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### SOURCE PROTECTION COMMITTEE MEETING #1/08

**Tuesday, January 29, 2008**

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# DRINKING WATER SOURCE PROTECTION

ACT FOR CLEAN WATER



**MEETING OF THE SOURCE PROTECTION COMMITTEE #1/08  
January 29, 2008**

**The Source Protection Committee Meeting #1/08, was held in the North Theatre, Black Creek Pioneer Village, on Tuesday, January 29, 2008. The Chair Susan Self, called the meeting to order at 10:05 a.m..**

**PRESENT**

Juli Abouchar	Member
Jessica Annis	Member
Andrea Bourrie	Member
Wendy Burgess	Member
Bob Burnside	Member
Michael D'Andrea	Member
Jessica Ginsburg	Member
Robert Goodings	Member
Irv Harrell	Member
Robert Hester	Member
David Kentner	Member
Heather Laidlaw	Member
Peter Miasek	Member
Lynn Moore	Member
Peter Orphanos	Member
John Presta	Member
Fred Ruf	Member
Mark Schiller	Member
Susan Self	Chair
Howard Shapiro	Member

**ABSENT**

Michael Garrett	Member
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**NON-VOTING INTERIM MEMBER**

Wendy Kemp	York Region Representative
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**RES.#A1/08 - MINUTES**

Moved by: David Kentner  
Seconded by: Lynn Moore

**THAT the Minutes of Meeting #1/07, held on December 10, 2007, be approved.**

**CARRIED**

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**PRESENTATIONS**

- (a) A presentation by Larry Moore, Project Coordinator, OCWA in regard to the Lake Ontario Collaborative Study.
- (b) A presentation by Ryan Post, Project Coordinator for the Dufferin Headwaters Pilot Study.

**RES.#A2/08 - PRESENTATIONS**

Moved by: David Kentner  
Seconded by: Heather Laidlaw

**THAT above-noted presentations (a) and (b) be heard and received.**

**CARRIED**

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**CORRESPONDENCE**

- (a) A letter dated January 18, 2008 from Ian Smith, Director Source Water Protection Branch, Ministry of the Environment (MOE), in regard to Other Legislative Safety Measures in place that protect Ontario's Drinking Water" with attachment which identifies Drinking Water Systems under the Safe Drinking Water Act, 2002.
- (b) A letter dated January 18, 2008 from Ian Smith, Director Source Water Protection Branch, MOE, in regard to Inclusion of a Drinking Water System under the Source Protection Planning Process through Municipal Council Resolution.
- (c) A letter dated January 18, 2008 from Ian Smith, Director Source Water Protection Branch, MOE, in regard to Clarifying and Using Proxies in accordance to the Source Protection Committee Regulation.
- (d) A letter dated January 28, 2008 from Mark Schiller, Chair, Collaborative Study to Protect Lake Ontario Drinking Water, Region of Peel, in regard to Scope Change - Collaborative Study to Protect Lake Ontario Drinking Water.

**RES.#A3/08 - CORRESPONDENCE**

Moved by: David Kentner  
Seconded by: Heather Laidlaw

**THAT above-noted correspondence (a) - (c) be received.**

**CARRIED**

**RES.#A4/08 - CORRESPONDENCE**

Moved by: Mark Schiller  
Seconded by: Michael D'Andrea

**THAT above-noted correspondence (d) be added to the agenda and received.**

**CARRIED**

## CORRESPONDENCE (A)

**Ministry of  
the Environment**

Source Protection Programs  
Branch

8<sup>th</sup> Floor  
2 St. Clair Ave. West  
Toronto ON M4V 1L5

**Ministère de  
l'Environnement**

Direction des programmes de protection  
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January 18, 2008

TO: Source Protection Committee Chairs  
Source Protection Project Managers

FROM: Ian Smith, Director  
Source Protection Program Branch  
Drinking Water Management Division

**Re: Other Legislative Safety Measures in place that protect Ontario's Drinking Water**

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In response to the discussion at our second chair meeting on December 3 and 4, 2007, below is an overview of other legislative measures the ministry has in place to protect Ontario's drinking water.

*Ontario's Drinking Water Safety Net* – is a comprehensive safety net of measures to protect Ontario's drinking water from source to tap. The eight interwoven components of the Drinking Water Safety Net include:

Strong legislation – *Clean Water Act, 2006* and *Safe Drinking Water Act, 2002*

1. Timely, reliable testing
2. Immediate notification and corrective action on adverse water quality incidents
3. Licensing, training and certification
4. Comprehensive inspection program
5. Investigation and enforcement
6. Integrated data acquisition and information management
7. Education and outreach

It is important to note that while the underlying principle in the *Clean Water Act, 2006* is prevention, the *Safe Drinking Water Act, 2002* (SDWA) helps safeguard drinking water. The purpose of the SDWA is to protect human health and prevent drinking water health hazards through the control and regulation of drinking water systems (see Appendix 1 attached) and drinking water testing.

Regulations made under the SDWA outline the detailed requirements regarding drinking water systems, testing services, drinking water quality standards, certification of drinking water system operators and drinking water quality analysts, and compliance and enforcement. In particular, there are two regulations that govern the testing of drinking water systems in Ontario, the Drinking Water Systems Regulation (O. Reg. 170/03) and O. Reg. 252/05 under the SDWA.

