



CTC SOURCE
PROTECTION
REGION



CREDIT VALLEY SOURCE PROTECTION AUTHORITY

19th MEETING

FRIDAY SEPTEMBER 11, 2015 AT 9:15 A.M.
CVC Administration Office at
1255 Old Derry Road, Mississauga, ON

MEMBERS:

N.	(Nando)	Iannicca	Chair
D.	(Don)	MacIver	Vice-Chair
T.	(Tom)	Adams	
J.	(John)	Brennan	
G.	(Gail)	Campbell	
J.	(Johanna)	Downey	
B.	(Bob)	Inglis	
M.	(Martin)	Medeiros	
K.	(Karen)	Ras	
R.	(Ron)	Starr	
J.	(Jim)	Tovey	

REGRETS:

M.	(Michael)	Palleschi
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STAFF PRESENT:

D.	(Deborah)	Martin-Downs-	Chief Administrative Officer
G.	(Gary)	Murphy	- Director, Planning and Development Services
M.	(Mike)	Puddister	- Deputy CAO and Director, Watershed Transformation
J.	(Jeff)	Payne	- Director, Corporate Services
T.	(Tim)	Mereu	- Director, Watershed Management
G.	(Gayle)	Soo Chan	- Director, Watershed Knowledge
T.	(Tamara)	Chipperfield	- Executive Assistant
C.	(Claudia)	Kasperowicz	- CSA, CAO's Office
M.	(Maureen)	Pogue	- Manager, Marketing and Communications

B.	(Bob)	Morris	- Sr. Manager, Natural Heritage
C.	(Colleen)	Bonner	- Planner
P.	(Paul)	Biscaia	- Restoration Technician
K.	(Kate)	Hayes	- Manager, Ecosystem Restoration
S.	(Savera)	Pawa	- Financial Analyst

OTHERS PRESENT:

L.	(Learie)	Miller	- Region of Peel
M.	(Marie)	Blazic	- Sierra Peel
T.	(Thaia)	Jones	- Sierra Peel
A.	(Aneela)	Aman	- EDDI
A.	(Aman)	Siddrqr	- EDDI

MINUTES

APPROVAL OF AGENDA

01/CVSPA/15

RESOLVED THAT the agenda for the 19th meeting of the Credit Valley Source Protection Authority be adopted.

CARRIED

DECLARATIONS OF CONFLICT OF INTEREST

MINUTES OF PREVIOUS MEETING

18th MEETING, CVSPA

NOVEMBER 14, 2014

02/CVSPA/15

RESOLVED THAT the minutes of the 18th meeting of the Credit Valley Source Protection Authority held November 14, 2014 be adopted.

CARRIED

BUSINESS ARISING FROM MINUTES

NEW BUSINESS STAFF REPORTS

MOECC APPROVAL OF THE CTC SOURCE PROTECTOPN PLAN

Attached as Schedule 'A' is a report on the above mentioned subject as submitted by Kerry Mulchansingh, Source Water Protection Project Manager/Hydrogeologist and Gayle Soo Chan, Director Watershed Knowledge.

03/CVSPA/15

***BE IT THEREFORE RESOLVED THAT** the report entitled "MOECC Approval of CTC Source Protection Plan" be received and appended to the minutes of this meeting as Schedule 'A'.*

CARRIED

ENVIRONMENTAL BILL OF RIGHTS POSTING 012-4243 - PROPOSED CHANGES TO ONTARIO REGULATION 288/07 REGARDING MEMBERSHIP OF THE CTC SOURCE PROTECTION COMMITTEE

Attached as Schedule 'B' is a report on the above mentioned subject as submitted by Kerry Mulchansingh, Source Water Protection Project Manager/Hydrogeologist and Gayle Soo Chan, Director Watershed Knowledge.

04/CVSPA/15

***BE IT THEREFORE RESOLVED THAT** the report entitled "Environmental Bill of Rights Posting 012-4243 – Proposed Changes To Ontario Regulation 288/07 Regarding Membership of the CTC Source Protection Committee" be received and appended to the minutes of this meeting as Schedule 'B'; and further*

***THAT** the comments provided herein be endorsed.*

CARRIED

INFORMATION ITEMS DISTRIBUTED TO MEMBERS

NOTICE OF MOTION

OTHER BUSINESS

MEETING ADJOURNED

On motion the meeting adjourned at 10:00 a.m.

TO: The Chair and Members of the Board of Directors
Credit Valley Source Protection Authority

SUBJECT: MOECC APPROVAL OF THE CTC SOURCE PROTECTION PLAN

PURPOSE: To inform the Board of Directors of CVSPA of the Minister of the Environment and Climate Change's approval of the CTC Source Protection Plan and Updated Assessment Report for the Credit Valley Source Protection Area

BACKGROUND:

The CTC Source Protection Plan (SPP) notice of approval was posted on the Environmental Bill of Rights (EBR) Registry on August 14, 2015. The SPP comes into effect on December 31, 2015 and applies immediately to new activities. There are phase-in provisions for application to existing activities. The SPP applies to the Credit Valley Source Protection Area, Toronto and Region Source Protection Area and the Central Lake Source Protection Area which collectively form the CTC Source Protection Region.

