



CTC SOURCE
PROTECTION
REGION



CTC SOURCE PROTECTION COMMITTEE

Source Protection Committee Meeting #5/11

Chair: Susan Self

Tuesday, July 26, 2011
10 AM to 3PM

Lunch to be served at 12:15 PM

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

AGENDA

1. DISCLOSURE OF PECUNIARY INTEREST

2. BUSINESS ARISING FROM THE MINUTES

3. DELEGATIONS

4. CORRESPONDENCE

- 4.1 Letter to Susan Self and Beverley Thorpe, dated June 9, 2011, from Ian Smith, Director, Source Protection Programs Branch, MOE, regarding CTC Extension Request. 3
- 4.2 Letter to Susan Self, Chair, CTC and Gerri Lynn O'Connor, Chair, TRSPA, dated June 24, 2011, from Ian Smith, Director, Source Protection Programs Branch, MOE, regarding approval of the Proposed Assessment Report: TRSPA submitted on December 21, 2010. 6
- 4.3 Letter to Susan Self, Chair, CTC and Pat Mullin, Chair, CVSPA, dated June 24, 2011, from Ian Smith, Director, Source Protection Programs Branch, MOE, regarding approval of the Proposed Assessment Report: CVSPA submitted on December 21, 2010. 9

- 4.4 Letter to Beverley Thorpe, CTC Project Manager, dated July 5, 2011, from Ian Smith, Director, Source Protection Programs Branch, MOE, regarding addition of activities as local drinking water threats, in vulnerable areas. 12
- 4.5 Letter to John Westlake, Source Protection Implementation Section, Source Protection Programs Branch, MOE, dated July 11, 2011, from Diane Bloomfield, Halton-Hamilton Project Manager, regarding Intent to submit updates to the approved Assessment Reports for the Halton Region and Hamilton Region Source Protection Areas. 16

5. PRESENTATIONS

- 5.1 Ontario Power Generation presentation in relation to ITEM 6.3 and ITEM 7.1

6. ITEMS FOR COMMITTEE ACTION

- 6.1 Strategy for Pre-Consultation with Implementing Bodies 20
- 6.2 Significant Groundwater Quantity Threats Policies Working Group 24
- 6.3 Lake Ontario Water Quality Threat Policies Working Group 28

7. ITEMS FOR COMMITTEE INFORMATION

- 7.1 Submission of *the Amended Assessment Report: CLOSPA, Updated Assessment Report: TRSPA and Updated Assessment Report: CVSPA* to the Minister of the Environment, July 29, 2011. 33
- 7.2 Source Protection Plan Policy Development Status 35
- 7.3 Communications Update 37

8. NEW BUSINESS

Next meeting of the Source Protection Committee #6/11, will be held on Tuesday, September 13, 2011, at 10:00 AM Black Creek Pioneer Village.

CORRESPONDENCE 4.1

Ministry of
the Environment

Source Protection Programs
Branch

14th Floor
40 St. Clair Ave. West
Toronto ON M4V 1M2

Ministère de
l'Environnement

Direction des programmes de protection
des sources

14^e étage
40, avenue St. Clair Ouest
Toronto (Ontario) M4V 1M2



Log: ENV1174IT-2010-64

June 9, 2011

Ms. Susan Self & Ms. Beverley Thorpe
Chair, CTC Source Protection Region
c/o Toronto and Region Conservation Authority
5 Shoreham Drive
Downsview, ON M3N 1S4

Re: CTC Extension Request Letter

Dear Susan and Beverley:

Further to your extension request letter, received by the ministry on May 13 2011, I hereby approve an extension for the resubmission of the Central Lake Ontario Source Protection Area (CLOSPA) Assessment Report (AR) with the following updated assessment report (UAR) tasks included within the amended AR, on or before July 29, 2011. The resubmission of the CLOSPA AR with the inclusion of the UAR tasks was initially directed to be resubmitted to the ministry for review by June 30, 2011.

Updated Tasks:

- Lake Ontario Collaborative (LOC) Phase 2 and 3

Amended Tasks:

- Assessment of Transport Pathways

Ms. Susan Self & Ms. Beverley Thorpe
Page 2

In addition, I hereby concur with an extension of the following UAR items for the Toronto and Region Source Protection Area (TRSPA) AR, and the Credit Valley Source Protection Area (CVSPA) AR, to be submitted to the ministry for review on or before July 29, 2011:

Updated Tasks:

- Lake Ontario Collaborative (LOC) Phase 2 and 3
- Tier 3 for Orangeville (Amaranth-Orangeville-Mono) (CVSPA)

Amended Tasks:

- Assessment of Transport Pathways

As a reminder, the consultation requirements are outlined in section 18 under O. Reg. 287/07, and must be completed for the updated tasks.

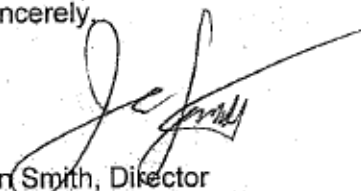
The ministry is still in the process of reviewing the CVSPA AR and the TRSPA AR. Once the review is complete and a decision has been made on the TRSPA AR and the CVSPA AR, please be sure to review the Director's decision letter for any additional details related to consultation requirements for amended tasks, should this be required.

I commit that my staff will communicate with you as soon as possible the early findings of the review of these two ARs to ensure we are not impacting your updated AR work. Please be advised that the timelines associated with reviewing the TRSPA AR and the CVSPA AR will not affect the July 29, 2011 submission date for UAR tasks.

I appreciate the amount of hard work the CTC Source Protection Region SPC has done for their ARs and I anticipate that this high level of effort will continue in order to complete the source protection plans by August 20, 2012.

I assure you that the ministry will continue to support Source Protection Committees and Authorities in achieving their compliance dates, whenever possible. I look forward to receiving your UAR/amended proposed AR.

Sincerely,



Ian Smith, Director
Source Protection Programs Branch
Ministry of the Environment

Ms. Susan Self & Ms. Beverley Thorpe
Page 3

c: Brian Denney, Chief Administration Office, TRSPA
Rae Horst, Chief Administration Officer, CVSPA
Russ Powell, Chief Administration Officer, CLOSPA
Deb Martin-Downs, CTC Executive Lead
Heather Malcolmson, Manager, Source Protection Planning
Keith Willson, Manager, Source Protection Approvals
John Westlake, Liaison Officer, Source Protection Implementation
Sarah Cruickshank, Research and Policy Analyst, Source Protection Approvals
Charlie Worte, Conservation Ontario
Mike Garraway, Water Budget Team Leader, Ministry of Natural Resources

CORRESPONDENCE 4.2

Ministry of
the Environment

Source Protection Programs
Branch

8th Floor
2 St. Clair Ave. West
Toronto ON M4V 1L5

Ministère de
l'Environnement

Direction des programmes de protection
des sources

8^e étage
2, avenue St. Clair Ouest
Toronto (Ontario) M4V 1L5



Log: ENV1174IT-2010-301

June 24, 2011

✓ Ms. Susan Self
Chair, CTC Source Protection Region
c/o Toronto and Region Conservation Authority
5 Shoreham Drive
Downsview, ON M3N 1S4

Ms. Pat Mullin
Chair, Credit Valley Source Protection Authority
1255 Old Derry Rd.
Mississauga, ON L5N 6R4

Dear Ms. Self and Ms. Mullin:

Thank you for the submission of your proposed Assessment Report (AR) for the Credit Valley Source Protection Area (CVSPA) on December 21, 2010. I have completed my review of the proposed Assessment Report and in accordance with my authority under Section 17(2) of the *Clean Water Act, 2006*, I hereby approve the Assessment Report as submitted.

Review of the proposed AR revealed some areas where the language is inconsistent with the technical rules and where more documentation would make the report more transparent, which could be addressed in an updated AR for purposes of clarity and accuracy in a future document. A list of these minor recommended amendments will be provided separately to the SPA/SPC by the Liaison Officer.

As per section 20 of the *Clean Water Act, 2006* the Source Protection Authority shall ensure that the approved assessment report is made available to the public as soon as reasonably possible on the Internet and in any other manner the Authority considers appropriate.

As per the *Clean Water Act, 2006* and General Regulation, your Source Protection Plan is due to be submitted to the Minister of the Environment on

August 20, 2012, the fifth (5th) anniversary of the date that the chairs of the source protection committees were appointed.

In addition, at this time I would like to advise you that all final water quality and quantity AR data must be uploaded as follows:

- Final water quality data is to be uploaded to ARDB@CAMaps within four (4) months of the date on this letter; and
- Final water quantity data is to be uploaded to the Ministry of Natural Resources (MNR) data base following further direction, which will be provided.