*O. Reg. 170/03*

It applies to municipal residential systems and to private systems that supply drinking water to year-round residences. It also applies to the other categories of drinking water systems that serve designated facilities. Examples of designated facilities include schools, daycares and nursing homes. They serve groups that may be vulnerable to water-borne disease, such as children, the elderly and those in ill health. It sets out requirements for water treatment, maintenance, operational

checks, sampling and testing at drinking water systems, as well as reporting and corrective actions in case of an adverse water quality incident. Drinking water systems under O. Reg. 170/03 are regulated by the Ministry of the Environment.

*O. Reg. 252/05*

It applies to non-residential and seasonal residential drinking water systems that do not serve designated facilities. Examples include churches, community halls, bed and breakfasts, and tourist outfitters. It prescribes a basic level of microbiological testing, reporting and corrective action – fundamental requirements that provide strong public health protection while reducing the financial burden on system owners. Drinking water systems under O. Reg. 252/05 are regulated by MOHLTC and public health units.

Additional information on can be found on Drinking Water Ontario at: [www.ontario.ca/drinkingwater](http://www.ontario.ca/drinkingwater)

Where the ministry can be of assistance, I would request that you continue to advise my staff of your concerns or that which come to your attention.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ian Smith', with a long horizontal flourish extending to the right.

Ian Smith  
Director, Source Protection Programs Branch

Attachment: Appendix 1: Drinking Water Systems under the *Safe Drinking Water Act, 2002*

## APPENDIX 1: Drinking Water Systems under the *Safe Drinking Water Act, 2002*

There are 8 types of drinking water systems under the *Safe Drinking Water Act, 2002*:

1	<i>Large Municipal Residential Drinking Water System:</i>	a municipal drinking-water system that serves a major residential development and serves more than 100 private residences.
2	<i>Small Municipal Residential Drinking Water System:</i>	a municipal drinking-water system that serves a major residential development but serves fewer than 101 private residences.
3	<i>Non-Municipal Year-Round Residential Drinking Water System:</i>	a non-municipal drinking-water system, other than a non-municipal seasonal residential system, that serves, (a) a major residential development, or (b) a trailer park or campground that has more than five service connections.
4	<i>Large Municipal Non-Residential Drinking Water System:</i>	a municipal drinking-water system that does not serve a major residential development and is capable of supplying drinking water at a rate of more than 2.9 litres per second.
5	<i>Small Municipal Non-Residential Drinking Water System:</i>	a municipal drinking-water system that does not serve a major residential development, is not capable of supplying drinking water at a rate of more than 2.9 litres per second and serves a designated facility or public facility.
6	<i>Large Non-Municipal Non-Residential Drinking Water System:</i>	a non-municipal drinking-water system that is capable of supplying drinking water at a rate of more than 2.9 litres per second and does not serve, (a) a major residential development, or (b) a trailer park or campground that has more than five service connections.
7	<i>Small Non-Municipal Non-Residential Drinking Water System:</i>	a non-municipal drinking-water system that is not capable of supplying drinking water at a rate of more than 2.9 litres per second, serves a designated facility or public facility and does not serve, (a) a major residential development, or (b) a trailer park or campground that has more than five service connections.
8	<i>Non-Municipal Seasonal Residential Drinking Water System:</i>	a non-municipal drinking-water system that, (a) serves, (i) a major residential development, or (ii) a trailer park or campground that has more than five service connections, and (b) does not operate to supply water to a development, trailer park or campground referred to in clause (a) for at least 60 consecutive days in, (i) every calendar year, or (ii) every period that begins on April 1 in one year and ends on March 31 in the following year.
<i>Designated Facility:</i>		(a) a children and youth care facility, (a.1) a children's camp, (b) a delivery agent care facility, (c) a health care facility, (d) a school or private school, (e) a social care facility, or (f) a university, a college of applied arts and technology, or an institution with authority to grant degrees.

The following categories of drinking water systems are regulated under O. Reg. 252/05 by the Ministry of Health and Long-Term Care (provided they do not serve a designated facility):

- small municipal non-residential
- large municipal non-residential
- small non-municipal non-residential
- large non-municipal non-residential
- non-municipal seasonal residential

The following categories of drinking water systems are regulated under O. Reg. 170/03 by the Ministry of the Environment (including those listed above provided that they serve a designated facility):

- municipal residential
- non-municipal year-round residential
- drinking water systems serving designated facilities

#### **For Further Reading:**

- 1) "Providing Safe Drinking Water to the Public: A guide for owners and operators of non-residential and seasonal residential drinking water systems that serve designated facilities":  
[http://www.ontario.ca/drinkingwater/stel02\\_054718.pdf](http://www.ontario.ca/drinkingwater/stel02_054718.pdf)
- 2) "Providing Safe Drinking Water to the Public: A guide for owners and operators of non-municipal year-round residential drinking water systems":  
[http://www.ontario.ca/drinkingwater/stel01\\_046948.pdf](http://www.ontario.ca/drinkingwater/stel01_046948.pdf)
- 3) "A Guide for Owners and Operating Authorities of Large Non-Residential Drinking Water Systems and Small Municipal Non-Residential Drinking Water Systems":  
[http://www.ontario.ca/drinkingwater/stel01\\_047749.pdf](http://www.ontario.ca/drinkingwater/stel01_047749.pdf)
- 4) "Guide - Small Non-Municipal Non-Residential – June 2005":  
[http://www.ontario.ca/drinkingwater/stel01\\_047747.pdf](http://www.ontario.ca/drinkingwater/stel01_047747.pdf)
- 5) "Guide - Non-Municipal Seasonal Residential – June 2005":  
[http://www.ontario.ca/drinkingwater/stel01\\_047751.pdf](http://www.ontario.ca/drinkingwater/stel01_047751.pdf)
- 6) Chief Drinking Water Inspector's Annual Report (2005-06):  
<http://www.ontario.ca/drinkingwater/123877.pdf>