The SPP contains both mandatory and have regard for policies, per the requirement of the Clean Water Act (CWA) and Ontario Regulation 287/07 that were developed to address both significant water quality and water quantity threats to groundwater and water quality threats to surface water sources (in this case Lake Ontario). The province's focus is on protecting sources of municipal drinking water from threats from 21 prescribed activities. With provincial approval, a Source Protection Region could add potential threats to the list if there was a local activity of concern. In the CTC Source Protection Region, two additional activities were added; spills from petroleum pipelines and releases of tritiated water from nuclear generating stations. The Source Protection Plan (SPP) sets out the policies to protect source water against drinking water threats identified in the CVSPA Assessment Report. On July 22, 2015 the MOECC Director approved the Updated Assessment Report for the CVSPA. The SPP contains policies that specify how drinking water threats will be reduced, eliminated, or monitored, who is responsible for implementing the policies and taking action, timelines, and how progress will be measured. The plan considers both existing and future threat activities, future water uses, and is aimed at preventing threats from developing and not just responding to current threats.

During the development of the SPP, the CTC Source Protection Region undertook extensive public consultation per the requirements of the *Clean Water Act* (2006). This included meetings with municipalities and the public, as well as electronic postings of the documentation. All public feedback was considered by the CTC Source Protection Committee in developing and amending policies. The consultation comments were also compiled and submitted with the proposed SPP to the Minister.

The SPP contains 110 policies for the protection of municipal water systems. The member municipalities have been identified as implementers of approximately forty-five (45) groundwater quality policies, six (6) groundwater quantity policies and one (1) Lake Ontario-related policy.

The CVSPA is responsible for three monitoring plan efficacy policies. Provincial ministries and agencies are responsible for implementing the remaining policies.

Approved Source Protection Plan Policies

The approved policies are targeted towards land uses and activities which may pose quality and quantity threats to a municipal water source, based on either their proximity to municipal wells and intakes, their potential contribution to an observed contaminant trend in a municipal supply, or their potential to reduce water supply in municipal aquifers.

These activities have been documented in the updated CVSPA assessment report (July 2015), and are as follows:

- The establishment, operation, or maintenance of a system that collects, stores, transmits, treats, or disposes of sewage;
- The application of agricultural source material to land;
- The storage of agricultural source material;
- The application of non-agricultural source material (NASM) to land;
- The handling and storage of non-agricultural source material (NASM);
- The application of road salt;
- The handling and storage of road salt;
- The handling and storage of fuel
- An activity that reduces the recharge of an aquifer;
- The use of land as livestock grazing or pasturing land, an outdoor confinement area, or a farm-animal yard;

Approximately 88 per cent of CVSPA's municipal drinking water is sourced from Lake Ontario (Mississauga, Brampton, portions of Caledon). As such, The CTC SWP contains several policies to protect Lake Ontario drinking water sources focusing on activities where the potential has been demonstrated for a land based activity to contaminate the lake in the vicinity of a municipal water intake. Such activities include:

- municipal sewage treatment plants disinfection failures;
- municipal trunk sewer breaks;
- tritium releases from nuclear generating stations;
- spills of fuel at bulk storage facilities; and
- petroleum product pipeline breaks.

These policies generally address improved spill notification and response, enhanced monitoring of lake conditions to aid in predicting where contaminants may move in the event of a spill and to aid in preparing spill response protocols; and use and ongoing improvement of three-dimensional models as risk management and decision-making tools.

Next Steps - Implementation

The implementation of the SPP is required by law under the *Clean Water Act, 2006*. Per the MOECC approval notification, the SPP becomes legally effective as of December 2015. All stakeholders identified as implementers of specific policies must ensure that the requirements are met per the established deadlines.

Every policy which addresses a significant drinking water threat also has a monitoring policy which requires the implementing body to report to the Source Protection Authority (SPA) every February on the actions taken in the previous year to implement the policy. In turn the authority must report to the Minister each May (starting in 2018) on progress. The Minister has also set November 30, 2018 as the date for submission of terms of reference for the review and update of the SPP including any updates to the assessment report required.

CVSPA and CTC Source Protection Region staff have been working with member municipalities since 2012, consulting on the plan and holding workshops and meetings to assist with understanding and implementation of the plan. The CTC and CVSPA staff will continue during the early implementation period to work with municipal (and other) personnel to ensure that they fully understand their responsibilities under the SPP and to provide support and tools as necessary. This includes training workshops and exercises. The CTC has also developed a web-based interactive tool designed to aid in this process, whereby municipalities and land owners are able to check land parcels on a map, and identify the specific policies that may apply to them.

Attached as Schedule 'A', Appendix 1 are a series of questions and answers provided by the province that accompanied the plan approval announcement for the CTC and the Halton-Hamilton Source Protection Regions that may be useful to the municipalities and the public.

COMMUNICATIONS PLAN

Communication on the SPP approval was sent via email by CTC Source Protection Project Manager Beverley Thorpe, to the source water staff of CVSPA's member municipalities on Friday, August 14, 2015.

In addition, a news release outlining the SPP approval was prepared by the CVSPA on Monday, August 17, and posted to its website. This release was also distributed to major media outlets and stakeholders within the Source Protection Area.

FINANCIAL IMPLICATIONS

The Province has fully funded the source protection authorities and municipalities to undertake the technical work and development of the initial source protection plan. Cost of implementation is the responsibility of the implementing body and the affected property or business owner. There are provisions in the *Clean Water Act, 2006* that give municipalities the power to recover costs through fees associated with administration of

Part IV of the Act related to risk management plans which are a new municipal tool to help protect sources of municipal drinking water.

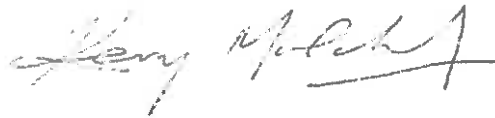
For its role in assisting the municipalities with implementation, CTC Source Protection received funding from the Province during the 2015/16 fiscal year. The CTC will continue to assess the future needs of the municipalities, and liaise accordingly with the province on the related costs.