With regard to the updated AR workplan submitted to the ministry on November 2, 2010, the SPA has identified the following project tasks, which can be categorized under the following headings – updated tasks and amended tasks, which are defined below:

Updated Tasks – new tasks not yet completed or consulted upon:

- Tier 3 for Orangeville (Amaranth-Orangeville-Mono); and
- Lake Ontario Collaborative (LOC) Phase 2 and 3.

Amended Tasks – tasks partially or wholly contained in the proposed AR that are being changed/updated:

- Assessment of transport pathways - Transport pathway assessment will consider the impact of transport pathways on groundwater vulnerability scoring.

As per my letter of June 10, 2011, the CVSPA has received an extension to July 29, 2011 for submission of the above-noted tasks. Any tasks not completed by this deadline may not be accepted by the ministry for review for this round of source protection planning due to the extremely tight timelines that exist between now and the due date of the source protection plans by August 20, 2012.

In addition to the extension granted for identified updated and amended tasks, it is noted that the Tier 3 Water Budgets for Halton Hills (Acton-Georgetown) that has been previously identified to be completed for June 30, 2011, is not anticipated to be complete for the July 29, 2011 extended deadline.

It is recommended that when developing policies for the Source Protection Plans, the SPC consider that new scientific information may have the potential to change some of the findings of the approved AR. The SPC should be cautious of this when writing policies.

As a reminder, the consultation requirements are outlined in section 18 under O. Reg. 287/07, and must be completed for the tasks contained in the updated assessment report.

Sincerely,

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

Ian Smith, Director
Source Protection Programs Branch
Ministry of the Environment

cc: Rae Horst, Chief Administrative Officer, Credit Valley Conservation
Beverly Thorpe, Project Manager, CTC Source Protection Region
Keith Willson, Manager, Source Protection Approvals
Heather Malcolmson, Manager, Source Protection Planning
John Westlake, Supervisor, Source Protection Implementation
Melanie Ward, Group Leader, Source Protection Approvals
Charley Worte, Conservation Ontario
Mike Garraway, Ministry of Natural Resources

CORRESPONDENCE 4.3

Ministry of
the Environment
Source Protection Programs
Branch
8th Floor
2 St. Clair Ave. West
Toronto ON M4V 1L5

Ministère de
l'Environnement
Direction des programmes de protection
des sources
8^e étage
2, avenue St. Clair Ouest
Toronto (Ontario) M4V 1L5



Log: ENV1174IT-2010-302

June 24, 2011

✓ Ms. Susan Self
Chair, CTC Source Protection Region
c/o Toronto and Region Conservation Authority
5 Shoreham Drive
Downsview, ON M3N 1S4

Ms. Gerri Lynn O'Connor
Chair of the Board of Directors
Toronto and Region Source Protection Authority
5 Shoreham Drive
Downsview, ON M3N 1S4

Dear Ms. Self and Ms. O'Connor:

Thank you for the submission of your proposed Assessment Report (AR) for the Toronto and Region Source Protection Area (TRSPA) on December 21, 2010. I have completed my review of the proposed Assessment Report and in accordance with my authority under Section 17(2) of the *Clean Water Act, 2006*, I hereby approve the Assessment Report as submitted.

Review of the proposed AR revealed some areas where the language is inconsistent with the technical rules and where more documentation would make the report more transparent, which could be addressed in an updated AR for purposes of clarity and accuracy in a future document. A list of these minor recommended amendments will be provided separately to the SPA/SPC by the Liaison Officer.

As per section 20 of the *Clean Water Act, 2006* the Source Protection Authority shall ensure that the approved assessment report is made available to the public as soon as reasonably possible on the Internet and in any other manner the Authority considers appropriate.

As per the *Clean Water Act, 2006* and General Regulation, your Source Protection Plan is due to be submitted to the Minister of the Environment on

August 20, 2012, the fifth (5th) anniversary of the date that the chairs of the source protection committees were appointed.

In addition, at this time I would like to advise you that all final water quality and quantity AR data must be uploaded as follows:

- Final water quality data is to be uploaded to ARDB@CAMaps within four (4) months of the date on this letter; and
- Final water quantity data is to be uploaded to the Ministry of Natural Resources (MNR) data base following further direction, which will be provided.

With regards to the updated AR workplan submitted to the ministry on November 2, 2010, the SPA has identified the following project tasks, which can be categorized under the following headings – updated tasks and amended tasks, which are defined below:

Updated Tasks – new tasks not yet completed or consulted upon:

- Lake Ontario Collaborative (LOC) Phase 2 and 3.

Amended Tasks – tasks partially or wholly contained in the proposed AR that are being changed/updated:

- Assessment of transport pathways - Transport pathway assessment will consider the impact of transport pathways on groundwater vulnerability scoring.

As per my letter of June 10, 2011, the TRSPA has received an extension to July 29, 2011 for submission of the above-noted tasks in an updated AR. Any tasks not completed by this deadline may not be accepted by the ministry for review for this round of source protection planning due to the extremely tight timelines that exist between now and the due date of the source protection plans by August 20, 2012.

In addition to the extension granted for identified updated and amended tasks, it is noted that the Tier 3 Water Budgets for York (Whitchurch-Stouffville-Uxville) that has been previously identified to be completed for June 30, 2011, is not anticipated to be complete for the July 29, 2011 extended deadline.

As a reminder, the consultation requirements are outlined in section 18 under O. Reg. 287/07, and must be completed for the tasks contained in the updated assessment report.

Sincerely,



Ian Smith, Director
Source Protection Programs Branch
Ministry of the Environment

cc: Brian Denney, Chief Administrative Officer, Toronto and Region
Conservation Authority
Beverly Thorpe, Project Manager, CTC Source Protection Region
Keith Willson, Manager, Source Protection Approvals
Heather Malcolmson, Manager, Source Protection Planning
John Westlake, Supervisor, Source Protection Implementation
Melanie Ward, Group Leader, Source Protection Approvals
Charley Worte, Conservation Ontario
Mike Garraway, Ministry of Natural Resources

CORRESPONDENCE 4.4

Ministry of
the Environment

Source Protection Programs
Branch

14th Floor
40 St. Clair Ave. West
Toronto ON M4V 1M2

Ministère de
l'Environnement

Direction des programmes de protection
des sources

14^e étage
40, avenue St. Clair Ouest
Toronto (Ontario) M4V 1M2



ENV1174IT-2011-56

July 5, 2011

Ms. Beverley Thorpe
CTC Source Protection Region Project Manager
CTC Source Protection Committee
5 Shoreham Drive
Downsview, ON M3N 1S4

Dear Ms. Thorpe:

Thank you for your letter of May 16, 2011 and your subsequent request for clarification via email of June 14, 2011. Please disregard my earlier letter of June 10th and consider this letter the official correspondence related to your requests.

In your letter of May 16, 2011 you requested a Director's opinion regarding the addition of the following activities as local drinking water threats, in vulnerable areas for specific drinking water systems, under Rule 119 of the technical rules:

1. Pipeline transporting petroleum product (containing benzene) which crosses a tributary flowing into Lake Ontario;
2. The storage and treatment of tritiated deuterium at the Pickering or Darlington Nuclear Generating stations

In accordance with my authority under Rules 119, 120, or 121, I am of the opinion that the hazard rating is greater than 4 for both activities. The information on the activities, circumstances under which the activities would be drinking water threats and the assigned hazard rating for each threat related to your proposed request is provided below.

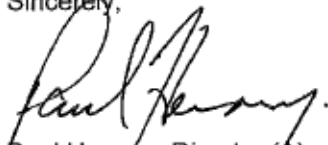
As per your letter, we understand you will be evaluating these activities using the event based modelling approach allowed under technical rule 130. Under that approach, the hazard rating is not relevant to the evaluation of the threat. The hazard rating is required to confirm that the activities are threats that can be considered using the event based approach.

Activity	Circumstance	Hazard Rating	
The conveyance of oil by way of a pipeline	<p>1. The conveyance of oil by way of a pipeline that would be designated as transmitting or distributing "liquid hydrocarbons", including "crude oil", "condensate", or "liquid petroleum products", and not including "natural gas liquids" or "liquefied petroleum gas", within the meaning of the Ontario Regulation 210/01 under the Technical Standards and Safety Act, or is subject to the National Energy Board Act.</p> <p>2. The rupture of a pipeline in an area where the pipeline crosses a body of open water and may result in the presence of BTEX in surface water.</p>	<p>IPZ 9.4</p>	
The storage and treatment of tritiated deuterium	<p>1. The storage and treatment of tritiated deuterium at the Pickering or Darlington Nuclear Generating stations</p> <p>2. The above grade handling of tritiated deuterium in tanks at facilities that are not required to report to the NPRI.</p> <p>3. A spill of the tritiated deuterium may result in the presence of tritiated deuterium in surface water.</p>	IPZ 6.8	WHPA 7
The storage and treatment of tritiated deuterium	<p>1. The storage and treatment of tritiated deuterium at the Pickering or Darlington Nuclear Generating stations.</p> <p>2. The above grade handling of tritiated deuterium in tanks at facilities that are required to report to the NPRI.</p> <p>3. A spill of the tritiated deuterium may result in the presence of tritium in surface water.</p>	7.2	7.4

The activities are both approved as local threats within the CTC Source Protection Region. Your rationale for the inclusion of these local threats along with a copy of this letter must be included in your assessment report.