## CORRESPONDENCE (B)

**Ministry of  
the Environment**

Source Protection Programs  
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January 18, 2008

TO: Source Protection Committee Chairs  
Source Protection Project Managers

FROM: Ian Smith, Director  
Source Protection Program Branch  
Drinking Water Management Division

Re: Inclusion of a Drinking Water System under the Source Protection Planning process through  
Municipal Council Resolution

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In response to the discussion at our second chair meeting on December 3 and 4, 2007, below is information to assist municipalities when considering including of a drinking water system under the source protection planning process through council resolution.

While the *Clean Water Act, 2006* (CWA) focuses upon the protection of sources of municipal residential drinking water systems, subsection 8(3) allows for municipalities, through a council resolution, to have other drinking water systems included in the source protection planning. Furthermore, in subsection 10(6) the Minister is granted authority to require other drinking-water systems to be included in the planning process.

Generally, any drinking water systems that are not municipal residential-drinking water systems serving or planned to serve major residential developments may be included in the source protection planning process through a resolution of a municipal council or Minister's requirement. The one exception to this is a single, private residential system that serves one residence and no other facility. As per Section 3 of the Miscellaneous Regulation (O. Reg. 286/07), such systems cannot be included in source protection planning unless the well or intake serving the system is one of a "cluster" of six (6) or more wells or intakes, or the system is located in an area of settlement (as defined in the *Planning Act*).

### *Including Other Drinking-Water Systems*

Some municipalities have expressed interest in exercising the opportunities afforded in subsection 8(3) of the Act. I would recommend that any such decision to include other systems into the source protection planning process be deferred until after the ministry provides guidance. The guidance on other drinking water systems will contain a decision matrix to help municipalities evaluate the benefits of including other systems in the source protection planning process. The decision matrix may include considerations such as growth pressures, known/historical issues, significant threats, existing protective tools/strategies, and location of these other systems in relation to municipal wellhead areas and surface water intake zones currently being assessed. The guidance will also speak to the potential responsibilities of municipalities if, based on the decision matrix, they choose to incorporate other drinking water systems into the source protection planning process. This guidance is anticipated to be available in the spring 2008.

*Liability Issues*

As well, we understand that some municipalities may have concerns regarding including additional drinking-water systems. One concern is that municipalities would become responsible for the maintenance of these drinking water systems under the *Safe Drinking Water Act, 2002* (SDWA). Taking actions to protect the source of these systems does not require the municipality to take over the systems. Under the SDWA, it is the individual drinking water system owner who is responsible for the proper function of the drinking water system, which includes its wells and/or intakes. This includes those private residential wells or intakes that make up a cluster. It is important to note that designation of a drinking water system under the CWA does not make it a "drinking water system that serves a designated facility" under the SDWA, unless it is already such a system under that Act. As well, inclusion of a drinking water system under the CWA does not change any existing obligations for the owner and operator of that system under the SDWA.

*Provincial Approach to Funding*

The provincial government has committed \$120 million to source protection planning from 2004 to 2008 and committed \$28 million over the next four years (2007 – 2011) for early actions related to protecting drinking water sources. The Ministry of Natural Resources (MNR) and the Ministry of the Environment are finalising budget requests for the next four (4), but MNR is confident base support for the source protection committee function and conservation authority support is available. While the focus of the technical studies funding in the past has been mainly around municipal residential drinking water systems, the province is evaluating options for supporting planning for other drinking water systems.

Where the ministry can be of assistance, I would request that you continue to advise my staff of your concerns or that which come to your attention.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ian Smith', written in a cursive style.

Ian Smith  
Director, Source Protection Programs Branch

## CORRESPONDENCE (C)

**Ministry of  
the Environment**

Source Protection Programs  
Branch

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**Ministère de  
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January 18, 2008

**TO:** Source Protection Committee Chairs  
Source Protection Project Managers

**FROM:** Ian Smith, Director  
Source Protection Programs Branch  
Drinking Water Management Division

**Re: Clarifying and using proxies in accordance to the Source Protection Committee regulation  
(O.Reg 288/07)**

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In response to the discussion at our second chair meeting (Dec. 3rd-4th), we have consulted our legal services and offer the following clarification and guidance around the definition and use of proxies by source protection committee members.

Section 17 of the Source Protection Committee regulation (O. Reg 288/07) states,  
"A member of a source protection committee who is appointed by a source protection authority may participate in meetings of the committee by proxy and, for that purpose, a reference to a member in the provisions of this Regulation that relate to meetings includes that proxy."