CVSPA staff costs related to the implementation of the SPP are also covered by funding from the province. With approval of many of the source protection plans, the province is currently reviewing the future funding that it will provide to source water. The Source Protection Authority has ongoing responsibilities to administer the program, maintain data and provide support as well as undertake future reviews and updates. It is expected that the province will continue to fund this liability but the amount of funding is expected to be substantially reduced in line with the lowered effort required.

Recommended Resolution:

BE IT THEREFORE RESOLVED THAT the report entitled "MOECC Approval of CTC Source Protection Plan" be received and appended to the minutes of this meeting as Schedule 'A'.

Submitted by:



Kerry Mulchansingh
Source Water Protection Project Manager/
Hydrogeologist



Gayle Soo Chan,
Director, Watershed Knowledge

Recommended by:



Deborah Martin-Downs
Chief Administrative Officer

**CTC Region and Halton-Hamilton Source Protection Region —
Source Protection Plan Approval
Questions and Answers
Local announcement: August 14, 2015**

KEY MESSAGES

- Ontario has approved action plans to protect the water sources that supply municipal drinking water systems in the GTA, and Halton-Hamilton areas. These plans pertain to three adjacent source protection areas — Central Lake Ontario, Toronto and Region, and Credit Valley — collectively known as the CTC source protection region (“CTC”), and the Halton-Hamilton source protection region.
- After years of work and public consultation, the CTC and Halton-Hamilton source protection committees have developed sound plans that protect their municipal drinking water systems, and in so doing, provide numerous actions to defend the integrity of Lake Ontario.
- The Clean Water Act ensures communities protect their drinking water supplies through prevention — by developing collaborative, watershed-based source protection plans that are locally driven and based on science.
- Local leadership continues to play a key role in protecting our drinking water sources now and in the future.
- Protecting our local drinking water sources is part of Ontario’s drinking water safety net. Thanks to our strong framework with safeguards at every step of the process, Ontarians can be confident in the quality and quantity of their drinking water.

Q1. What’s the news?

Ontario has approved action plans to protect the water sources that supply municipal drinking water systems in the GTA, and Halton-Hamilton areas. These plans pertain to three adjacent source protection areas — Central Lake Ontario, Toronto and Region, and Credit Valley — collectively known as the CTC source protection region (“CTC”), and the Halton-Hamilton source protection region. Both plans come into effect December 31, 2015.

Source protection planning and implementation is all about protecting existing and future sources of drinking water. Protecting local drinking water sources is part of Ontario’s drinking water safety net that starts at the source and continues until you turn on your tap.

Q2. Where is the CTC source protection region?

The CTC source protection region is situated in southern Ontario. It is comprised of three source protection areas: Central Lake Ontario, Toronto and Region, and Credit Valley.

SCHEDULE 'A', APPENDIX 1

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2015-09-11

The source protection region is complex and diverse – it spans from Oak Ridges Moraine in the north to Lake Ontario in the south. It also includes portions of the Niagara Escarpment, the Greenbelt, and Canada's most densely populated area: the Greater Toronto Area. It borders several source protection regions including Halton-Hamilton to the southwest; Lake Erie to the west; South Georgian Bay Lake Simcoe to the north; and Trent Conservation Coalition to the east.

The region contains 25 watersheds and measures over 10,000-square kilometres, and is home to approximately 6.78 million people. Almost half reside in Toronto.

The area has 27 municipal residential drinking water systems – 17 draw from 66 groundwater wells, and 10 draw from Lake Ontario. Over 95% of the population in the region is served by these systems.

Q3. Where is the Halton-Hamilton source protection region?

The Halton-Hamilton source protection region is situated in southern Ontario along the north shore and western end of Lake Ontario.

It includes parts of the Niagara Escarpment and borders a number of source protection regions including Lake Erie to the west and CTC to the northeast, as well as Niagara Peninsula source protection area to the south.

The region measures over 1400 square kilometres and is home to approximately 900,000 people. Urban areas in the region include the City of Burlington, Town of Oakville, Town of Milton, and the City of Hamilton.

The area has ten municipal residential drinking water systems – six draw from an aquifer, and four draw from Lake Ontario. Over 90 per cent of the population in the region is served by these systems.

Q4. How were these source protection plans developed?

The plans are the result of many years of work and public consultation.

The source protection committee led scientific evaluations of their drinking water sources, and mapped out vulnerable areas around each of these sources. Then they assessed activities in these areas with the potential to pose a risk to these local water supplies. Members then led local discussions with key stakeholders and the public on the best way to address these risks, using this input to develop the source protection plans.

The CTC source protection committee consists of a chair and 21 members speaking for the local interests of the area. This source protection committee is one of 19 established through the Clean Water Act.

The Halton-Hamilton source protection committee consists of a chair and 15 members speaking for the local interests of the area. This source protection committee is one of 19 established through the Clean Water Act.

Q5. Was the public consulted in the development of these source protection plans?

Community engagement is a very important part of plan development.

The CTC source protection committee held public meetings, posted the draft plan on the internet, then the proposed plan, and consulted again with the public on proposed amendments.

The Halton-Hamilton source protection committee held public meetings, posted the draft plan on the internet, then the proposed plan, and consulted again with the public on proposed amendments.

The committees met their public consultation requirements.

Q6. What areas are identified in the CTC area plans?

Source protection plans protect the lakes, rivers and aquifers that supply water to municipal drinking water systems. These plans outline actions to protect the 27 local municipal drinking water systems in the region — 17 that draw from 66 groundwater wells, and 10 that draw from Lake Ontario.