I hope this has addressed your concerns, however, should you wish to discuss this matter further please feel free to contact me at (416) 212-6459.

Sincerely,



Paul Heeney, Director (A)
Source Protection Programs Branch
Ministry of the Environment

- c: Keith Willson, Manager, Source Protection Approvals
Paul Heeney, Manager, Source Protection Implementation
Heather Malcolmson, Manager, Source Protection Planning
Katie Fairman, Supervisor, Source Protection Implementation
John Westlake, Liaison Officer, CTC Source Protection Region
Clara Tucker, Watershed Management Specialist, Source Protection Planning

Table 1: Conveyance of Petroleum Hydrocarbons Using Pipelines which are exposed above ground and cross a surface water body

Activity	Vulnerability Score to produce a Significant DWT IPZ-1,2,3, WHPA-E	Vulnerability Score to produce a Moderate DWT IPZ-1,2,3,WHPA-E	Vulnerability Score to produce a Low DWT IPZ-1,2,3, WHPA-E
<p>1. The conveyance of oil by way of a pipeline that would be designated as transmitting or distributing "liquid hydrocarbons", including "crude oil", "condensate", or "liquid petroleum products", and not including "natural gas liquids" or "liquefied petroleum gas", within the meaning of the Ontario Regulation 210/01 under the <i>Technical Standards and Safety Act</i>, or is subject to the National Energy Board Act.</p> <p>2. The rupture of a pipeline in an area where the pipeline crosses a body of open water and may result in the presence of BTEX in surface water.</p>	10	7 - 9	4.8 - 6.4

Table 2: Storage and treatment of tritiated deuterium at the Pickering or Darlington Nuclear Generating stations

Activity	Vulnerability Score to produce a Significant DWT IPZ-1,2,3; WHPA-E	Vulnerability Score to produce a Moderate DWT IPZ-1,2,3; WHPA-E	Vulnerability Score to produce a Low DWT IPZ-1,2,3; WHPA-E
<p>1. The storage and treatment of tritiated deuterium at the Pickering or Darlington Nuclear Generating stations</p> <p>2. The above grade handling of tritiated deuterium in tanks at facilities that are not required to report to the NPRI.</p> <p>3. A spill of the tritiated deuterium may result in the presence of tritiated deuterium in surface water.</p>	n/a	9-10	6-8.1
<p>1. The storage and treatment of tritiated deuterium at the Pickering or Darlington Nuclear Generating stations.</p> <p>2. The above grade handling of tritiated deuterium in tanks at facilities that are required to report to the NPRI.</p> <p>3. A spill of the tritiated deuterium may result in the presence of tritium in surface water.</p>	n/a	8.1-10	5.6-8

CORRESPONDENCE 4.5



July 11, 2011

Source Protection Implementation Section
Source Protection Programs Branch
Ministry of the Environment
40 St. Clair Ave. West, 14th Floor
Toronto, ON M4V 1M2

Attention: John Westlake

Dear Mr. Westlake:

Re: Intent to submit updates to the approved Assessment Reports for the Halton Region and Hamilton Region Source Protection Areas

On June 27, 2011, the Halton-Hamilton Source Protection Committee passed a motion to require staff to update the approved Assessment Reports for

- a. the Halton Region and the Hamilton Region Source Protection Areas to include the preliminary findings of the Lake Ontario Collaborative, and
- b. the Halton Report to include the issue contributing area of the Georgetown wells that extends from the Credit Valley Source Protection Area.

The modifications are required to identify significant threats to the source water of the Lake Ontario intakes and the Georgetown issue contributing area and to be consistent with what's reported in the Credit Valley Assessment Report.

The necessary revisions and additions to the reports are summarized in Table 1. The timeline is as follows:

Prepare draft updated assessment reports	to September 2, 2011
Review of draft updated assessment reports by SPC and approval to consult with the public.....	September 13, 2011
Finalize draft updated reports	September 30, 2011
Consult with public, post on website, make reports available	October 1 to 31, 2011
Provide notice to landowners in affected areas and give a copy of notice to clerks of affected municipalities.....	October 1, 2011
Prepare updated reports considering comments received	November 1 to 11, 2011
SPC meeting to approve submission of updated reports to Source Protection Authorities	November 15, 2011
Submit updated reports to Source Protection Authorities.....	November 21, 2011

SPA meetings to approve submission of reports to MOE..... December 1, 2011
Submit updated reports to Director, MOE..... December 2, 2011
Required MOE approval date to meet Plan consultation timing .. January 25, 2012

The preliminary work of the Lake Ontario Collaborative is included in the current draft updated proposed assessment report for the Credit Valley Source Protection Area. The text used in this report will be modified to update the Halton Region and Hamilton Region reports to make it local. The Credit Valley report will be submitted to the MOE this summer for review. We ask that MOE review comments on the Lake Ontario Collaborative results and the issue contributing area work for the Georgetown wells be shared with Halton-Hamilton staff so that we can revise our submission and assist the MOE with review of our reports.

The executive summary and Section 8 – Summary, of both reports will be reviewed and the text revised to capture the changes made throughout the documents. All changes made will be highlighted to assist the MOE review.

As noted above, the Halton-Hamilton Source Protection Committee requires approval of the updated assessment reports by January 25, 2012 to be able to meet the public consultation timing for the Halton Region and Hamilton Region Source Protection Plans. We request early consultation with staff should concerns with our updates be identified.

We trust this information satisfies the request for a work plan to update the assessment reports. Should you have any questions, please don't hesitate to contact the undersigned.

Yours truly,



Diane L. Bloomfield, M.Sc., P.Geo.
Project Manager

c: Doug Cuthbert, Chair
Bev Thorpe, Project Manager CTC

Table 1. Proposed Assessment Report updates for the Halton Region and the Hamilton Region Source Protection Areas

Report Halton and/or Hamilton	Report Section / Table	Update Required	Results / Work plan
Halton	6.2.3 WHPAs	Drainage area for WHPA-E vulnerability score = 9 has been altered slightly.	Modification results in inclusion of 14 additional properties. Only future threats. Landowners have been notified through plan preparation letters sent out in June 2011.
Halton	Tables 7.2 and 8.2 and text	Modify existing significant threats and their counts based on verified results (threats and numbers have decreased).	Plan preparation letters sent June 2011 notify the landowners on the revised list. No additional action needed.
Hamilton	Tables 7.1 and 8.2 and text	Modify existing significant threats and their counts based on verified results (threats and numbers have decreased).	Plan preparation letters sent June 2011 notify the landowners on the revised list. No additional action needed.
Halton	6.3 neighbouring SPAs	Replace Georgetown wells WHPA and add issue contributing area, if applicable.	<p>To be consistent with Credit Valley SPA assessment report and facilitate inclusion of policies in the plan to address significant threats within the issue contributing area.</p> <p>Based on recent modelling completed for the Tier 3 water budget study for Georgetown municipal wells, Halton Region will be updating the WHPA and its vulnerability scoring. CTC has also identified this area as an issue contributing area, and mapping must be added to the Halton Region report. The change in mapping and inclusion of the revised ICA map and text are dependent on completion of the Halton Region work within our timeframe.</p> <p>The inclusion of the work is also dependent on the revised delineation. There is the possibility that the new WHPA will not enter the CH watershed. In this case the text will be revised and Figure 6.29 removed.</p> <p>If the additional work is not complete, the ICA map currently included in the Credit Valley SPA amended report will be added to Section 6.3 with some explanatory text.</p>

Report Halton and/or Hamilton	Report Section / Table	Update Required	Results / Work plan
Both	6.1.5 IPZ-3	Text will be changed to include preliminary results of the Lake Ontario Collaborative modelling and the identification of IPZ-3s and significant threats within the Halton and Hamilton areas that affect Halton and Hamilton intakes. Also inclusion of appendix. A map will be included of the IPZ-3s in the watersheds. All figure numbers for section 6 beyond 6.5 will have to be increased by one to allow the insertion of an IPZ-3 figure.	To identify significant threats to the source water of the Halton and Hamilton Lake Ontario intakes. The text and appendix used in the Credit Valley updated assessment report will be used, with minor modifications, to update the Halton Region and the Hamilton Region reports.
Both	Figures 6.6 and onward and corresponding text	A map will be included of the IPZ-3s in the watersheds. All figure numbers for section 6 beyond 6.5 will have to be increased by one to allow the insertion of an IPZ-3 figure.	All appropriate figure numbers will be changed by staff and the figures replaced in the body of the report. All text references to the figures will be changed by staff and pages replaced in the pdf version of reports.
Both	6.3 neighbouring SPAs	Text will be added to discuss the IPZ-3s delineated for neighbouring Lake Ontario intakes that extend into the Halton and Hamilton SPAs. A map will also be included.	To be consistent with Credit Valley SPA and their preliminary identification of significant threats and IPZ-3s that extend into our watersheds.
Both	7.2 threats	Addition of a local threat - rupture of pipeline carrying liquid fuel. Text will be modified.	A request for the approval of a local threat is being submitted to the MOE to capture the significant threat identified in the Lake Ontario Collaborative work.
Both	throughout	Minor editorial corrections	A few typos, missing words, and incorrect formatting exist in the reports and will be corrected during this update. The corrections will not affect results and will be highlighted for the MOE's review.