The intent of the proxy is to act on behalf of a source protection committee member who, for whatever reason, is not able to participate at the meeting in person or by other means (e.g. teleconference). This is an authority that is provided to a source protection committee member in the regulation and the rules of procedure cannot remove that authority. In addition, the proxy does count for quorum.

While the regulation does not define who the proxy may be, we strongly advise that the **proxy be another existing member of the source protection committee.**

Our reason for this advice is due to the following;

- The Province does not have funding for non-SPC members (either per diems or for training initiatives)
- All those present and able to make decisions should understand and abide by the rules of procedures, code of conduct and conflict of interest policy.
- Committee meetings will have ambitious agendas, all those present should be familiar with the context of the matters (which may have occurred from previous meetings) and able to make decisions without unnecessary delays.
- Relationship between the committee members may provide a more trusting environment for those who wish to provide general authority over their opinion to the proxy.

I recommend that the rules of procedure define the proxy and establish the process for its use. Below are two approaches for consideration:

- 1) Informal procedure whereby the member who is absent notifies the chair and informs him/her of the person who will be acting as proxy and the extent by which an opinion for consensus or vote will be provided. This approach is flexible and conditions may be applied on case-by-case bases as determined by the chair.

2) A formal procedure that requires:

- A template or form that has to be completed and submitted by a specified time;
- In the template or form, a detailed outline of what the opinion and/or vote is for particular issues by the absentee member;
- In the template or form, a description of conditions that apply to the proxy.

This approach is more structured but clearly defines expectations for all members who may wish to use a proxy at one point or another.

Should you have any other questions or comments, please do not hesitate to call Keith Willson, Manager of Source Protection Approvals (416) 314 – 0560 or [keith.willson@ontario.ca](mailto:keith.willson@ontario.ca)

Sincerely,

A handwritten signature in black ink, appearing to read "Ian Smith". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Ian Smith, Director of Source Protection Programs Branch

CORRESPONDENCE (D)



January 28, 2008

Mr. Ian Smith  
Director, Source Protection Programs Branch  
Ontario Ministry of the Environment  
2 St Clair Ave W., 8th Floor  
Toronto, ON M4V 1L5

**Re: Scope Change – Collaborative Study to Protect Lake Ontario Drinking Water**

Dear Mr. Smith:

The Collaborative is working diligently to complete its technical studies and meet its contractual obligations funded by the Ministry. The studies include the delineation of vulnerable areas (TPZs) related to 33 intakes, building threat inventories and identifying issues that will contribute to the development of the assessment reports of nine Source Protection Areas on the western end of Lake Ontario, in accordance with MOE's Draft Guidance Documents for the Assessment Report: Modules 4, 5 and 6.

However, in undertaking the above-noted work, several concerns and issues have surfaced which are not addressed in the current scope of work and not included in any of the existing MOE Guidance Documents, related to Great Lakes-based intakes. In response, we see the need to expand the existing scope of work to include the following:

1. 2008 Pathogen Studies

A key concern regarding our understanding of pathogens related to a number of point and non-point sources to the Lake Ontario near shore, and their potential impact on drinking water intakes has emerged. A study of pathogens that may be present in the source water of Lake Ontario drinking water plants at representative intakes and at 'control sites' as detailed in the Appendix A is proposed. The estimated cost of this study is \$200,000 could be funded from the Collaborative's contingency funds of approximately \$300,000. Further, this study would take advantage of a unique monitoring opportunity (including supporting boat and sampling infrastructure) being carried out by Environment Canada on Lake Ontario during 2008, which would not be repeated for another 4 to 5 years.

2. Significant Threats Assessment

While the MOE guidance documents refers to land parcel-based threats, along the Lake shoreline and within tributaries flowing to the near shore, the impact of more significant threats on any one or multiple water intakes such as: non-point and point source discharges during extreme storm conditions; tritium spills from a nuclear power generating station during varied lake circulation conditions; and the possible impingement of sewage treatment plant effluent plumes during winter conditions, are not addressed and require a more comprehensive approach than is currently proposed, namely:

- i) Development of a whole lake 3-dimensional water quality model. The basic modelling framework has been developed.
- ii) Development of Lake Ontario watershed-based discharge time-series for extreme storm conditions. The basic required information for this activity has been developed.
- iii) Assessment of threats using (i) and (ii) for the following scenarios:

Scenario (a) - impact of an extreme weather event and the cumulative impact of tributary and sewage treatment plant discharges on the lake near-shore, for storms such as the May 2000 (Walkerton storm) and August 2005 storm;

Scenario (b) – Scenario (a) plus a coincident sewage spill from a sanitary sewer collapse in a representative tributary;

Scenario (c) – A tritium spill from Pickering (Darlington) or Bruce facilities as a function of east-tending or west-tending currents; and

Scenario (d) – impingement of sewage treatment plant effluent plumes during winter conditions on water intakes.

3. Pilot Demonstration of Threats Identified Above in 2.

As an alternative, and/or precursor activity to Item 2, it is proposed that a pilot demonstration could be undertaken for a representative intake for which the required information is available, using funds allocated from the contingency.

Progress from the Modules 5 and 6 analyses and a further explanation of Items 2 and 3 is provided in Appendix A.