The area where policies address water quality represent 2 per cent of the region, and the area where policies address water quantity represent 16 per cent of the region.

Q7. What areas are identified in the Halton-Hamilton area plans?

Source protection plans protect the lakes, rivers and underground aquifers that supply water to municipal drinking water systems. These plans outline actions to protect the ten local municipal drinking water systems in the region — six that draw from an aquifer, and four that draw from Lake Ontario.

The area where policies address water quality represent 6.5 per cent of the region, and the area where policies address water quantity represent less than 1 per cent of the region.

Q8. How serious are the risks to the CTC drinking water supply?

The CTC source protection committee identified significant risks that could occur in the protection zones of their municipal drinking water systems.

The committee identified the following existing activities as potential significant risks:

- waste disposal
- sewage facilities
- application and storage of manure

- management of aquaculture
- application, handling and storage of biosolids, pesticides and commercial fertilizers
- livestock grazing and pasturing including farm-animal yards
- application, handling and storage of road salt
- storage of snow
- handling and storage of fuel, dense non-aqueous phase liquids and organic solvents
- consumptive water taking
- activities that reduce the recharge of aquifers in the region
- spills from pipelines transporting petroleum products across tributaries, rivers and streams that flow into Lake Ontario
- Tritium spills from a nuclear generation station in the region.

There are also a number of similar activities that are prohibited in the future if they are close to municipal intakes.

Q9. How serious are the risks to the Halton-Hamilton drinking water supply?

The Halton-Hamilton source protection committee identified significant risks that could occur in the protection zones of their municipal drinking water systems.

The committee identified the following existing activities as potential significant risks:

- sewage facilities
- application and storage of manure
- handling and storage of commercial fertilizers
- application of pesticides
- livestock grazing and pasturing including farm-animal yards
- application of road salt
- handling and storage of fuel, dense non-aqueous phase liquids
- conveyance of oil in pipelines

There are also a number of activities that are prohibited in the future if they are close to municipal intakes, such as waste disposal sites, gas stations, salt storage, and snow storage.

Q10. Why are you taking extra steps to protect source water through the Clean Water Act?

We learned from the events in Walkerton that the first step in ensuring safe drinking water is to protect the local supply of drinking water at the source.

The Clean Water Act ensures communities protect their drinking water supplies through prevention — by developing collaborative, watershed-based source protection plans that are locally driven and based on science.

Source protection planning and implementation helps to ensure that local drinking water is protected in communities across the province.

Q11. What do the CTC plans include?

Protecting Ontario's sources of drinking water is a shared responsibility. The CTC source protection plan gives responsibilities to municipalities, several provincial ministries, and the local conservation authorities.

Examples of municipal actions include:

- establishing risk management plans for the following:
 - storage of fuel and organic solvents
 - handling and storage of manure and pesticides if located in protection zones closest to municipal wells, and commercial fertilizers, known to contain nitrate, in broader protection zones
 - generators of hazardous and liquid industrial and PCB waste storage
 - application of pesticides
 - application, handling and storage of road salt
 - chemicals used in de-icing aircraft
 - activities that reduce aquifer recharge
 - farm yards known to have nitrates and pathogens in run-off
 - handling, application and storage of manure, biosolids, livestock grazing, commercial fertilizers, and pesticides, in certain identified parts of the protection zones.
- developing or updating water conservation plans, and collaborating with other municipalities that share the same groundwater sources to plan and manage their water supply.
- developing and implementing a drought management plan for York Region.
- requiring salt management plans to accompany development applications
- delivering education and outreach programs to raise awareness and promote best management practices for handling and storage of small quantities of hazardous and liquid industrial wastes; handling, storage and application of commercial fertilizers, pesticides, and road salt; storage of snow; and handling and storage of fuel and organic solvents.
- Working with the conservation authority to investigate the sources of sodium and chloride that contribute to drinking water issues in the Orangeville and Georgetown area, and sample the raw water at affected drinking water systems monthly.
- Conducting research with the local conservation authority to determine how Orangeville's wastewater treatment plant affects the sodium and chloride levels in aquifers in the area.

Q12. What do the Halton-Hamilton plans include?

Protecting Ontario's sources of drinking water is a shared responsibility. The Halton-Hamilton source protection plans give responsibilities to municipalities, several provincial ministries, and the local conservation authorities.

Examples of municipal actions include:

- establishing risk management plans for the following:
 - application of manure
 - application, handling and storage of commercial fertilizer
 - fuel storage
 - Handling and storage of organic solvents
 - Outdoor livestock yards, including grazing and pasturing
- implementing septic inspection and maintenance programs
- update their salt management plans to include wellhead protection areas and other vulnerable areas, and enhance their best management practices
- implement education and outreach plans to promote:
 - best management practices for the application or storage of commercial fertilizers by golf course operators, fertilizer application technicians, home and business owners, and retail establishments.
 - proper pesticide use and storage methods, and their impacts on drinking water sources.
 - effective spill response protocols for homeowners with home fuel tanks
 - impacts of road salt, and the use of best management practices.
 - hazardous waste disposal and waste reduction.
 - the broadening of best management practices to septic system users.

Q13. How were the local First Nations involved in the CTC plan?

There are no First Nations reserves in the CTC source protection region.

None of the policies in the plans are directed at First Nations, nor do the policies impact Aboriginal or Treaty rights.

Q14. How were the local First Nations involved in the Halton-Hamilton plan?

There are no First Nations reserves in the Halton-Hamilton source protection region.

None of the policies in the plans are directed at First Nations, nor do the policies impact Aboriginal or Treaty rights.