Item 6.1

TO: Chair and Members of the Source Protection Committee Meeting #5/11, July 26, 2011

FROM: Susan Self, Chair, CTC SPC

RE: **Strategy for Pre-Consultation with Implementing Bodies**

KEY ISSUE

Strategy for pre-consultation with municipalities who are “Implementing Bodies” for Source Protection Plans under the Clean Water Act, 2006.

RECOMMENDATION

THAT the CTC Source Protection Committee (SPC) approves this strategy for pre-consultation with municipalities who are “Implementing Bodies”;

THAT CTC SPC members advise staff which workshops they wish to attend prior to September 2, 2011;

AND FURTHER THAT staff be directed to take the necessary steps to execute the outlined strategy for consulting with Implementing Bodies.

BACKGROUND

Before a Draft Source Protection Plan can be published for public comment, there is a regulatory requirement under the *Clean Water Act, 2006* to consult with those bodies designated to implement policies. O. Reg. 287/07 outlines the requirements for pre-consultation which include the SPC:

- a) Providing notice of the proposed policy to the body that would be responsible for implementing the policy.
- b) Providing draft wording of the proposed policy to the above body.
- c) Providing a summary of reasons for the proposed policy.
- d) Requesting written comments on the proposed policy.
- e) Considering comments received, if any, from the body referred to above.

In the case where the Province has been designated to implement a policy through prescribed instruments, the Ministry of the Environment will be coordinating this notification with other ministries through a database which they are developing. Staff will populate the database after approval from the SPC of draft policies for pre-consultation.

Municipalities designated to implement Source Protection Plan policies will require a more extensive consultation, especially since many municipalities will be designated to implement policies from multiple Source Protection Regions (SPRs). Staff has been working to develop a pre-consultation strategy that will effectively allow municipalities to give input on the draft policies. The proposed strategy provides an opportunity for municipalities to review and provide feedback on multiple draft Source Protection Plans to SPCs at one time. This consultation is scheduled to start with the endorsement of draft Source Protection Plan wording

in September. On June 3, 2011, the Communications and Outreach Working Group endorsed the following consultation strategy in principle and instructed staff to seek SPC approval.

Proposed Consultation Strategy

The proposed format consists of series of workshops where a municipality can engage members from all the Source Protection Committees who are drafting policies that affect it. It is recognized that giving municipalities a venue to respond to all plans that impact them will help ensure consistency between Source Protection Plans (where possible). The request for consistent Source Protection Plan policies has been a recurring theme in the comments received from municipal staff who are concerned about the difficulties they will have in implementing the policies. Where consistency is not possible, municipalities and SPRs will have this information ahead of public consultation where these challenges may need to be addressed further. CTC staff has taken the lead to engage the adjacent regions to determine their interest and to coordinate development of this proposal. To date, all SPRs adjacent to the CTC, except Halton-Hamilton SPR, have expressed strong interest in participating.

The process would be for the municipalities to receive notification and the draft policies from each SPR in early fall for review, along with the proposed date to respond and the workshop date. The workshops will be scheduled six to eight weeks following the circulation of the draft policies, to provide time for municipal staff review and report to council. Municipalities will be asked to provide written comment in advance of the workshop so that there is an opportunity for discussions and consideration of the issues by SPC members. Workshops will be grouped by municipality and SPRs (see Table below). It is proposed that the upper and its lower tier municipalities would be invited to the same workshop. The lead municipalities will be those responsible for the well/intake and water treatment. It is recognized that each level of government may have a role in implementing different facets of the Source Protection Plan. Where a municipality is not being assigned any implementing responsibility, they may wish to attend in an observer role. All municipalities will also have an opportunity to review and comment on the proposed Source Protection Plans through the regulated consultation process which starts after the pre-consultation phase.

At these workshops, municipalities will be able to respond to each SPC whose plans affect them. This will also allow SPC members and staff to compare draft policies between SPRs which may identify some areas where an SPC may wish to revise, add or delete items prior to public consultation. Though the regulatory requirements to pre-consult can be met without holding workshops, or without working co-operatively with adjacent SPRs, it is recognized that this will reduce the workload on municipalities affected by multiple SPRs, as well as give a venue for discussion amongst SPRs and municipalities. These workshops are also beneficial when committees move forward with the public consultation phase which will start in early 2012. The exact format of each workshop will be developed through the fall in conjunction with the participating municipalities and SPRs.

If this strategy is approved, the general timelines would be as follows:

Summer 2011: Committees develop draft policies

Mid-Late September 2011: Council given formal notification of pre-consultation and Draft policies and Explanatory Document supplied to municipality

September - November 2011: Municipality to review draft policies and provide comments/seek clarification

November - December 2011: Submission of comments from municipality and workshops

It is estimated that six workshops will be required to cover CTC municipalities, with the groupings as follows (**municipality responsible for water systems shown in bold**):

Upper Tier Municipality	Lower Tier Municipality	SPR1	SPR2	SPR3	Workshop
City of Toronto	City of Toronto	CTC			1
Simcoe County		CTC	SGBLS		2
Simcoe County	Township of Adjala-Tosorontio	CTC	SGBLS		2
County of Dufferin	Town of Mono	CTC	SGBLS		2
County of Dufferin	Township of Amaranth	CTC	SGBLS	Lake Erie	2
County of Dufferin	Township of East Garafraxa	CTC	Lake Erie		2
County of Dufferin	Melancthon	SGBLS	Lake Erie		2
County of Dufferin	Mulmur	SGBLS	Lake Erie		2
County of Dufferin	Shelburne	SGBLS			2
Durham Region	Town of Ajax	CTC	CTC		3
Durham Region	City of Pickering	CTC			3
Durham Region		CTC	SGBLS	TCC	3
Durham Region	Town of Whitby	CTC			3
Durham Region	Township of Scugog	CTC	TCC		3
Durham Region	City of Oshawa	CTC			3
Durham Region	Municipality of Clarington	CTC	TCC		3
Durham Region	Township of Uxbridge	CTC	SGBLS	TCC	3
Durham Region	Brock Township	SGBLS			3
Durham Region	Scugog	SGBLS	TCC		3
Halton Region	Halton Region	CTC	HH		4
Halton Region	Town of Halton Hills	CTC	HH		4
Halton Region	Town of Oakville	CTC	HH		4
Halton Region	Town of Milton	CTC	HH		4
Wellington County	Town of Erin	CTC	Lake Erie		4
Wellington County		CTC	Lake	HH	4

			Erie		
Peel Region	City of Brampton	CTC			5
Peel Region	City of Mississauga	CTC			5
Peel Region		CTC	SGBLS		5
Peel Region	Town of Caledon	CTC	SGBLS		5
York Region	Town of Markham	CTC			6
York Region	Town of Whitchurch-Stouffville	CTC	SGBLS		6
York Region	Town of Aurora	CTC	SGBLS		6
York Region		CTC	SGBLS		6
York Region	Town of Richmond Hill	CTC	SGBLS		6
York Region	City of Vaughan	CTC			6
York Region	Township of King	CTC	SGBLS		6
York Region	East Gwillimbury	SGBLS			6
York Region	Georgina	SGBLS			6
York Region	Newmarket	SGBLS			6

NEXT STEPS

It is expected that in addition to staff being present to receive comments, that members of the SPC should also be in attendance at these workshops. **SPC members interested in participating in this process are requested to contact the Chair of the SPC or staff by September 2, 2011.** SPC members should indicate which workshops they will be attending, to ensure there is appropriate attendance at the workshops. At CTC SPC meeting #6/11, to be held on September 13, 2011 staff will provide an update on the status and plans for the pre-consultation, including the proposed SPC attendance and dates for the specific workshops.

