross tributaries draining into Lake Ontario to further understand risks associated with pipe break scenarios and to provide information to Source Protection Authorities to update respective Assessment Reports and Source Protection Plans to ensure that policies are developed and implemented to ensure that any such activities cease to be or do not become significant drinking water threats.**

## **2) Water Quantity Policies**

### *a) Background*

The CTC SPC has developed the first policies to address significant drinking water quantity stress. The first Tier 3 Water Budget in the province was completed for municipal well water supplies serving the Towns of Orangeville , Mono and the Township of Amaranth in the south part of Dufferin County. The wells are located in the Credit Valley Source Protection Area (CTC Source Protection Region) but the vulnerable area extends into the Grand River Source Protection Area (Lake Erie Source Protection Region) and the Nottawasaga Source Protection Area (South Georgian Bay Lake Simcoe Source Protection Region). In addition to significant water quantity stress, some of these same wells serving the Town of Orangeville have sodium and chloride “Issues”. The Issue Contributing Areas partly overlay the water quantity stress area, also extending into the Townships of Amaranth and East Garafraxa and the Grand River Source Protection Area.

CTC SPC members and staff have held numerous meetings with the adjacent source protection region committee members and staff, and elected officials and staff of the municipalities to discuss policies during the development of the Plan. The CTC has also flowed funding (from provincial transfer payments) to the Townships of Amaranth and East Garafraxa to hire a planning consultant to review and advise municipal staffs and councils during the development and review of policies. This support was to ensure that these municipalities had the capacity to participate. Some of these water quantity policies have proven particularly contentious for the Townships of Amaranth and East Garafraxa and to a lesser extent for the Town of Mono. These municipalities surrounding the Town of Orangeville have expressed concern that they will be required to implement policies that benefit Orangeville and not themselves. While many matters have been resolved, there are still outstanding matters which the Ministry the Environment will need to address.

### *b) Issues*

1. Implementation of the policies in this vulnerable area will require that Amaranth and East Garafraxa in particular implement policies that affect their planned development of vacant lands identified in their current Official Plans. In the Township of Amaranth portions of the vulnerable areas overlay lands which have been designated for industrial development.

2. Amaranth and East Garafraxa are not planning to provide municipal drinking water services in their future development areas beyond a proposed well in Amaranth to service a new residential subdivision which was part of an Ontario Municipal Board decision. A Class Environmental Assessment is underway for this water system and an application for a Permit to Take Water will be submitted once the EA has been completed. The other development (industrial or residential) in these municipalities within the vulnerable area would be serviced from private systems. Water demand from such private systems has not been factored into the current stress assessments in the Tier 3 Water Budget.
3. Orangeville had an increased population target assigned under the *Places to Grow Act* in their Official Plan after the Tier 3 Water Budget water demand scenarios were assessed. Without additional water supplies and/or water conservation strategies to lessen demand, it is not likely that additional demand from increased population and other new demands from industrial, commercial and institutional uses can be met with the existing water supplies. There is minimal reserve capacity or redundancy in the current well systems in Orangeville. The Tier 3 study predicted significant stresses in meeting the current and committed demand to build out to the previous Official Plan growth targets.

**The CTC SPC recommends that the provincial Ministries of Environment (Drinking Water Management and Operations Divisions), Municipal Affairs and Housing (the Planning Approval Authority for Dufferin County municipalities) and Infrastructure (Growth Secretariat) work together with the above municipalities to find mutually beneficial solutions to these challenges and to ensure protection of sustainable municipal drinking water supplies for the current and future residents and other users and to protect ecological resources in this area. The Proposed Policy DEM-03 addresses this issue.**

*c) Out of Scope Policies*

The CTC SPC also wants to bring to your attention two water quantity policies which have not been included in our Proposed Source Protection Plan which were deemed by your Ministry staff in their review of the draft policies as being “out of scope”. The SPC is of the opinion that these two policies would provide protection to significant groundwater recharge areas which have been mapped as required under the Act but for which no policies can be proposed under the existing rules.