Q15. Ontario has given money to municipalities for source protection. Did anyone in the CTC region receive a grant?

Ontario is giving grants to small, rural municipalities to help offset start-up costs associated with implementing their source protection plans and collaborating with each other in this regard. In this region, 14 municipalities met the eligibility criteria when the program was launched in November 2013, and received over \$572,000 in total.

The province also invested over \$24.6 million in the scientific assessment and development of the plans for the CTC source protection region.

As well, Ontario gave approximately \$1.3 million to residents living in the source protection region, under the Ontario Drinking Water Stewardship Program. This program helped landowners make voluntary changes to reduce or remove potential

drinking water risks on their properties, in advance of the approval of the source protection plans.

Q16. Ontario has given money to municipalities for source protection. Did anyone in the Halton-Hamilton region receive a grant?

Ontario is giving grants to small, rural municipalities to help offset start-up costs associated with implementing their source protection plans and collaborating with each other in this regard. In this region, two municipalities met the eligibility criteria, and received over \$90,000 in total.

The province also invested over \$8.5 million in the scientific assessment and development of the plans for the Halton-Hamilton source protection region.

As well, Ontario gave about \$507,000 to residents living in the source protection region, under the Ontario Drinking Water Stewardship Program. This program helped landowners make changes to reduce or remove potential drinking water risks on their properties, in advance of the approval of the source protection plans.

Q17. How do the CTC plans help protect the Great Lakes (Lake Ontario)?

The plans include policies that call for the Ministry of the Environment and Climate Change to re-convene the Lake Ontario Collaborative working group to help further protect the lake. In the past, this working group brought together municipal and provincial representatives, and local scientists, to identify how to work together to protect Lake Ontario.

The ministry is continuing to work through existing collaborative approaches such as the Canada-Ontario Agreement on Great Lakes Water Quality and Ecosystem Health (COA), and the proposed Great Lakes Protection Act. If passed, the Act would enable various watershed approaches to help solve the complex problems in the Great Lakes. The COA includes commitments to take action with the Great Lakes community to address priority lakewide and nearshore issues. With the approval of these source protection plans the ministry will continue to seek opportunities to address the objectives of these policies through ongoing work on the Great Lakes.

Q18. How do the Halton-Hamilton plans help protect the Great Lakes (Lake Ontario)?

The plans include policies that call for the Ministry of the Environment and Climate Change to share information of water resources obtained through source protection planning with Environment Canada, to enhance the knowledge of Lake Ontario's shoreline.

As well, the plans request the ministry reach out to Environment Canada, New York State, and the United States government agencies, to discuss the findings and policies of the source protection planning process, to encourage collaboration on protecting the Great Lakes, and raising the profile of Lake Ontario.

The ministry is continuing to work through existing collaborative approaches such as the Canada-Ontario Agreement on Great Lakes Water Quality and Ecosystem Health (COA), and the proposed Great Lakes Protection Act. If passed, the Act would enable various watershed approaches to help solve the complex problems in the Great Lakes. The COA includes commitments to take action with the Great Lakes community to address priority lakewide and nearshore issues. With the approval of these source protection plans the ministry will continue to seek opportunities to address the objectives of these policies through ongoing work on the Great Lakes.

Q19. What does source protection planning in CTC and Halton-Hamilton do to address the risk of spills to Lake Ontario from oil pipelines, such as the Enbridge Line 9 B Project?

The plans ask the Ministry of the Environment and Climate Change to work with pipeline owners and provincial and federal regulators to update spill prevention and contingency plans to include source protection. Interprovincial pipelines, such as Enbridge's Line 9B, are federally regulated and subject to the jurisdiction of the National Energy Board (NEB).

The plans also ask the Ministry of the Environment and Climate Change to include maps of protection zones and locations of known significant risks to municipal sources of drinking water, and modify existing procedures to ensure that operators of all water treatment plants that could be affected by oil pipeline spills are notified. The ministry has revised all its spills response and notification procedures to reflect these suggestions, for all source protection areas within the province.

The Ontario Government actively participated in the NEB hearing process to ensure that Ontario's concerns, including potential environmental impacts arising from the Enbridge Line 9B Project, were fully considered by the NEB in its decision. Pipeline companies and first responders must be prepared to respond to pipeline spills in a timely and effective manner to protect people, property and the environment.

The ministry has ensured that Enbridge (and other pipeline owners) have access to source protection mapping information to use in developing their watercourse crossing and emergency management plans. Enbridge has confirmed in their regulatory filings with the NEB that their analysis of "High Consequence Areas" was re-drafted to incorporate vulnerable areas identified in source protection plans, and that this information is being added to their emergency response plans. This analysis includes considering drinking water sources that could be affected in the event of a pipeline rupture.

On October 6, 2014, the NEB requested additional information from Enbridge related to two conditions (16 and 18) outlined in the NEB decision to approve Line 9B which relate to the placement of valves and the company's water crossing management plan for Line 9B. Enbridge provided this on October 28, 2014 for the NEB's review.

On February 5, 2015, the NEB approved Enbridge's revised filings for conditions (16 and 18). The NEB found that Enbridge has adequately demonstrated that its methodology for the number and placement of valves is currently appropriate and has

approved Enbridge's water crossing management plan. The Board also imposed new conditions on Enbridge in order to consider and assess the ongoing valve placement needs on Line 9B. Within the next 12 months, Enbridge must submit engineering studies and analyses relating to whether additional valves are required. In addition, the NEB appointed Dr. Ron Wallace – a member of the Board – to review all future filings for this project.