We would be pleased to discuss the above further, but seek your approval in advance of proceeding with any of the above-noted items. It is extremely important that we receive an early response on the Pathogen study as Environment Canada has scheduled their research vessel to undertake this work in the near future. Failure to undertake this work at this time will be a lost opportunity in which all level of governments work together for a common purpose. It will also become a gap in our assessment which will have to be dealt with in the development of the CTC terms of reference.

Sincerely,



Mark Schiller  
Chair, Collaborative Study to Protect Lake Ontario Drinking Water

C: Heather Malcolmson, MOE  
Martin Keller, MOE  
Larry Moore, OCWA  
Beverly Thorpe, CTC  
Michael D'Andrea City of Toronto  
Sue Watson, Environment Canada  
Mitch Zamojc, Region of Peel

## Appendix A

### 1. Proposed 2008 pathogen studies:

One key element is pathogen studies. Our Peel (Collaborative) – Ministry agreement included the development of a pathogen monitoring plan for Lake Ontario. After many months of consultation with Ministry scientists and an international panel of experts, Environment Canada completed the pathogen monitoring plan for 2008. This plan was designed to determine the occurrence of pathogens in source waters of Lake Ontario drinking water plants. The Collaborative's scope of studies *did not include the implementation* of this plan since the plan was not available when our proposal was submitted.

The proposed work by Environment Canada is focused particularly on the March – April 2008 period as a part of the International Field Year on Lake Ontario, a coordinated effort between Canada and the US. This opportunity would not be repeated for another 4 -5 years.

This letter is to seek your approval of a scope change to allow the implementation of the pathogen studies. With the Ministry approval, the Collaborative would allocate \$200K from its contingency. \$120K would be allocated to OCWA to cover the costs of external pathogen analysis and \$80K would be allocated for incremental costs at Environment Canada.

On January 18, 2008, we were advised by the Ministry that the pathogen studies should be focussed on pathogen "issues", and that any funding for such work would have to be allocated from the Collaborative's contingency. In response, the objectives of the 2008 pathogen studies have been revised, as follows.

1. Determine the occurrence of specific pathogens (e.g. *Campylobacter*, *Cryptosporidium*, *Giardia*, enteric viruses) and pathogen indicators (e.g. *E. coli*, Enterococcus, *Clostridium perfringens*) at three drinking water intakes (R.L. Clarke, Lakeview, Lorne Park) to understand weather event, seasonal, and long term variability in pathogen occurrence. Compare pathogen and pathogen indicator occurrence in the vicinity of intakes at offshore intakes with that of raw water from plants;
2. Determine the occurrence of these specific pathogens and pathogen indicators at selected negative and positive reference sites to validate methods. A negative reference site includes one 10km offshore of Lakeview (LV3 a site with extensive records). Positive reference sites include Credit and Humber River, and a STP outfall where a variety of pathogens are expected to occur;



3. Evaluation of results to advise the Collaborative, SPCs and MOE on the occurrence of pathogens at the intakes and comparative value of different pathogen indicators; and,
4. Provide data and information to inform the development of MOE guidance on determination of a “pathogen issue” for Great Lakes intakes.

## **2. Significant Threats Assessment**

### **a) Progress in Module 5 & 6 Analyses**

A comprehensive overall analysis has been advanced and completed to address the requirements of Modules 5 (Issues Evaluation and Treats Inventory) and Module 6 (Water Quality Risk Assessment) for two Water Treatment Plants (Peel Region’s Lakeview Plant, and Durham Region’s Newcastle Plant). Fine-tuning of the numerical results for the Semi-Quantitative Risk Assessment will be developed when MOE guidance for the Hazard Score for two items (Deleterious Quantity, Likelihood of Release) becomes available.

### **b) Additional threats**

Additional issues / threats to those documented in the Module 5 analyses have been identified by Collaborative Partners which need to be undertaken as a Part of the Tier 1 Risk Assessment. Examples of threats include:

- Extreme event based discharges from tributaries, individually and cumulatively, to the coastal zone near intakes of specific plants which are sources of high turbidity and pollutant loads including E. Coli and pathogens;
- Creek erosion undermining trunk sanitary sewer infrastructure which causes a spill of raw sewage (eg. Highland Creek trunk sanitary sewer collapse in Toronto – August 2005 storm); and
- Tritium spills from nuclear power generating stations which can potentially reach the intakes.

As indicated on Page 7 of the Module 6 Guidance, “*The team may need to extend the delineation of some vulnerable areas, based on outcomes of Module 5 analysis. This could occur when the geographical area of a threat extends beyond the delineated vulnerable area*”. In addition, on page 8 referring to pathogen threats, “*Where these threats are a cause for concern, the team will perform a Tier 1 risk assessment*”.

## **SECTION I - ITEMS FOR COMMITTEE ACTION**

### **RES.#A5/08 - TERMS OF REFERENCE FOR ASSESSMENT REPORTS AND SOURCE PROTECTION PLANS**

Update and Approval of Next Steps. Report back seeking approval of CTC Source Protection Committee for proposed approach and timelines to complete Terms of Reference for each source protection area within the CTC Region and submit the Terms of Reference to the respective source protection authority no later than August 19, 2008.