Report prepared by: Megan Price, extension 5568
Emails: mprice@trca.on.ca
For Information contact: Megan Price, extension 5568
Emails: mprice@trca.on.ca
Date: July 11, 2011

Item 6.2

TO: Chair and Members of the Source Protection Committee
Meeting #5/11, July 26, 2011

FROM: Susan Self, Chair, CTC SPC

RE: **Significant Groundwater Quantity Threats Policies Working Group**

KEY ISSUE

Establish a Groundwater Quantity Threats Policies Working Group to work with staff to draft policy options to address groundwater quantity threats.

RECOMMENDATION

THAT the CTC Source Protection Committee (SPC) authorizes the formation of a Groundwater Quantity Threats Policies Working Group (WG) composed of CTC SPC members, municipal staff or representatives from Orangeville, Amaranth, East-Garafraxa, Mono, Caledon (Peel) and Halton Hills (Halton), and a representative from South Georgian Bay Lake Simcoe Source Protection Region (SGBLS) to draft policy options;

THAT the WG will meet for a full day workshop on August 23rd, 2011 to review and revise potential draft policies proposed by staff;

THAT the WG will present draft policies to the CTC SPC at SPC Meeting #6/11, to be held on September 13, 2011;

THAT the CTC SPC will be asked to adopt draft policies for pre-consultation at the SPC Meeting #7/11 to be held on September 27, 2011;

THAT Chair Self will appoint WG members (SPC and municipal) at the July 26th, 2011 CTC SPC meeting #5/11; and

AND FURTHER THAT Chair Self will appoint Bob Burnside as Chair of the WG.

BACKGROUND

RES. #236/11, adopted at CTC SPC Meeting #2/11, held on March 1, 2011 accepted the final AquaResource report *Orangeville, Mono, and Amaranth Tier Three Water Budget and Local Area Risk Assessment* as a foundation report. These results which were included in the *Updated Assessment Report: Credit Valley Source Protection Area (CVSPA)* identified significant drinking water threats. Additionally, staff was directed to take the necessary action to develop policy options to address the significant drinking water **quantity** threats identified.

In order to most effectively develop draft policies for consideration by the CTC SPC, staff is recommending the formation of a WG composed of both SPC members and technical staff from the affected municipalities. The Chair and members of the WG are to be appointed by Chair Self from those SPC members who represent the impacted areas and technical staff from the impacted municipalities.

One full day workshop will be held on August 23, 2011 to review, evaluate and revise potential policy options presented by staff. Staff will draft policies as discussion starters in consultation with staff from South Georgian Bay Lake Simcoe Source Protection Region and distribute draft policies to working group members in early August. The WG will present these draft policies to the SPC at Meeting #6/11 to be held on September 13, 2011. On September 27, 2011 at SPC Meeting #7/11, CTC SPC members will discuss, review and approve draft policies to be considered during pre-consultation.

An initial outline of significant drinking water quantity threat policies is included as **Attachment 1**.

Report prepared by: Andrea Dube-Goss, extension 5633

Emails: adube-goss@trca.on.ca

For Information contact: Andrea Dube-Goss, extension 5633

Emails: adube-goss@trca.on.ca

Date: July 12, 2011

Attachment: 1

Attachment:1 Outline of “Significant Drinking Water Quantity Threat Policies”

SIGNIFICANT DRINKING WATER QUANTITY THREAT POLICIES

Background

The *Clean Water Act, 2006* and O. Reg. 287/07 prescribes drinking water threats to municipal drinking water systems and sets out the requirements to identify vulnerable areas where threats can exist, and the categorization of the threats as low, moderate or significant. Source Protection Committees (SPCs) must develop policies to address significant drinking water threats from existing or future activities and may develop policies for low and moderate threats.

Two of the prescribed drinking water threats are related to water quantity (the remaining 19 deal with threats to water quality). These prescribed water quantity threats are:

- #19: An activity that takes water from an aquifer or a surface water body without returning the water taken to the same aquifer or surface water body.
- #20: An activity that reduces the recharge of an aquifer.

Through a tiered process of water budget analyses as set out in the *Technical Rules* under O. Reg. 287/07, SPCs are required to identify the vulnerable areas, activities that pose drinking threat, and the threat level. At the final stage (Tier 3) specific vulnerable areas (Local Area) are delineated and significant drinking water threat activities are identified. Within the CTC SPR, three Tier 3 water budget analyses have been initiated. Only one of these has been completed as of July 2011, in the areas around municipal wells in Orangeville, Mono and Amaranth. This study resulted in the delineation of one Local Area within which significant drinking water threats have been identified. This Local Area extends into the South Georgian Bay Lake Simcoe Source Protection Region. The *Updated Assessment Report: Credit Valley Source Protection Area* describes this work.

Tier 3 water budget studies are still underway in Halton Hills related to wells in the CTC, and in York Region involving wells both in the CTC and South Georgian Bay Lake Simcoe Source Protection Regions.

Policy Development

This Tier 3 water budget study is the first to be completed under the CWA. There is no provincial guidance at this point on developing policies to address significant drinking water threats, although work is underway to develop a catalogue of risk management measures for water quantity threats.

Policies will be required to address activities which take water from the aquifers, create demand for additional water takings, and reduce recharge - therefore reducing the water available for taking.

Potential Policy Topics

The following list identifies the possible topic areas within which policies may be developed. It is intended for starting discussion. In addition to the tools described below, Part IV tools under the CWA can be used to address these threat activities.

1. Permits to Take Water (PTTW) issued under the *Ontario Water Resources Act* are a prescribed instrument under the CWA. Policies which direct MOE staff regarding the review, renewal or limits on issuing new PTTWs to protect and give priority to municipal water use are one policy option.
2. Population growth creates demand for additional water taking. Review and possible limits on population to be served will be considered. The Ministries of Municipal Affairs and Housing and Infrastructure have roles in setting population growth targets for municipalities. The *Planning Act* is a prescribed instrument under the CWA.
3. Development which creates additional hard surfaces reduces recharge and therefore the water available in the aquifer to meet the water demands. In addition, a number of the wells in the Local Area that have been identified as having significant drinking water quantity threats have also been identified as having Issues related to sodium and chloride. Mitigation measures must address both water quantity and quality threats in these wells. Land use planning policies under the *Planning Act* can be used to limit the recharge reduction from new development and to require implementation of mitigation measures.
4. Water conservation can reduce the demand from existing users. The municipalities could be directed to implement voluntary or mandatory programs both on their own takings but also on the residents. New conditions to limit takings and conserve water can also be placed on PTTWs.
5. Any water taking within the Local Area identified as having significant drinking water quantity stress is a significant threat activity, even if there are no permits or approvals required for the taking. This includes private wells and livestock watering. Education and Outreach and Incentive programs may be developed to ensure that property owners and businesses understand their role in protecting water supplies and actions that they can take. This may be coupled with municipal financial incentive programs and projects that could be eligible for cost-sharing under future funding of the Ontario Drinking Water Stewardship Program.
6. Municipalities have the responsibility to plan for and manage their long term water supply. In this area, the lower tier municipalities have the water supply responsibilities. These municipalities have limited staff and financial capacity to carry out this task. Some of the wells which serve the Town of Orangeville are located outside of the town limits and the well head protection areas for wells within the town extend beyond the town limits. Future growth in this area is limited by the current water supply. In order to properly manage the water supply optimally, the establishment of a local water management authority that can work across municipal and watershed boundaries to control the current and long term water supply may be required.
7. Other topics as identified by staff and WG members.

Item 6.3

TO: Chair and Members of the Source Protection Committee Meeting #5/11, July 26, 2011

FROM: Susan Self, Chair, CTC SPC

RE: **Lake Ontario Water Quality Threat Policies Working Group**

KEY ISSUE

Establish a Lake Ontario Threats Policies Working Group to work with staff to draft policy options to address threats impacting Lake Ontario intakes.

RECOMMENDATION

THAT the CTC Source Protection Committee (SPC) authorizes the formation of a Lake Ontario Threats Policies Working Group (WG) composed of CTC SPC members or municipal staff from the City of Toronto, Regions of Halton, Peel and Durham and the affected industrial and general public sectors;

THAT representatives from the Trent Conservation Coalition and the Halton-Hamilton Source Protection Committees be invited to participate on the WG;

THAT the WG will meet for a full day workshop on September 15th, 2011 to review and revise potential draft policies proposed by staff;

THAT the WG will present draft policies to the CTC SPC at SPC Meeting #7/11, to be held on September 27th, 2011;

THAT the CTC SPC will review and adopt draft policies for pre-consultation at the SPC Meeting #8/11 to be held on October 25th, 2011;

THAT Chair Self will appoint WG members (SPC and municipal) at the July 26th, 2011 CTC SPC meeting #5/11;

AND FURTHER THAT Chair Self will appoint Michael D'Andrea as Chair of the WG.