The NEB has granted provisional "Leave to Open" (approval to operate the pipeline), once Enbridge completes hydrostatic testing of certain stretches of Line 9B.

Q20. What does source protection planning in CTC do to address the risk of spills to Lake Ontario from bulk fuel storage?

The plans include policies that call for the ministry to work with owners and operators of bulk fuel storage facilities to develop risk management plans, and with the Ministry of Consumer Services, and the Technical Standards and Safety Authority, to develop information materials about fuel storage and handling, for delivery to municipalities and industry associations. Additionally, policies call for this ministry to work with the appropriate authorities to develop, review, update, and test spill prevention, spills management, risk reduction and contingency plans along shipping lanes and certain areas along railways and highways.

Q21. What does source protection planning in Halton-Hamilton do about the blue-green algae in the western part of Lake Ontario?

The Halton-Hamilton source protection committee reviewed water quality data for the drinking water intakes that draw from Lake Ontario when developing their local assessment reports. While there is some evidence of blue-green algae in the western basin of Lake Ontario, it has not impacted any of the drinking water intakes in the region that draw from Lake Ontario.

Recent confirmed blue-green algae blooms in the Halton area of Lake Ontario were confined to the shorelines and did not impact the drinking water intakes, which are as far as a kilometre from the shoreline. Furthermore, the Ministry of the Environment and Climate Change has never detected algal toxins in any of the treated drinking water samples at these intakes at or above the Ontario drinking water quality standard level of 1.5 micrograms per litre.

This summer, the ministry is continuing with implementing precautionary monitoring in the area. In addition to these local actions, the Ministry of the Environment and Climate Change has implemented a 12-point blue-green algae plan to diminish algal blooms in the Great Lakes and other lakes and rivers. To learn more about the plan, please visit: <https://www.ontario.ca/environment-and-energy/blue-green-algae>

Q22. Why is blue-green algae a concern to drinking water safety?

Cyanobacteria, commonly called blue-green algae, occur naturally in ponds, rivers, lakes and streams. Usually the algae are not visible, until they become a bloom.

Typically, blooms form when nutrients are readily available in the water. Nutrients come from agricultural or urban runoff, effluent from sewage treatment and industrial plants, and leaching from septic systems. Reducing or eliminating these nutrient inputs is a proactive way to reduce the occurrence of blue-green algal blooms.

Some blooms produce toxins — a real threat to water quality, and human and animal health. Blooms may also produce compounds that affect how the water tastes and smells, and clog filters at drinking water treatment plants.

Q23. When do the CTC and Halton-Hamilton source protection plans take effect?

The effective date for the CTC and Halton-Hamilton source protection plans is December 31, 2015. This timing will allow source protection partners, including municipalities and the local conservation authorities, to continue to work together and effectively prepare for plan implementation.

Q24. Will the CTC source protection plans be updated in the future?

The Minister of the Environment and Climate Change requires the Toronto and Region Conservation Authority, the lead source protection authority, to work with the two other source protection authorities in the region, the source protection committee, the ministry, and the municipalities in the area, to develop a workplan outlining the future plan's review. The workplan will also have regard for the first annual progress report on the implementation of the source protection plans, which is due in May 2018. The workplan is due in November 2018.

Q25. Will the Halton-Hamilton source protection plans be updated in the future?

The Minister of the Environment and Climate Change requires the Halton Region Conservation Authority, the lead source protection authority, to work with the Hamilton Region Conservation Authority, the source protection committee, the ministry, and the municipalities in the area, to develop a workplan outlining the future plan's review. The workplan will also have regard for the first annual progress report on the implementation of the source protection plans, which is due in May 2018. The workplan is due in November 2018.

Q26. How do the source protection plans relate to sewage bypass notification?

The CTC and Halton-Hamilton source protection plans require the ministry and municipalities to take action to protect sources of municipal drinking water from sewage spills and bypasses. The ministry is required to review environmental compliance approvals for wastewater treatment plants that discharge into Lake Ontario to ensure they protect these sources, as well as updating protection zone mapping to ensure that drinking water system operators and the public are notified in the event of a spill or bypass. The ministry has updated this mapping information. Municipalities will be required to update emergency response and contingency plans in the event of spills or bypasses. The plans take effect on December 31, 2015.

The ministry recognizes that during significant storms or wet weather events, bypasses may be required to prevent flooding of a sewage treatment system and streets and homes. Bypasses are meant to be temporary, emergency measures and not part of a treatment system's normal operation.

The ministry monitors incidents at sewage facilities to confirm contingency plans are in place to reduce bypasses and overflows.

The ministry believes the public should be made aware of potential impacts to water quality following storms. Having real-time information on sewage bypasses and any associated health risks will better protect the public.

The ministry is looking at developing a provincial approach that is more transparent and includes real-time public reporting by municipalities of bypasses and overflows. Right now, we are consulting with the City of Toronto on a public notification plan that could be used as a model for other municipalities. We will be looking for the best ways to make sure the public has detailed and real-time information on bypasses which could include amendments to the City's approvals.

We are committed to undertaking this work now and expect to develop a public notification plan in the coming months.

TO: The Chair and Members of the Board of Directors
Credit Valley Source Protection Authority (CVSPA)

SUBJECT: ENVIRONMENTAL BILL OF RIGHTS POSTING 012-4243 -
PROPOSED CHANGES TO ONTARIO REGULATION 288/07
REGARDING MEMBERSHIP OF THE CTC SOURCE PROTECTION
COMITTEE

PURPOSE: To inform the Board of Directors of Changes to O. Regulation
288/07, present comments submitted by the TRSPA (the lead Source
Protection Authority) on behalf of the CTC Source Protection Region
and to seek endorsement of these comments from the Board.