**The CTC SPC recommends that the Ministry considers how the intent of the following policies may be achieved through other means or in future source protection plan revisions.**

1. **Threat: An activity that reduces recharge to an aquifer**

**Research: Change in Impervious Cover**

**Where funding has been made available, the responsible Conservation Authority shall assess the change in recharge from existing, approved and planned land uses within the Local Area A (the area identified as having significant water quantity stress) and provide this data to MOE for their update of the Tier 3 water budget model.**

2. **Threat: Moderate/Low Threat An activity that reduces recharge to an aquifer**  
**Land Use Planning: Planning Policy for Protecting Low and Moderate Threats**  
**In accordance with Provincial Policy Statement (2005) Sec. 2.2, Planning Approval Authorities shall protect, improve or restore ground water quality and quantity outside Tier 3 Water Budget Local Areas identified as having significant water quantity threats by implementing necessary restrictions on development and site alteration to:**  
**i) protect Significant Groundwater Recharge Areas;**  
**ii) protect, improve, and restore vulnerable ground water, sensitive ground water features, and their hydrologic functions.**  
**Where policy applies: SGRAs (outside of Local Area A)**

3) **Water Quality Policies**

a) *Role of Provincial Ministries and Agencies in Protecting Source Water*

The CTC SPC has been disappointed that a number of ministries and agencies, in particular staff of the Ministries of Transportation, Consumer Services and the Technical Standards Safety Authority and Agriculture, Food and Rural Affairs have commented that they are not prepared or able to implement a number of important policies contained in the Proposed Source Protection Plan. Despite participating in meetings to discuss these concerns, in the end there has been little willingness on the part of these bodies to take new action or modify existing programs to implement the proposed policies. It is our opinion that the provincial government through discussions amongst ministers has to address this gap. As a result of the gap, additional responsibilities have been added to the risk management official through some of our policies in order to meet our requirement to propose policies to address significant drinking water threats.

**The CTC SPC encourages the Minister and staff to discuss at the earliest possible date with other provincial ministries the actions that can and should be taken under other legislation to implement source water protection as it is recognized that it may take some time to reach resolutions that would provide SPCs with more options for assigning implementation responsibilities in future source protection plan revisions.**

b) *Economic Costs and Benefits - Who Pays? Who Benefits?*

Throughout our consultations with municipalities and affected property owners a common concern has been expressed about the costs of implementing source protection policies and who should pay for these costs.

The CTC SPC is well aware that the province is still determining what funding support will be provided to the source water protection program in the future to fund the Ontario Drinking Water Stewardship program and Source Protection Authorities to carry out their regulatory tasks including the support of source protection committees and other provincial support.

We would recommend that decisions should be made on multi-year funding basis to provide both a clear signal of the province's commitment to municipalities and property owners and to permit Source Protection Authorities the ability to plan and retain the staff with the necessary experience and expertise required to ensure that the implementation phase of the program is successful. Provincial funding of the first round of Source Protection Plans has provided a solid basis for these policies.

**The CTC SPC recommends that the province commits funding on a multi-year basis to Source Protection Authorities to enable successful implementation of Source Protection Plans and to meet their regulatory obligations to the source water protection program.**

Many of our municipalities have expressed concern about the costs to implement and comply with source protection policies. While the municipality responsible for the provision of the municipal water system may recover costs for source water protection implementation and monitoring through municipal water rates, there is general reluctance for municipal councils to increase costs to their taxpayers. However, in a number of instances the municipalities that will need to implement policies are not those who are able to recover costs through municipal water rates. For example, the Town of Erin in the County of Wellington must implement policies to protect the Region of Halton's wells where the vulnerable areas extend into their municipality, but has no means to recover these costs from water users who are all located in Halton.

Likewise many of the property owners who will be required to comply with significant drinking water threat policies are not municipal water customers, but rely on their own private wells which may or may not also be protected by the actions taken. This is not intended to imply that there is a "right to pollute", but rather to try to strike a fair balance of costs and benefits.