Moved by: Irv Harrell  
Seconded by: Lynn Moore

**THAT the CTC Source Protection Committee (SPC) concurs with the amended proposed approach and timelines outlined in Attachment 1 for the CTC SPC Municipal Technical Advisory Working Group to prepare the Terms of Reference for each of the three source protection areas for the approval of the CTC SPC;**

**THAT the composition of the sub-committee of the CTC Municipal Technical Advisory Working Group (the “Municipal Terms of Reference Liaison Working Group”) be endorsed, with additional membership to be explored;**

**THAT the draft Table of Contents for the Terms of Reference be provided to members of the Municipal Terms of Reference Liaison Working Group as a discussion starter;**

**AND FURTHER THAT staff be requested to take the necessary action to support and ensure the development of the milestone products and report back at the February 11, 2008 meeting of the CTC SPC on progress to date and seek approval of any further directions required at that time.**

**CARRIED**

### **BACKGROUND**

At CTC SPC Meeting #1/07, held on December 10, 2007, a staff report was received for information outlining the requirements for the development of Terms of Reference by the CTC SPC as required pursuant to Ontario Regulation 287/07 under the *Clean Water Act, 2006*. Also, the CTC SPC received a presentation on these requirements and authorized by Resolution #C5/07 that a Municipal Technical Advisory Working Group under the chairmanship of SPC member Michael Garrett be charged with preparing the Terms of Reference on behalf of the SPC.

## **Current Status**

At the request of Michael Garrett and CTC SPC Chair Susan Self, the seven municipal members of the CTC SPC have been requested to be part of the Municipal Technical Advisory Working Group responsible for developing the Terms of Reference. The inaugural meeting was held January 8, 2008, which was attended by five of seven municipal SPC members, plus municipal staff from a number of the upper and lower tier municipalities' works, planning and health departments. Included as Attachment 1 are the agenda and the notes from that meeting.

At the post-meeting discussions with SPC members and chair, CTC project manager and CTC executive lead a number of decisions were made:

1. The members of the Municipal Terms of Reference Liaison Working Group chaired by Mike Garrett will be the seven municipal SPC representatives, Susan Self, selected municipal staff (see item 2 below for details and actions required), Adele Freeman and the CTC Technical Committee (Don Ford, Gayle Soo-Chan, John Kinkead, Kerry Mulchansingh, Karen Hortopan and Beverley Thorpe).
2. Additional municipal staff members were proposed by the SPC members: Ralph Stanley – (Health, Peel), Mark Head (Planning, Peel), James Stiver, (Director of Planning, Orangeville), to be determined (planning, Town of Halton Hills), Barb Jefferies (Planning, York Region). The appointment of these persons is the responsibility of the SPC member representing that municipal group. If the selected individual is not available, then the SPC member is responsible to find an alternate. The selected individuals were chosen to represent the perspectives of upper & lower tier municipalities across the CTC Region with a bias towards the areas in the CTC Region where there are existing water issues. As the SPC members represent the works areas, no additional municipal staff with works expertise is required.
3. Mark Schiller and Beverley Thorpe will engage the Lake Ontario Collaborative (Larry Moore) in helping with identifying in the Terms of Reference (TOR), work required beyond the currently funded Phase 2 studies.
4. Rick Gerber will be requested to advise on what would be required (both technical and budget wise recognizing the current funding model limitations) for the York-Peel-Durham-Toronto Groundwater Study to address the Halton, Wellington, Orangeville and Mono groundwater information.
5. Beverley Thorpe will develop a proposed meeting schedule for the Municipal Terms of Reference Liaison Working Group through completion, to precede the dates of the SPC meetings to ensure work is completed in time to have a draft TOR for municipalities by late April/early May, and will consider when meetings of the larger Municipal Technical Advisory Working Group are required (all municipalities – works, planning and health).
6. A meeting will be scheduled with the commissioners of planning and works for all CTC Region municipalities in mid-March to engage senior municipal staff in the development of the TOR and seek their support. At the meeting to be chaired by Mike Garrett, the commissioners will be briefed on the work to date at that time, the approach, and a proposed generic presentation which could be given to municipal councils. The commissioners will be asked for their advice/recommendations on best approach for the respective councils.
7. Beverley Thorpe is to prepare a draft generic presentation deck on source protection for use by the SPC members in briefing their constituents as soon as possible.

8. The project manager and project leads from the three conservation authorities were directed to prepare a draft Table of Contents for the TOR and a proposed meeting schedule to be reviewed by the CTC SPC and sent to the Municipal Terms of Reference Liaison Working Group members.

#### **RATIONALE**

Attachment 1 is the proposed meeting schedule and timetable for the development of the Terms of Reference for endorsement by the CTC SPC. Included in the schedule are the proposed milestone deliverables and or decisions required at each meeting. Newly appointed municipal staff on the Municipal Terms of Reference Liaison Working Group have been advised of the proposed meeting on January 30, 2008.

Attachment 2 is the draft Table of Contents prepared by project staff which will be used to begin development of the TOR starting with the January 30, 2008 meeting of the Municipal Terms of Reference Liaison Working Group.