BACKGROUND:

The purpose of the Clean Water Act, 2006 (CWA) is to protect existing and future sources of drinking water to help protect human health and the environment, and to ensure safe, clean drinking water for Ontarians. The Act ensures communities are able to protect their drinking water sources through prevention - by developing collaborative, locally driven, watershed based drinking water source protection plans founded on science. The Source Protection Committee is responsible for the development and approval of the three major deliverables under the Act; the Terms of Reference, the technical Assessment Reports and the Source protection Plan. Ontario Regulation 288/07 "Source Protection Committees" sets out the requirements for the size, appointment and operation of source protection committees.

The Toronto and Region Source Protection Authority (TRSPA) is the lead Authority of the Credit Valley, Toronto and Region, Central Lake Ontario (CTC) Source Protection Region. The lead Authority holds the responsibility to establish and maintain the Source Protection Committee for governance of the Region. The TRSPA at Meeting #1/07, held on July 27, 2007, approved by Resolution #SPA 4/07 the proposed membership composition of the CTC Source Protection Committee and steps to establish the CTC SPC. Subsequently at Meeting #2/07 held on October 26, 2007, the TRSPA approved by Resolution #SPA 9/07 the appointment of the inaugural members. The term of appointment of these members begin to expire upon the Minister's approval of the source protection plans for the CTC. The Minister approved the CTC Source Protection Plan on 14th August, 2015.

On June 12, 2015, the Ministry of the Environment and Climate Change (MOECC) posted for consultation on the Environmental Bill of Rights (EBR) proposed changes to O. Reg. 288/07 that would provide more flexibility for the respective source protection authority on the size, appointment and operation of source protection committees. The

SCHEDULE 'B'

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comment period closed on July 27, 2015. Details of the proposed changes can be found at:

<http://www.ebr.gov.on.ca/ERS-WEB-External/displaynoticecontent.do?noticeId=MTI1MTEw&statusId=MTg4NDQ0&language=en>

On behalf of the CTC, staff at the TRSPA subsequent to consultation with the CVSPA and CLOSPA, prepared comments on the changes to the regulation. The comments are provided in Schedule 'B', Appendix 1. The CTC staff support in general the proposed changes which will provide more local autonomy to consider the needs of the CTC Source Protection Region and also reduce costs associated with publishing notices in newspapers. The endorsement of these comments from the Board of the CVSPA is being sought.

CTC staff has consulted with the CTC SPC members who have membership terms that expire upon plan approval and at the first and second anniversary dates as set out in O. Reg. 288/07. There is nothing to prevent a member from being re-appointed and it is anticipated that some members may choose to seek reappointment, while others have stated their intention to retire. Advice has also been sought on the optimal size of the committee and the economic sectors which should be represented. The CTC SPC considered the proposed changes to O. Reg. 288/07 in developing their advice. At SPC meeting #1/15 held on June 24, 2015, the SPC provided advice to CTC staff to maintain the current size (21 members plus chair) to:

- avoid having to have more municipalities sharing a single member;
- to adjust the economic sectors, for example replace the nuclear energy representative with the road maintenance industry as there are a number of policies directed to requiring salt management plans and trained operators;
- to maintain the two agricultural representatives; and
- to consider seeking public representatives who may bring science or academic expertise.

The SPC members were very complimentary about the results of the process used by TRSPA to select inaugural members with varied and relevant experience and expertise to undertake the source water tasks.

The TRSPA Board, at their meeting #1/15, held on Friday, July 24, 2015, approved the Res. #SPA2/15, *Replacement of Members: Approval to initiate the process of replacing members of the CTC Source Protection Committee.*

ANALYSIS:

TRSPA staff will be undertaking the following steps, as soon as possible to begin the process of replacing the first group of members whose terms expire upon plan approval:

1. Send a letter to the clerks of the following municipalities who are represented by a member to be replaced, asking for each council to forward their council resolution by October 15, 2015 to jointly identify the person to be appointed as their shared member.

Name of Member	Municipality Represented by the Member
Mr. Robert Burnside	County of Dufferin, townships of Amaranth and East Garafraxa, towns of Orangeville and Mono; County of Simcoe, Township of Adjala-Tosorontio
Dr. Howard Shapiro	City of Toronto
Mr. Mark Schiller	Region of Peel, Town of Caledon, cities of Brampton and Mississauga

2. Post on of each of the conservation authorities and the CTC websites for comment options for changes to the economic sector representatives and also identify and consult with economic sector representative associations such as the Ontario Sand and Gravel Association; Halton, Peel, York and Durham Federations of Agriculture; Smart About Salt and environmental non-government organizations, to gauge interest in having representation on the CTC SPC and help in finding potential nominees.
3. Following consideration of input and advice from item two, staff will seek TRSPA approval for the proposed representation prior to advertising for applicants to fill three economic and three public positions on the CTC. If MOECC implements proposed changes to O. Reg. 288/07, advertising for applicants may be via internet and optionally via newspaper, otherwise advertising of vacancies will require both internet and newspaper posting per the current requirements of the regulation. Timing of the advertising of vacancies will consider when and if any proposed changes to the regulation will be made.

Subsequent to their Board's approval, TRSPA staff sent the letter attached (see Schedule 'B', Appendix 1), to the MOECC in response to EBR posting 012-4243.

COMMUNICATIONS PLAN:

- There are no communications implications for this report.

FINANCIAL IMPLICATIONS

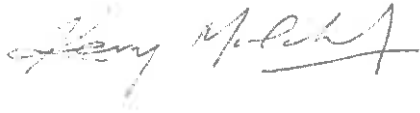
- There is no financial impact to CVC for this project.