**The CTC SPC recommends that the province, in consultation with the municipalities whose water systems are being protected should research and implement economic mechanisms to fund implementation of these policies, including the role that the Ontario Drinking Water Stewardship program could play. In particular attention should be given to recognize the source water protection benefits provided to others by landowners who are often in the agricultural sector.**

c) *Cross Boundary Policy Harmonization*

In developing these policies, CTC SPC members and staff held numerous workshops and meetings (details are found in the *Explanatory Document* which accompanies the Proposed Source Protection Plan) with municipal and industry staff and adjacent Source Protection Regions. Efforts have been made to harmonize these policies to the greatest extent possible with adjacent Source Protection Regions.

A number of municipalities have noted that there are some matters which could be better harmonized by the province developing and implementing some universal policies. In particular standardized definitions of what constitutes an “existing” or “future” threat, and transition policies. The CTC Proposed Source Protection Plan contains definitions for the foregoing that have been developed based on the input of members and considering proposals from adjacent source protection regions.

**The CTC SPC recommends that the Ministry reviews the definitions and transition policies proposed in the various source protection plans to inform the introduction of standardized wording to apply in all source protection plans across the province.**

The greatest degree of harmonization has been achieved with the South Georgian Bay Lake Simcoe Source Protection Region which has the longest boundary with the CTC. Through these efforts it has been apparent that each Source Protection Committee has carefully considered their local drinking water threats and selected policy approaches that in their opinion are appropriate to meet their regulatory obligation to protect existing and future sources of municipal drinking water. Despite these best efforts, not all municipalities who are in more than one Source Protection Regions are satisfied with the resulting policies and the differences amongst policies.

The Region of Halton staff has been particularly concerned about the CTC policies and has requested revisions to align with policies in the Halton Hamilton and Lake Erie Source Protection Regions. The CTC SPC has carefully considered these matters and tried to work with the adjacent SPRs to seek mutually satisfactory resolutions. The policies to protect the municipal drinking water wells in the Town of Halton Hills (Acton and Georgetown), operated by the Region of Halton have been developed in light of the particular vulnerability of these systems. The geological setting of these wells makes them very susceptible to both quality threats and quantity stresses (a Tier 3 Water Budget study is currently underway for these wells). A number of the wells have sodium and chloride “Issues” identified and one well has been identified with a nitrate “Issue”. The Region of Halton’s wells outside of the CTC have not had similar water quality and quantity threats identified in the respective Assessment Reports. It should also be noted that the current Official Plan for the Region of Halton has many more stringent land use policies prohibiting future development than those in the CTC Proposed Source Protection Plan.

**The CTC SPC recommends that the Ministry reviews all source protection plans for policy consistency and opportunities to introduce policy standardization to reduce confusion for municipalities in implementing policies. *Note this was added based on suggestions from Halton staff.***

d) *“Issues” and Issue Contributing Areas*

A number of wells in the north and west of the Credit Valley Source Protection Area have had “Issues” identified with various contaminants. During the assessment report preparation, additional work was undertaken to identify the sources of these contaminants to identify the Issue Contributing Areas (ICA). Except for the one well with a pathogen issue, the ICAs for the other wells have been delineated as the entire wellhead protection area including WHPA-E. Policies are proposed to continue research into the sources and extent of the area to be included in the ICA to inform future updates of the Source Protection Plan. Policies are proposed to prohibit future activities in the most vulnerable parts of these ICAs in a number of cases to be precautionary. In future plan updates these policies can be informed with the new information as the additional work is undertaken to refine the understanding of these issues.