**Report prepared by: Beverley Thorpe, 416-661-6600 extension 5577**

**Emails: bthorpe@trca.on.ca**

**For Information contact: Beverley Thorpe, 416-661-6600, extension 5577**

**Emails: bthorpe@trca.on.ca**

**Date: January 17, 2008**

**Attachments: 2**

**Attachment 1**

**CTC Source Protection Region Proposed Meeting Schedule, Milestone Deliverables & Decision Points for Terms of Reference**

<b>Month</b>	<b>CTC SPC Meetings</b>	<b>Municipal Terms of Reference Liaison Working Group Meetings</b>	<b>CTC Technical Committee Meetings</b>	<b>Other Meetings/Consultations</b>
<b>January</b>				
Jan. 8				Kick-off meeting of the CTC Municipal Technical Advisory Working Group
Jan. 15			Prepare for draft Table of Contents Prepare proposed meeting schedule	
<b>Jan. 16</b>	<b>Formal Notice to municipalities re commencement of TOR work</b>			
Jan. 29	Progress on TOR			
Jan. 30		Update on TOR from Technical Committee meeting Jan. 15 Set the stage for Feb. 22 meeting	Joint meeting with Municipal Liaison Group	
<b>February</b>				
Feb. 11	Progress on TOR			
Feb. 21			Prepare for workshop with project management consultant to develop deliverable breakdown structure and estimated effort and responsibility for each of major Terms of Reference tasks	

Month	CTC SPC Meetings	Municipal Terms of Reference Liaison Working Group Meetings	CTC Technical Committee Meetings	Other Meetings/Consultations
Feb. 22		Workshop with project management consultant to develop deliverable breakdown structure and estimated effort and responsibility for each of major Terms of Reference tasks	Joint meeting with Municipal Liaison Working Group	
<b>March</b>				
Mar. 19				Dinner meeting with SPC municipal members, commissioners of planning and works and CA CAOs to present work in-progress and seek advice on how to work with councils
Mar. 17	Progress on TOR			
Mar. 19			Timelines Resource estimates Who does what	
Mar. 26		Draft TOR		
Mar. 28	Draft TOR circulated to members			
<b>April</b>				
Apr. 14	Progress on TOR			
Apr. 16		Draft TOR Meet with Technical Committee in morning	Joint meeting with Municipal Liaison group in morning	Meeting of the Municipal Technical Advisory Working Group with the Municipal Terms of Reference Liaison Working Group to discuss draft TOR in afternoon
Apr. 30		Final Draft TOR Meet with Technical Committee	Joint meeting with Municipal Liaison Working Group	

Month	CTC SPC Meetings	Municipal Terms of Reference Liaison Working Group Meetings	CTC Technical Committee Meetings	Other Meetings/Consultations
<b>May</b>				
May 13	Approve Draft TOR			
<b>May 14</b>	<b>Post TOR for public comment. Written comments accepted until June 18</b>			
<b>June</b>				
June 4 Review Dates				Public consultation meeting, Credit Valley SPA  Will require some SPC members in attendance
June 5 Review Dates				Public consultation meeting, Toronto and Region SPA  Will require some SPC members in attendance
June 6 Review Dates				Public consultation meeting, Central Lake Ontario SPA  Will require some SPC members in attendance
June 9	Review initial comments on TOR			
June 10-23				Other meetings with stakeholder groups to be determined
June 24		Review written comments on TOR  Revise TOR as required  Meet with Technical Committee in morning	Joint meeting with working groups	Meeting of the Municipal Technical Advisory Working Group with the Municipal Liaison Working Group to discuss draft TOR in afternoon

<b>Month</b>	<b>CTC SPC Meetings</b>	<b>Municipal Terms of Reference Liaison Working Group Meetings</b>	<b>CTC Technical Committee Meetings</b>	<b>Other Meetings/Consultations</b>
<b>July</b>				
July 8	Review written comments on TOR  Review revised TOR from working group			
July 10		Final meeting re TOR Meet with Technical Committee	Joint meeting with Municipal Liaison Working Group	
July 20	TOR circulated to members			
<b>August</b>				
Aug. 11	Final meeting re approval of TOR			
<b>Aug. 22</b>	<b>Submission of TOR to each SPA no later than August 22.</b> <b>Notice for public to comment on TOR to each authority.</b>			

CTC source protection staff will be responsible for preparing draft documents for review by the various committees, organizing meeting arrangements, locations etc, agenda and meeting notes, notices and newspaper ads and completing the terms of Reference in the Access database (Wizard) as mandated by the Ministry of the Environment.



**Attachment 2**

**Draft Table of Contents for Terms of Reference**

**Terms of Reference  
for  
CTC Source Protection Planning**

**Version 1.0**

January 15, 2008

## Table of Contents

## Page

- 1. Assessment Report Preparation (Clean Water Act, s.15)**
  - a. Assessment Report Components
    - i. Watershed Characterization (Module 1)
    - ii. Municipal Water Supply Strategies (Module 2)
    - iii. Groundwater Vulnerability (Module 3)
    - iv. Surface Water Vulnerability (Module 4)
    - v. (Module 5)
    - vi. (Module 6)
    - vii. Water Quantity Risk Assessment (Module 7)
  - b. Report Compilation
  - c. Project Management
  - d. Budget Administration
  