Recommended Resolution:

BE IT THEREFORE RESOLVED THAT the report entitled "Environmental Bill of Rights Posting 012-4243 – Proposed Changes To Ontario Regulation 288/07 Regarding Membership of the CTC Source Protection Committee" be received and appended to the minutes of this meeting as Schedule 'B'; and further

THAT the comments provided herein be endorsed.

Submitted by:



Kerry Mulchansingh
Source Water Protection Project Manager/
Hydrogeologist



Gayle Soo Chan,
Director, Watershed Knowledge

Recommended by:



Deborah Martin-Downs
Chief Administrative Officer

July 25, 2015

Ms. Debbie Scanlon
Senior Drinking Water Program Advisor
Ministry of the Environment and Climate Change
Source Protection Programs Branch
40 St. Clair Avenue West
14th floor
Toronto, Ontario M4V 1M2

Dear Ms. Scanlon:

Re: EBR Notice 012-4243 - Amendments to Ontario Regulation 288/07

These comments on proposed amendments to the regulation governing source protection committees represent the position of the Toronto and Region Source Authority (TRSPA) which is the lead authority for the CTC Source Protection Region and has the responsibility under section 7 of the *Clean Water Act, 2006* to appoint the members of the source protection committee. The TRSPA considered and endorsed this letter at their meeting held on July 24, 2015. The TRSPA is pleased with these proposed changes that will provide more flexibility in determining the size, appointment and operation of our source protection committee.

In response to each of the specific questions that you posed, we offer the following:

1. Please comment on the proposal to defer the expiry of the terms of appointment and full recruitment process to not later than January 1st before the first progress report on plan implementation is due.

In the CTC we must begin replacing members immediately due to existing vacancies and the requests of a number of members who wish to be replaced upon plan approval. As such we would not utilize this provision.

2. What are the advantages and disadvantages of providing flexibility to source protection authorities to determine the actual number of memberships that expire by January 1st of the year the first annual progress report is due and over the subsequent 24 months?

While it would ensure some continuity and retention of knowledge of the purpose and expected outcomes considered by members when setting specific policies, the time taken to reach the plan approval stage has been much longer than the inaugural members anticipated. We have reached the point that many members wish to be replaced. We hope that some will consider applying for reappointment so that there will be a mix of current and new members at the time of the first annual report to the Minister.

3. Should source protection authorities be able to align future terms of appointment with the time required to complete the future review and update of source protection plans (under section 36 of the Clean Water Act), to a maximum of five years? Why or why not?

We support the proposed change so the terms of new members can be five years rather than the current regulatory requirement that members' terms are for three years. With the three year term, there will be an annual turnover of approximately one-third of the committee members. Given the information that a new member will need to acquire in order to effectively participate, a three year term will limit their ability to contribute to the discussions, while also frustrating the sitting members who are already up to speed. The training of new members also poses an administrative and cost burden, along with the time and effort to recruit and appoint members with little, if any, benefit.

4. It is proposed that the January 1st deferral apply regardless if a committee retains its current size or becomes smaller, in order to provide the opportunity for new members to join the committee. What advantages and disadvantages do you expect would result?

As noted in the answers to questions 1 and 5, it is unlikely that the TRSPA would use the proposed deferral.

5. What are the advantages and disadvantages of the source protection committee in your area or region becoming smaller?

Both the CTC SPC and the TRSPA have considered the proposal to reduce the size of the committee and would not implement the option to reduce the size at this time. The challenge for the CTC is that there are 33 upper, lower and single tier municipalities wholly or partially within the CTC region who are represented by seven municipal representatives. Reducing the size of the committee would necessitate more municipalities sharing a committee member. This is not seen as desirable at this time. Perhaps in the future as more experience is gained municipalities may be able to consolidate representation with fewer members. The other two sector groupings could be similarly reduced at that time. Having the flexibility to reduce the committee size in the future is supported in principle.

6. Should the source protection authority or source protection committee make the decision to have a smaller committee size? Why?

The source protection authority should be the decision-making body as we are the legal entity responsible for compliance with the Act and regulations. In the CTC our practice has been to consult with and receive advice on these matters from our committee but do not agree with assigning this decision to the source protection committee.

7. Please identify any other provisions in Regulation 288/07 that you recommend should change and what improvements these changes would provide.

Section 13 of the regulation sets quorum of the SPC at 2/3 of members including proxies. While the CTC has not had to cancel for lack of quorum to date, there is concern that during the time between plan approval and starting meaningful work on preparing terms of reference for updating the plan and the annual reporting to the Minister, there may be instances where achieving quorum would be a challenge. Has the Ministry considered whether the quorum could be reduced or alternate measures available to allow the committee to function? This may be important, especially as vacancies are being filled and there is not an interim replacement available.

Thank you for providing the opportunity to comment on the proposed changes to the regulation governing source protection committees. We encourage the Ministry to move ahead expeditiously with promulgating the changes. As we are initiating the replacement of members of the CTC Source Protection Committee now, it would greatly aid our efforts to have any new rules clarified quickly. Should you have any questions, please contact me or Beverley Thorpe, bthorpe@trca.on.ca.

Yours truly,

Brian Denney
Chief Executive Officer, Toronto and Region Source Protection Authority

cc. Deborah Martin-Downs, CAO, Credit Valley SPA
Chris Darling, CAO, Central Lake Ontario SPA
Susan Self, Chair, CTC SPC
Beverley Thorpe, CTC Source Protection Project Manager