**The CTC SPC recommends that the Ministry provides funding to Source Protection Authorities to conduct further evaluation of the sources, nature and location of activities which contribute to “Issues” to update the Assessment Report and Source Protection Plan so that the appropriate actions are implemented to ensure activities that contribute to the “Issue” cease to be or do not become significant drinking water threats.**

e) *Salt Threats*

The CTC SPC is concerned that the Ministry’s circumstances for identifying when there may be a significant salt threat are not sufficiently protective of groundwater. There are a number of wells in the CTC SPR that have “Issues” identified related to salt, yet none of these wells meet the threshold of road density for them to have a significant threat level in the absence of the rising salt levels being found in the wells. Additionally the MOE approach does not take into consideration the large amounts of salt that are applied to parking lots and sidewalks including on private, commercial or industrial properties.

It is doubtful that MOE’s approach to identify significant drinking water threats in fact captured the majority of instances in which salt application presents a risk to drinking water. As a result, few instances of salt application qualified as a threat anywhere in the CTC, even in densely populated urban areas where it is expected that salt application would be high. This makes it very difficult for an SPC to ensure that there are proactive policies proposed to protect against more “issues” in the future. Thus the MOE circumstances set an unreasonably high threshold.

**The CTC SPC recommends that the Ministry re-evaluates the circumstances in which salt application qualifies as a significant, moderate or low drinking water threat.**

f) *List of Pesticides which are Drinking Water Threats*

The CTC SPC agricultural representatives have raised a concern with the inclusion of the herbicide glyphosate (Roundup) in the list of pesticides which pose a drinking water threat. They have advised that the rationale their sector has received from Ministry staff for its inclusion on the list is solely due to the amount of this pesticide which is used in Ontario. They are of the opinion that due to the low risk to non-target receptors, glyphosate should not be included in the list of pesticides which pose a threat to drinking water. The reason large amounts of glyphosate are used is because it is much less toxic than other herbicides. Therefore pesticide applicators have replaced other herbicides which pose a greater threat to non-target receptors with glyphosate. There is also recognition that other more toxic, commonly used substances are not included on the list but perhaps should be.

**The CTC SPC recommends that the Ministry should review the criteria used to identify which specific pesticides pose a threat to drinking water to ensure they identify realistic threats and update the list of the Table of Threats by adding or deleting substances accordingly.**

g) *Out of Scope Policies*

The CTC SPC also wants to highlight and bring to your attention the following water quality policy which has not been included in our Proposed Plans which was deemed by your Ministry staff in their review of the draft policies as being "out of scope". The SPC feels that implementation of this policy would provide important information to aid the protection of drinking water quality.

**The CTC SPC recommends that the Ministry considers how the intent of the following policy may be achieved through other means or in future source protection plan revisions.**

The following is the draft proposed policy which has been removed from the Proposed Plan:

**Related to threats from stormwater management facilities: - "The MOE is encouraged to conduct research to identify risks from infiltration ponds into groundwater used for drinking water and to review contemporary technology for the design and operation of stormwater management facilities that can protect municipal drinking water systems with the goal of updating SWM Planning and Design Guidelines and the Table of Circumstances as appropriate".**

#### 4) Other Matters

The following section deals with important concerns that don't fall under the preceding three categories which the CTC wants to bring to the Minister's attention.

##### 1. *Emerging Issues*

Committee members are concerned that there is no clear process to ensure that new information (e.g. gathered from on-going Tier 3 water budget studies; when a new well or intake is brought on-line; or from new scientific research or monitoring showing changing trends in a contaminant) can be assessed to determine what changes are required in identifying new or updating vulnerable areas where policies will apply or determine if a new or amended Source Plan policy is required. In the CTC, only one Tier 3 water budget has been completed to date. There are two that are not yet finished, for the areas of Halton Hills and Whitchurch-Stouffville. When these Tier 3 water budgets are completed, there is the potential that any significant threats that are identified may not have policies implemented for an indeterminate period of time. Many of the CTC's water quantity policies are specific to the significant water quantity stresses in the Orangeville, Mono and Amaranth Tier 3 Water Budget Local Area. Each Tier 3 water budget identifies the site specific stresses based on the local ecosystem, water users and sensitivity to drought, unlike generic water quality threats.

The following policy has not been included in our Proposed Plan as it was deemed by your Ministry staff in their review of the draft policies as being "out of scope". The SPC feels that implementation of this policy would provide important information to aid the protection of drinking water sources.