BACKGROUND

RES. #248/11, adopted at CTC SPC Meeting #3/11, held on April 19, 2011 accepted the draft results of the IPZ-3 spills scenarios for Lake Ontario drinking water intakes in the CTC Region. These results were included in the *Updated Assessment Reports: Credit Valley Source Protection Area (CVSPA)*, the *Updated Assessment Reports: Toronto and Region Source Protection Area (TRSPA)* and the *Amended Assessment Reports: Central Lake Ontario Source Protection Area (CLOSPA)*.

In order to most effectively develop draft policies for consideration by the CTC SPC, staff is recommending the formation of a WG of both SPC members from the CTC, Trent Conservation Coalition and Halton-Hamilton SPCs and technical staff from the affected municipalities. The

Chair and members of the WG would be appointed by Chair Self from those SPC members who represent the impacted areas and technical staff from the impacted municipalities. The Chair will consult with the Chairs of the Trent Conservation Coalition and Halton-Hamilton SPRs to offer them the opportunity to appoint a representative from their respective SPCs to the WG. Staff will draft policies as discussion starters in consultation with staff from Trent Conservation Coalition and Halton-Hamilton SPRs and distribute draft policies to working group members in early August. One full day meeting will be held to review, evaluate and revise potential policy options presented by staff. The WG will present these draft policies to the SPC at Meeting #7/11 to be held on September 27th, 2011. On October 25th, 2011 at SPC Meeting #8/11, CTC SPC members will discuss, review and adopt draft policies to be considered during pre-consultation.

An initial outline of Lake Ontario significant drinking water quality threat policies is included as **Attachment 1**.

Report prepared by: Andrea Dube-Goss, extension 5633
Emails: adube-goss@trca.on.ca
For Information contact: Andrea Dube-Goss, extension 5633
Emails: adube-goss@trca.on.ca
Date: July 12, 2011
Attachment: 1

Attachment:1 Outline of “Significant Drinking Water Quality Threat Policies for Lake Ontario”

SIGNIFICANT DRINKING WATER QUALITY THREAT POLICIES FOR LAKE ONTARIO

Background

The *Clean Water Act 2006* and O. Reg. 287/07 prescribes drinking water threats to municipal drinking water systems and sets out the requirements to identify vulnerable areas where threats can exist, and the categorization of the threats as low, moderate or significant. The *Technical Rules* provide for the use of events based modelling as a tool to identify threats to drinking water sources in the Great Lakes. Any threat identified by this approach is deemed “significant”. There is also a requirement to delineate an area known as an IPZ-3 related to the location of the threat activity on land and the intake that is impacted.

Source Protection Committees (SPCs) must develop policies to address significant drinking water threats from existing or future threat activities. O. Reg. 287/07 Section 19.7 sets out the following list of contents that can be included in a source protection related to strategic actions:

The following matters are prescribed for the purposes of paragraph 3 of subsection 22 (6) of the Act:

1. *Policies with respect to drinking water threats identified in the assessment report or Great Lakes targets that,*
 - i. *establish stewardship programs,*
 - ii. *specify and promote best management practices,*
 - iii. *establish pilot programs,*
 - iv. *govern research, or*
 - v. *specify the actions to be taken to implement the source protection plan or to achieve the plan’s objectives.*

In carrying out the assessment report work, no consideration was made of whether there are existing risk management measures in place to manage the threat or to assess the adequacy of any such measures. Rather, these are matters relevant to the source protection plan development and implementation phases of the source water protection program.

Nineteen of the prescribed drinking water threats are related to water quality (the remaining 2 deal with threats to water quantity). Of these 19, the storage and handling of fuel and sewage systems have been identified through events based modelling as significant threat activities to Lake Ontario drinking water sources at specific locations within the CTC. In addition to these prescribed threat activities, SPCs may request the addition of local threat activities per *Technical Rule 119* where the SPC is of the opinion that these activities can threaten drinking water sources in their area. The CTC SPC has received approval from the MOE Director to add two additional local threats relating to Lake Ontario intakes – tritium releases from nuclear generating stations and pipelines that carry products containing benzene that cross tributaries to Lake Ontario..

The *Updated/Amended Assessment Reports* for each of the Credit Valley, Toronto and Region and Central Lake Ontario Source Protection Areas, describes this work.

Policy Development

This events based modeling work carried out by the Lake Ontario Collaborative study is one of only a few to be completed under the CWA. There is no provincial guidance at this point on developing policies to address these significant drinking water threats. MOE staff has advised that they are looking to the advice of SPCs developing policies for Great Lakes sources to make recommendations regarding possible Great Lakes targets to be established under provisions of the CWA which have not yet been acted upon. Lake Ontario is the single most important source of drinking water in the CTC. It is abundant in quantity and of high quality. This makes it possible for municipal utilities to easily treat the water to deliver low cost, safe and aesthetically pleasing water to residents in Halton, Peel, Toronto, Durham and York. Even though York does not border Lake Ontario, over 80% of York residents receive water from Lake Ontario purchased by York from Peel and Toronto. Policies are required that ensure that Lake Ontario remains a safe, economical and reliable source of drinking water.

Policies will be required to address significant threat activities to manage or eliminate the threats and to prevent future threats from occurring.

Potential Policy Topics

The following list identifies the possible topic areas within which policies may be developed. It is intended for starting discussion. In addition to the tools described below, Part IV tools under the CWA can be used to address these threat activities with the exception of the threats from sewage.

1. A number of industries whose activities have been identified as significant threats have advised staff that there are a number of risk management measures already in place to protect water. Policies could require review of these risk management measures to ensure that they are adequate to protect specific drinking water intakes. For sewage works this would be implemented through the C of A process as this is the prescribed instrument for these activities. Policies for other threat activities could direct the RMO to implement a risk management plan or in case of federally regulated facilities, the policy might be directed at the federal approval authority, to undertake this action.
2. Policies might be developed using land use planning tools and/or prescribed instruments requiring proponents to assess and site facilities to ensure future threats are avoided. The *Planning Act* is a prescribed instrument under the CWA.
3. The events based modelling that has been done to date is not exhaustive. Policies might be developed requiring further research and evaluating the potential for other land-based activities to cause harm or to run other scenarios.
4. Through the LOC, a predictive three dimensional model has been calibrated to assess in a consistent manner threats to Lake Ontario sources within the LOC. This does not include the Hamilton Harbour which has been modelled by federal staff at the Canada Centre for Inland Waters (CCIW) as part of the Remedial Action Program. In Hamilton Harbour, CCIW staff have a calibrated model at a finer resolution than was possible in the lake proper. Policies may be developed to recommend the maintenance, enhancement and use of a common model tool for responding to spill situations when they happen and to assess future potential threat activities.
5. Delineation of the IPZ-3 has generated considerable discussion amongst LOC partners. The method set out in the assessment reports links the land-based activity with the affected intake. This approach does not convey the fact that the nearshore area (out to

approximately 2 kilometers) is susceptible to contamination from large shore-based spills and activities. Policies may be drafted to address this limitation and better address the inherent vulnerability of the area.

6. In order to reliably assess threats and model spills and other activities, real time information on weather and lake current speed, and direction and water temperatures at various depths is required. Policies may be developed to recommend the addition of more fixed, continuous instrumentation to provide data to LOC partners and industries to manage their facilities. These policies may recommend that funding be shared amongst users and regulated industries.
7. Education and Outreach policies may be developed to encourage a variety of activities to ensure that individuals, planning and works staff are aware of how activities on the land can impact water quality and what can be done to reduce these impacts.
8. POSSIBLE STRATEGIC ACTION POLICIES
 - a) Preliminary pathogen assessment was undertaken for some intakes. A fuller assessment of the threats from pathogens that are not easily treated with conventional water treatment technologies may be recommended.
 - b) Managing threats to drinking water sources in Lake Ontario is best handled in a collaborative framework that integrates local, regional, provincial and federal partners and provides sustainable funding for monitoring and modelling tools to support decision-making. Policies may be developed aimed at establishing a governance and funding mechanism for this.
 - c) Loading of contaminants through tributaries, particularly driven by large scale precipitation events was examined in the LOC work. Although not related to a specific land-based activity, the impacts of overland flow of contaminants into storm sewers or directly into tributaries, can significantly impact near shore water quality. Climate change scenarios predict increasing frequency of large scale precipitation events which can cause rapid erosion of streambanks and exposure of buried utilities making them prone to rupture. The on-going urbanization can impact on surface water quality and flow quantities, especially if there are not storm water retention facilities built in to ameliorate the impacts. Policies may be developed to speak to these matters.
9. Other topics as identified by staff and WG members.