- 2. Assessment Report Consultation**
  
- 3. Publication of Approved Assessment Report (Clean Water Act, s.20)**
  
- 4. Interim Progress Reports (Clean Water Act, s.21)**
  
- 5. Source Protection Plan Preparation (Clean Water Act, s.22)**
  - a. Source Protection Plan Components
    - i. Assessment Report
    - ii. Policies on Significant Drinking Water Threats
    - iii. Policies for Targets (Clean Water Act, s.85)
    - iv. Policies for Monitoring Significant Drinking Water Threats
    - v. Policies for Monitoring Drinking Water Threats in Vulnerable Areas
    - vi. Policies for Monitoring Effectiveness of Policies
    - vii. Policies for Monitoring Drinking Water Issues (limited circumstances)
    - viii. Prohibited Activities (Clean Water Act, s.57)
    - ix. Regulated Activities (Clean Water Act, s.58)
    - x. Restricted Activities (Clean Water Act, s.59)
    - xi. Other Prohibited/Regulated/Restricted Activities
    - xii. Policies Governing Content of Risk Management Plans (s.58)
    - xiii. Policies for Lake Ontario Drinking Water Supplies/Great Lakes Policies
    - xiv. Policy Designating Public Body for implementing policy
    - xv. Policies re Monitoring Past Conditions
    - xvi. Education and Outreach
    - xvii. Additional Policies on Prohibiting/Restricting Activities
  - b. Plan Compilation
  - c. Proposed Source Protection Plan Consultation
  - d. Proposed Source Protection Plan Publication
  - e. Project Management
  - f. Budget Administration

**6. Notification (Clean Water Act, s.23)**

- a. Notice to Clerks of Proposed Source Protection Plan
- b. Notice to Persons of Proposed Source Protection Plan
- c. Notice to Public of Proposed Source Protection Plan
- d. Publish Source Protection Plan

**7. Amending the Terms of Reference**

**8. Municipal Resolutions (Clean Water Act, s.24)**

**9. Submission to Minister of the Environment (Clean Water Act, s.25)**

- a. Submission of Source Protection Plan to Minister of the Environment
- b. Submission of Comments on Source Protection Plan to Minister of the Environment

**RES.#A6/08 -**

**INFORMATION TOPICS FOR FUTURE MEETINGS AND TRAINING NEEDS**

Discussion regarding priority/scheduling of presentations at upcoming SPC meetings and the future information and training needs for SPC members.

Moved by: Irv Harrell  
Seconded by: Lynn Moore

**THAT the list of Information Topics for Future Meetings and Training Needs be updated as outlined below.**

**CARRIED**

<b>Suggested Topic</b>	<b>Priority/Meeting</b>
Municipal and conservation authority technical studies	
Discussions with First Nations	
Understanding of water quantity <ul style="list-style-type: none"><li>• Water budgets, climate, and impacts to permits to take water</li></ul>	Feb. 11 from each SPA
Future re how municipalities will be expected to report on monitoring of performance	
Information from Province on public health issues and connection to drinking water source protection	
Establishing a Great Lakes working group	
Water Characterization Reports	Feb. 11 from each SPA
Groundwater vulnerability	Mar. 17
Why CVC is able to go directly to Tier 2	
Risk Assessment	
Results of jurisdictional scan by MOE	
Where is this all going ie. what will be in a SPP and what are we working toward. From MOE, what restrictions, policies, etc. will be established	Mar. 17
Tier 3 study in Orangeville	
Context of how assessment reports go together. Table explaining into which module each report fits	Feb. 11
Gap analysis and how will we know progress	

## **SECTION II - ITEMS FOR COMMITTEE INFORMATION**

### **RES.#A7/08 - MUNICIPAL TECHNICAL ADVISORY WORKING GROUP MINUTES**

Moved by: Fred Ruf  
Seconded by: Heather Laidlaw

**THAT the Minutes from Municipal Technical Advisory Working Group Meeting #1/08, held on January 8, 2008, be received.**

**CARRIED**

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### **RES.#A8/08 - SCHEDULE OF MEETINGS**

Moved by: Fred Ruf  
Seconded by: Heather Laidlaw

**THAT the Schedule of Meetings outlined in Attachment 1 be received.**

**CARRIED**

**For Information contact: Karen Hortopan, extension 5392  
Email: [khortopan@trca.on.ca](mailto:khortopan@trca.on.ca)  
Date: January 17, 2008  
Attachments: 1**

**Attachment 1**

**CTC Source Protection Committee Meetings Schedule  
December 2007 - August 2008**

<b>Meeting #1/07</b>	<b>Monday, December 10, 2007 10am - 3pm</b>
<b>Meeting #1/08</b>	<b>Tuesday, January 29, 2008 10am - 3pm</b>
<b>Meeting #2/08</b>	<b>Monday, February 11, 2008 10am - 3pm</b>
<b>Meeting #3/08</b>	<b>Monday, March 17, 2008 10am - 3pm</b>
<b>Meeting #4/08</b>	<b>Monday, April 14, 2008 10am - 3pm</b>
<b>Meeting #5/08</b>	<b>Tuesday, May 13, 2008 10am - 3pm</b>
<b>Meeting #6/08</b>	<b>Monday, June 9, 2008 10am - 3pm</b>
<b>Meeting #7/08</b>	<b>Tuesday, July 8, 2008 10am - 3pm</b>
<b>Meeting #8/08</b>	<b>Monday, August 11, 2008 10am - 3pm</b>

**TERMINATION**

ON MOTION, the meeting terminated at 2:45 p.m., on January 29, 2008.

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Susan Self  
Chair

/ks