**The CTC SPC recommends that the Ministry considers how the intent of the following policy may be achieved through other means or in future source protection plan revisions.**

The following is the draft proposed policy which has been removed from the Proposed Plan:

**Related to taking action upon identifying new or emerging "Issues" or significant drinking water threats: - "Where on-going scientific/technical assessment work identifies issues or SDWTs that are not addressed by policies in the most current version of the SPP, provincial ministries and/or municipal water providers are encouraged to take immediate action, as permitted, to ensure that the activity ceases to be or does not become a SDWT and to also refer the matter to the SPC for their assessment on the need to develop and consult on potential new policies to update the SPP".**

The following is being presented to the SPC for consideration and decision on whether to include. It is new material which has not been considered with a policy decision taken to date.

1. *Jessica Ginsburg has proposed the following recommendation to replace or amend the preceding recommendation:*

***As soon as additional water quantity threats are identified for Halton Hills and Whitchurch-Stouffville, targeted amendment processes for the ARs and SPPs should begin. In the meantime, immediate action should be taken to provide these areas with the equivalent protection to what is set out for the one completed tier 3 water budget area. This should include the incorporation of Tier 3 findings into the growth projections for these areas so that growth is not promoted unless it is possible to ensure protection of sustainable municipal drinking water supplies now and in the future, and to protect ecological resources in these areas.***

2. *Lynne Moore has proposed the following issue be included:*

*Locating New Wells*

*Within the CTC Source Protection Region a number of municipalities are planning to establish new municipal water supplies. In areas inside the Greenbelt Planning Area, new municipal supplies must be based on groundwater as bringing in lake-based supplies is not permitted. New wells will result in new vulnerable areas where water quality policies will apply. Because the policies are generally most restrictive in WHPA-A and in WHPA-B with high vulnerability scores, locating new wells away from existing threat activities will reduce the burden on landowners to implement risk management actions or avoid prohibition of future activities. In particular concern has been raised about the impact on agricultural operations in the CTC SPC.*

***The CTC SPC recommends that the Ministry directs municipalities to locate new wells at least one kilometer from existing agricultural operations.***

## Item 7.1

**TO:** Chair and Members of the Source Protection Committee  
Meeting #6/12, October 23, 2012

**FROM:** Beverley Thorpe, Project Manager, CTC Region

**RE:** **Update to Credit Valley Source Protection Area Assessment Report**

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### **KEY ISSUE**

The wellhead protection areas and threats assessment for the Region of Halton's wells serving Acton and Georgetown (Town of Halton Hills) have been revised based on new technical information. Public consultation has been completed on the updated information and is being submitted to the Ministry of the Environment for approval by the Credit Valley Source Protection Authority.

### **RECOMMENDATION**

**THAT the CTC Source Protection Committee receives this report for information.**

### **BACKGROUND**

At the CTC SPC Meeting #5/12 held on August 14, 2012, the SPC accepted by RES #312/12, the re-delineated Wellhead Protection Areas (WHPAs) and threats assessment for wells in Halton Hills and authorized staff to take the necessary action to undertake the required public consultation in parallel with the public consultation on the Proposed Source Protection Plan (SPP). Staff was authorized to amend the approved assessment report based on the findings of the accepted foundation report, and directed to conduct public consultation in parallel with the Proposed Source Protection Plan (SPP).

It is critical that the updated mapping of wellhead protection areas is submitted with or before the source protection plan so that when approved, the plan policies will apply in the right areas. The wellhead protection areas for Georgetown's wells have undergone significant revisions based on new technical information and differ significantly from those in the currently approved Assessment Report.

### **Public Consultation**

Public consultation on the update to the Approved Assessment Report took place between September 7 and October 8, 2012. One comment was received from the Region of Halton requesting that source protection authority staff contact Union Gas to determine if the revised threat count for fuel storage in the Georgetown WHPAs could be reduced for properties served by natural gas.