Item 7.1

TO: Chair and Members of the Source Protection Committee Meeting #5/11, July 26, 2011

FROM: Working Group Chair

RE: **Submission of the Amended Assessment Report: CLOSPA, Updated Assessment Report: TRSPA and Updated Assessment Report: CVSPA to the Minister of the Environment, July 29, 2011.**

KEY ISSUE

Update on consultation period for the three updated Assessment Reports and submission of the revised updated Assessment Reports.

RECOMMENDATION

THAT the CTC SPC accepts this report for information.

BACKGROUND

The CTC SPC authorized the Updated Assessment Report Working Group (UAR WG) to make decisions on behalf of the CTC SPC to review comments and amend the three Assessment Reports for submission by RES.#245/11 at CTC SPC meeting #3/11, held on April 19, 2011.

The three updated Assessment Reports were posted on June 17th, 2011 for a 30 day consultation period ending July 18th, 2011. On June 24th, 2011 Chair Self received letters for the Ministry approving the Proposed Assessment Report: CVSPA and TRSPA submitted in December 2010. On March 3rd, 2011 Chair Self received a letter from the Ministry of the Environment, indicating that the *Proposed Assessment Report: CLOSPA* required amendments. The reports will now be titled: *Updated Assessment Report: CVSPA, Updated Assessment Report: TRSPA, and Amended Proposed Assessment Report: CLOSPA*.

At the close of the consultation period there were 12 written comments received from municipalities, oil/gas and pipeline industry, and the power generation industry. A majority of these comments are in regard to the assumptions used in the development of the spills scenario modelling for the Lake Ontario intakes.

CTC staff met on July 19th and 20th to review all the comments and revise reports where appropriate. The comments and the action taken in response to the comments are summarized in **Attachment 1** (to be provided separately).

Next Steps

The UAR WG is meeting on July 25th, 2011 to review the comments and revisions to the reports.

The UAR WG Chair will provide a verbal update at the CTC SPC meeting on July 26th, 2011.

Each Source Protection Authority has authorized their Chair to submit the updated Assessment Reports. Staff are preparing transmittal letters for the Chairs' signatures to accompany the

updated Assessment Reports which will be submitted to the MOE Director by July 29th, 2011.

Staff will post the reports, as submitted to the MOE, on the CTC SPC website. When the updated reports are approved, staff will format and print copies for those SPC members who want them. Electronic copies will be available.

Staff are required to submit electronic data to the MOE on the approved Assessment Reports by December 2011.

There will be a further update in the fall 2011 for the revised Wellhead Protection Areas (WHPAs) and threats identification, and issues and enumerations for Acton/Georgetown. Tier 3 work is continuing for Halton and York. Staff is not clear if any further update related to this work will be possible in time for this round of source protection planning. Peer review of the Lake Ontario scenario modelling will be completed in early fall of 2011. Minor updates may be required.

Report prepared by: Andr ea Dub e-Goss, extension 5633

Emails: adube-goss@trca.on.ca

For Information contact: Andr ea Dub e-Goss, extension 5633

Emails: adube-goss@trca.on.ca

Date: July 12, 2011

Attachment: 1

Attachment 1: Summary of comments and actions taken - available under separate cover at meeting

Item 7.2

TO: Chair and Members of the Source Protection Committee Meeting #5/11, July 26, 2011

FROM: Beverley Thorpe, Project Manager, CTC Region

RE: **Source Protection Plan Policy Development Status**

KEY ISSUE

Update on progress in developing Source Protection Plan policies for groundwater quality threats following the June 20-22, 2011 Workshop.

RECOMMENDATION

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

BACKGROUND

At the beginning of 2011 the Source Protection Plan Working Group (SPPWG) began a series of five facilitated workshops to formulate Source Protection Plan (SPP) Groundwater Quality policy options, these workshops are listed below:

- Workshop #1 Waste Disposal and Sewage, held on January 12, 2011
- Workshop #2 Agricultural and Non-agricultural, Source Material, Fertilizers, Pesticides and Livestock, held on February 22, 2011
- Workshop #3 Fuel, DNAPLs, Organic Solvents, Salt and Snow, held on March 29, 2011
- Workshop #4 Summary and Review of all threats targeted for CTC SPC members, held on April 26,
- Workshop #5 Further Information Presentations as requested and targeted for CTC SPC members plus preparation for June planning workshop held on May 24, 2011

After the May 24, 2011 Workshop, CTC planning staff prepared draft policies as discussion starters for each of the threat circumstances based on the results of the five workshops that were held. These drafts were distributed to SPC members and shared with municipal staff. On June 20th through June 22nd the Source Protection Committee (SPC) members along with source protection planning staff gathered for a Policy Planning Development Workshop, held at Hockley Valley Resort to review policy options developed. The Workshop was facilitated by Robb Ogilvie and Isobel Heathcote of Ogilvie, Ogilvie & Company, who recorded live-on-screen discussion notes and decisions reached at the Workshop. On June 29, 2011 source protection planning staff received a draft report from the consultants entitled, Plan Development Retreat Groundwater Quality Threats - Summary of Discussion. Source protection planning staff met on July 6, 2011 to discuss next steps and timelines to review the draft document and provide comments to the consultants for finalizing the document. The revised report will be available for SPC members at the July 26, 2011 meeting. In addition staff discussed timing to prepare draft policies for SPC approval for stakeholder consultation purposes.

NEXT STEPS

Attachment 1 sets out the timelines up to submission of the Source Protection Plan (SPP) in August 2012, including consultation, communications and stakeholder workshop process. Agenda **ITEM 6.1** for the July 26 SPC meeting lays out the strategy for consultation with implementing bodies. Agenda **ITEM 6.2 and 6.3** for the July 26, 2011 meeting set out recommendations for the water quantity and Lake Ontario policy development process.

The CTC source protection planning staff is taking the following actions to prepare draft policies for SPC endorsement for stakeholder consultation.

DATE	ACTION
July 12, July 14 and August 5	Meeting with planning counterparts from Hamilton-Halton (HH) and South Georgian Bay-Lake Simcoe (SGBLS) Source Protection Regions to review and coordinate, where possible, consistency in format and content of SPP policies, plan and explanatory document.
July 20	Complete review of consultant's draft retreat report and provide comments back to consultant for their completion of the report. Update the policy tables prepared by staff and used at the retreat with the directions and decisions reached at the retreat, and add additional policies as required, e.g. monitoring policies to prepare a complete set of policies.
July 26	Provide SPC members with copies of consultants report and revised draft policies for information and circulate to SPP Steering Committee members.
August 8	Meeting of the SPP Planning Working Group and Steering Committee to review the revised policy tables and first draft of the Explanatory Document;
August 31	Draft policies for pre-consultation finalized by staff for SPC approval at meeting #6/11 to be held on September 13.

Report prepared by: David Burnett, extension 5361

Emails: dburnett@trca.on.ca

For Information contact: David Burnett, extension 5361

Emails: dburnett@trca.on.ca

Date: June 21, 2011

Attachment 1: Gantt chart of Source Protection Plan Consultation Timelines (available underseparate cover)

Item 7.3

TO: Chair and Members of the Source Protection Committee Meeting #5/11, July 26, 2011

FROM: Beverley Thorpe, Project Manager, CTC Region

RE: **Communications Update**

KEY ISSUE

Update Regarding Communications Activities including Source Protection Plan Commencement Notification and Updated Assessment Report Consultation