As of October 15, staff have not received any information from Union Gas. If information is received in time for inclusion then the threat counts will be adjusted accordingly. After October 16, staff will not be able to make further changes before submission of the update which scheduled for October 22, 2012 to coincide with submission of the Proposed Source Protection Plan to the Minister for approval. Threats enumeration is mandated by the Ministry to be a desk top exercise. The work done to date meets the Ministry's requirements. The actual number of

threats can only be verified through field visits as part of the implementation of policies. The proposed CTC Source Protection Plan policy for residential home heating fuel storage at single family residences is for the municipality to deliver education and outreach materials aimed at advising property owners of actions they need to take to prevent, or if necessary report, a spill.

**Submission of Amendments to the Ministry of the Environment**

The amendments to the Approved Assessment Report are being submitted to the Ministry of the Environment on October 22, 2012 by the Credit Valley Source Protection Authority. The revisions being submitted are only the relevant pages of the report containing revised text, maps and tables, along with a cover page explaining the nature of the amendments and detailing the page numbers that require replacement. This information will be posted on the CTC website ([www.ctcswp.ca](http://www.ctcswp.ca)). When approved, the entire CVSPA Assessment Report will be updated and posted on the website. Limited numbers of copies will be printed. The printed copies of updated pages can be made available to the CTC SPC members upon request.

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**Date: October 15, 2012**

**Attachments:**

## Item 7.2

**TO:** Chair and Members of the Source Protection Committee  
Meeting #6/12, October 23, 2012

**FROM:** Beverley Thorpe, Project Manager, CTC Region

**RE:** **Submission of the CTC Proposed Protection Plan to the Minister of the Environment**

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### KEY ISSUE

Information update on submission of the CTC Proposed Source Protection Plan jointly by the three Source Protection Authorities to the Minister of the Environment.

### RECOMMENDATION

**THAT the CTC SPC receives this report for information.**

### BACKGROUND

At Meeting #5/12 held August 14, 2012, the CTC SPC approved the policies to be included in the Proposed Source Protection Plan (the Plan) covering all three Source Protection Areas (Credit Valley, Toronto and Region, and Central Lake Ontario) within the CTC Source Protection Region.

Staff circulated the revised policies to all SPC members following the meeting and requested that any errors or omissions be identified prior to submission of the Plan and Explanatory Document to each Source Protection Authority to undertake the required second (final) public consultation. Staff prepared the necessary files including the revised Plan, Explanatory Document (containing all comments received and how they were addressed) and maps, along with notice letters.

### Public Consultation

The second consultation was carried out under the direction of the three Source Protection Authorities. The consultation ran from September 7 through October 8, 2012. All documents and maps were posted on the website. Notice letters and electronic files were sent via courier to clerks of all municipalities, as well as sending a notice via email. All persons or organizations who had previously commented, as well as those subscribing to our email list were sent notices and advised where the Plan could be viewed or downloaded from the website. A USB key containing the files was sent upon request.

Individuals who were newly impacted by the revised well head protection areas in Acton and Georgetown were mailed individual packages of information, including notice of the opportunity to comment on either or both the updated technical information and the Plan.

Comments were received from 4 provincial ministries and agencies; 9 municipalities; 2 conservation authorities; 3 industry or business interests; 2 public interest groups; and 14 members of the public. Staff have made additional editorial and minor changes to the Plan as posted. No changes have been made to policy directions or rationale.

The CTC SPC who wish to receive copies of consultation comments with personal identifying information removed should request from staff. Copies of the Proposed Plan will be distributed to CTC SPC members at Meeting #6/12.

**Next Steps**

The Chairs of the Source Protection Authorities are jointly submitting the Plan, Explanatory Document and associated files to the Minister of the Environment on October 22, 2012 for his approval decision. Staff will advise on status as the review process proceeds.

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**Date: October 15, 2012**

**Attachment:** Copies of the Proposed Source Protection Plan to be provided to CTC SPC members at meeting. The material as submitted will also be posted on the CTC website.