RECOMMENDATION

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

BACKGROUND

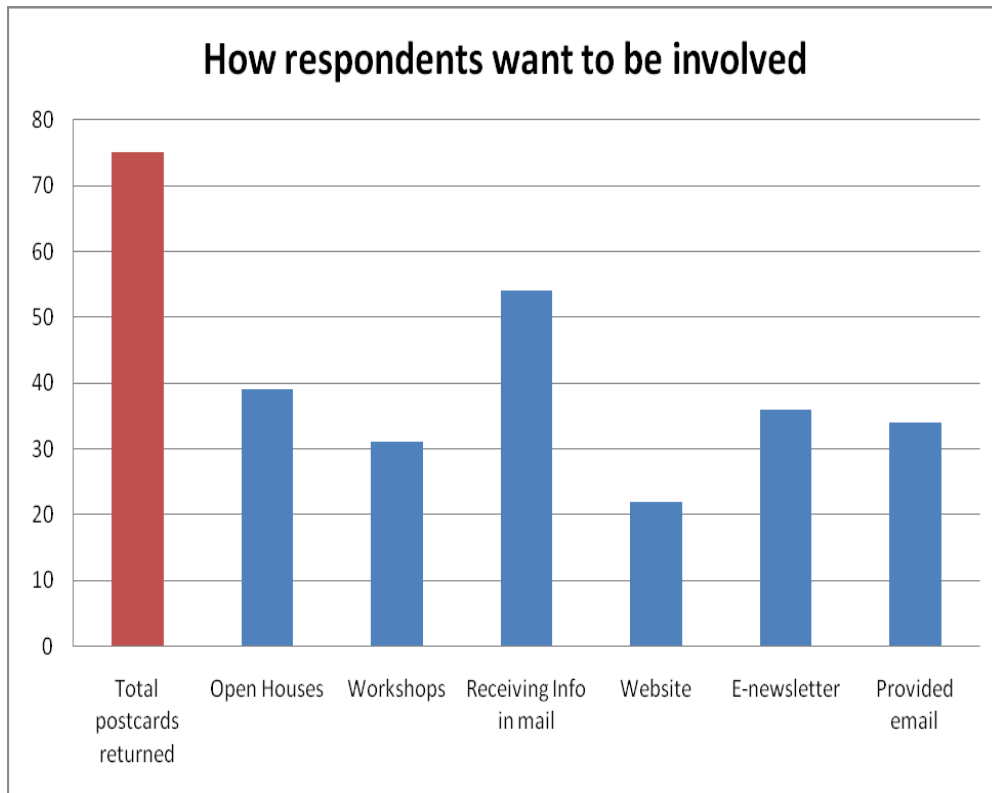
Communications and Outreach Working Group Meeting #3/11

On June 3, 2011 the Communications and Outreach Working Group met by teleconference to review the draft letters to landowners and businesses affected by the *Draft Updated Assessment Report: CVSPA*, *Draft Updated Assessment Report: TRSPA* and the *Draft Updated Assessment Report: CLOSPA*. Also discussed at the meeting was a strategy for pre-consultation with implementing bodies (further detailed in **ITEM 6.1**). See **Attachment 1** for Communications and Outreach Working Group meeting notes.

Source Protection Plan Commencement Notification

As reported verbally at SPC #4/11, held on May 17, 2011, notification was mailed in the third week of April to all residents who are, or could be, a significant threat to let them know that the Source Protection Committee (SPC) was commencing the development of Source Protection Plans and that they might be affected. In total approximately 12,000 residents were notified. In response staff received approximately 45 phone calls, primarily from the Halton Hills and Orangeville areas. Most residents were in an Issue Contributing Area (ICA) for sodium and chloride and it was explained to them the significance of this vulnerable area.

Municipalities were given the opportunity to enclose correspondence, and those that did received very few, if any phone calls. The brochure "Assessing Our Water Sources: Protecting Our Drinking Water" was also included, which summarized the high-level findings of the Assessment Reports. Along with the mailout, a postcard was included which asked residents to respond with their preferred method of communication. In response, 75 postcards were returned; the chart below summarizes the results. The postcard response rate was almost twice that of the phone call responses, and there was very little duplication between residents who called, and those who sent postcards. In addition, approximately 20 new email addresses were added to the electronic mailing list by visitors to the site.



The results from the postcard survey reveal that receiving information in the mail is the preferred method for residents to be involved. Open houses and electronic newsletters were the next preferred method. The website was the least preferred option, indicating that residents preferred a communications method which “pushed” selected information at them, versus them having to “pull” information from the website themselves.

Updated Assessment Report Consultation

On June 17, 2011 the *Draft Updated Assessment Report: CVSPA*, *Draft Updated Assessment Report: TRSPA* and the *Draft Updated Assessment Report: CLOSPA* were published on the source water protection website at www.ctcswp.ca. This commenced the consultation period for these reports which ran until July 18th.

Regulatory notifications were mailed to all those affected by the changes to the reports, including clerks of the municipalities affected. All landowners affected by the changes are required to be notified. Landowners notified included residents in the newly delineated Inglewood ICA, Halton Hills Sodium ICA, Acton Nitrate ICA, Orangeville Sodium ICA and Orangeville “Local Area” (where significant water quantity threats can exist). In total, an estimated 10,000 parcels received notifications. In addition to residents, all identified Lake Ontario threats were required to be notified. This included municipalities that operate sewage treatment plants, nuclear generating stations, bulk storage of fuel and fuel pipelines identified as significant threats in the Draft Updated Assessment Reports.

Comments were received primarily in response to the Lake Ontario work. These comments came from industries and municipalities affected by the IPZ-3 spill scenario modelling which identified threats to Lake Ontario drinking water sources. Approximately a dozen responses

were received via phone and email by residents. Primarily, residents wanted more information about the program and how it affects them. A number of responses were very positive about the program. The consultation, comments, and revisions to the *Updated Assessment Report: CVSPA*, *Updated Assessment Report: TRSPA* and the *Amended Assessment Report: CLOSPA* for the CTC will be submitted for approval to the province on July 29, 2011.

Pre-Consultation with Implementing Bodies

The next regulatory consultation is with bodies designated to implement the Source Protection Plan. This will primarily be municipalities and the province. The Communications and Outreach Working Group endorsed a strategy for consultation at their most recent meeting held on June 3, 2011. The strategy is **ITEM 6.1** in this Agenda for Source Protection Committee approval.

Ontario Drinking Water Stewardship Program (ODWSP)

In June, mailouts went to residents in the CVSPA who may be eligible for ODWSP Early Response funding, based on the prioritization of the SPC. On July 14, 2011, the ODWSP Early Response Technical Review Committee met for the first time. The first matter under discussion was Early Action Program applications that had been submitted but the work not completed by December 31, 2010. MOE had extended the deadline for this program and has allowed TRCA to fund applications with the funds remaining. The funding protocol in place to fund eligible projects continues to be on a first come-first served basis. The 15 applications that had been submitted prior to December 2010 for remaining funds under the Early Action Program were reviewed and all 15 were approved. Staff also reviewed the first four applications that have been received for funding for water softeners under the new Early Response Program. Of these four, three were approved, with one being held pending review of the well head protection areas in Acton/Georgetown to confirm that the property is within the ICA (eligible areas for funding). **Attachment #2** is the meeting notes from the ODWSP Early Response Technical Review Committee meeting, and will be available at meeting.

Lake Ontario Evenings

Lake Ontario Evenings is an ongoing speakers' series to engage residents near the lake in environmental issues (including source water protection) which affect the Lake. This is a joint event, run by Source Water Protection and the Remedial Action Plan staff from TRCA. A Lake Ontario Evening was held on July 19, 2011 at the Toronto Harbourfront and was entitled "Lake Ontario Evening: Beaches Edition". The keynote speaker was Toronto Medical Officer of Health David McKeown. The evening was designed to underscore to residents the safety and pleasure of swimming in any one of Toronto's eight Blue Flag Beaches. Other speakers included Environmental Defence and The Lake Ontario Waterkeepers. The evening's MC were "The Water Brothers".

The next Lake Ontario Evening will be held this fall and will highlight some of the major findings of the Lake Ontario Collaborative including some spill scenario modelling potential threats to drinking water in the lake. More information will be available closer to the date.

Report prepared by: Megan Price, extension 5568

Emails: mprice@trca.on.ca

For Information contact: Megan Price, extension 5568

Emails: mprice@trca.on.ca

Attachments: 2 (Note: Attachment 2 will be available at meeting)

Attachment 1: Communications and Outreach Working Group Notes

Notes: CTC Source Protection Committee Communications and Outreach Working Group Meeting #3/11 June 3, 2011 2:30pm-4:30pm

Attendees	Chair: David Kentner SPC Members: Fred Ruf, Jessica Ginsburg, Peter Orphanos, Susan Self Staff: Megan Price, Beverley Thorpe
------------------	--

Lead	Details	Follow Up Action
David Kentner	<ul style="list-style-type: none"> ● Introductions 	
Megan Price	<ul style="list-style-type: none"> ● Update Assessment Report Notifications ● Review of UAR notifications ● Notifications for Clerks of affected municipalities 	The group worked through each of the notifications and made changes to be implemented by the Communications Supervisor. The revised documents were posted on the portal for SPC review and comments.
	<ul style="list-style-type: none"> ● Newsletter Review ● Feedback on issue 2 of "Water Talk" 	Draft was reviewed by COWG, and changes were made by the Communications Supervisor. Email draft was sent to the SPC for their review/information prior to publication of newsletter
	<ul style="list-style-type: none"> ● Pre-Consultation on Source Protection Plan with Implementing Bodies 	The Project Manager and Communications Supervisor outlined a strategy for the regulatory consultation with implementing bodies which will include adjacent regions with which CTC shares municipalities in order to consult in a comprehensive way with municipalities which will be impacted by multiple plans. The proposal will be brought forward to the SPC at the next meeting.
David Kentner	Meeting Adjournment	