

CENTRAL LAKE ONTARIO SOURCE PROTECTION AUTHORITY

A G E N D A ELEVENTH CLOSPA MEETING

Tuesday, May 12, 2020 – 5:00 p.m.
MEETING LOCATION: VIRTUAL MEETING
ACCESS DETAILS TO BE PROVIDED

CIRCULATION LIST

Authority	Bob Chapman, Chair	Authority	C. Darling, Chief Administrative Officer
Members:	Ron Hooper, Vice Chair	Staff:	B. Boardman, Executive/Accounting Administrator
	Dave Barton		R. Catulli, Director, Corporate Services
	Janice Jones		J. Davidson, Acting Director, Watershed Planning & Natural Heritage
	Chris Leahy		L. Hastings, Marketing & Communications Coordinator
	Sterling Lee		D. Hope, Land Management & Operations Supervisor
	Tito-Dante Marimpietri		C. Jones, Director, Planning & Regulation
	Ian McDougall		P. Lowe, Director, Community Engagement
	Don Mitchell		P. Sisson, Director, Engineering & Field Operations
	Rhonda Mulcahy		L. Vaja, Executive Assistant/Health & Safety Administrator/Recording Secretary
	John Neal		R. Wilmot, GIS Systems Supervisor
	Brian Nicholson		
	David Pickles		
	Elizabeth Roy		
	Corinna Traill		

AGENDA ITEM:

SUPPORTING DOCUMENTS

1. **CALL TO ORDER**
2. **DECLARATIONS of interest by members on any matters herein contained**
3. **ADOPTION OF MINUTES of April 16, 2019** pg. **SP-1**
4. **CHIEF ADMINISTRATIVE OFFICER**
(1) Staff Report #SP-018-20 pg. **SP-3**
Re: Annual Reporting – Drinking Water Source Protection
5. **OTHER BUSINESS**
6. **ADJOURNMENT**

A G E N D A
SUPPORTING DOCUMENTS

MEETING OF: CLOSPA

DATE: Tuesday, May 12, 2020

TIME: 5:00 p.m.

LOCATION: Virtual Meeting

CENTRAL LAKE ONTARIO SOURCE PROTECTION AUTHORITY

MINUTES NO. 10 TENTH CLOSPA MEETING

Tuesday, April 16, 2019 – 5:00 p.m.

MEETING LOCATION: 100 WHITING AVENUE, OSHAWA
AUTHORITY'S MAIN BOARDROOM

Present:

Members: Bob Chapman, Chair
Ron Hooper, Vice Chair
Janice Jones
Chris Leahy
Sterling Lee
Ian McDougall
Don Mitchell
Rhonda Mulcahy
John Neal
David Pickles
Steve Yamada

Staff: B. Boardman, Administrative Assistant
C. Darling, Chief Administrative Officer
H. Brooks, Director, Watershed Planning & Natural Heritage
R. Catulli, Director, Corporate Services
G. Geissberger, Marketing & Communications Coordinator
S. Holysh, Senior Hydrogeologist
C. Jones, Director, Planning & Regulations
P. Lowe, Director, Community Engagement
P. Sisson, Director, Engineering & Field Operations
R. Wilmot, GIS Systems Supervisor

Absent:

Dave Barton
Tito-Dante Marimpietri
Brian Nicholson
Corinna Traill

Others: Jennifer Stephens, Toronto & Region Source Protection Authority

The Chair called the meeting to order at 5:00 p.m.

DECLARATIONS of interest by members on any matters herein contained - NONE

ADOPTION OF MINUTES of January 15, 2019 (Agenda pg. SP-1)

Res. #SP-34 Moved by D. Mitchell
Seconded by S. Lee

THAT the minutes of January 15, 2019 be adopted as circulated.
CARRIED

Councillor I. McDougall arrived at 5:03 p.m.
Councillor C. Leahy arrived at 5:13 p.m.
Councillor S. Yamada arrived at 5:13 p.m.

Cont'd

CHIEF ADMINISTRATIVE OFFICER

- (1) Staff Report #SP-017-19 (Agenda pg. SP-3)
Re: Annual Reporting – Drinking Water Source Protection

Jennifer Stephens, Program Manager, CTC Source Water Protection Region made a presentation to the Board (attached **H1-H16**)

- Res. #SP-35 Moved by J. Neal
Seconded by C. Leahy

*THAT Staff Report #SP-017-19 be received for information;
THAT the CLOSPA endorses the recommendation of the CTC SPC to report to the Ministry of the Environment, Conservation and Parks that the CTC Source Protection Plan is progressing well and is on target to full implementation within the timelines outlined in the Plan; and
FURTHER THAT the comments from the CTC SPC be incorporated into correspondence from the Chair of the CLOSPA to the Ministry of Environment, Conservation and Parks by the May 1st reporting deadline and that staff be directed to submit the Annual Progress Report and accompanying documents.*

CARRIED

ADJOURNMENT

- Res. #SP-36 Moved by R. Hooper
Seconded by S. Lee

THAT the meeting adjourn.

CARRIED

The meeting adjourned at 5:18 p.m.

DATE: May 12, 2020
FILE: NSPG1
S.R.: SP-018-20 **APPROVED BY C.A.O.** _____
MEMO TO: Chair and Members, CLOSPA Board of Directors
FROM: Chris Darling, Chief Administrative Officer
SUBJECT: ANNUAL REPORTING – DRINKING WATER SOURCE PROTECTION

BACKGROUND:

The Credit Valley – Toronto and Region – Central Lake Ontario (CTC) Source Protection Plan (SPP) was approved by the Minister of the Environment and Climate Change in July 2015 and became effective on December 31, 2015. Municipalities, source protection authorities (SPAs), and various provincial ministries have been implementing policies within the plan since it became effective.

The CTC Source Protection Committee (CTC SPC) had access to a variety of policy tools in developing Source Protection Plan policies, inclusive of specific prescribed instruments and land use planning powers under the Clean Water Act, 2006. The legislation also introduced new powers (Part IV powers) which allow for specific activities to be regulated (prohibited or managed) in areas where these activities are, or could be, a significant drinking water threat. Lastly, the committee also had access to ‘softer’ tools, such as education and outreach or incentive programs, which could be applied to address existing or future significant drinking water threats, in combination with other tools or alone.

The Clean Water Act (CWA), 2006 establishes a requirement for annual progress reporting by the source protection authority (SPA) to the Ministry of the Environment, Conservation and Parks (MECP) by May 1st for the previous calendar year. Under the present circumstances related to the Novel Coronavirus (COVID-19) pandemic, the Central Lake Ontario Source Protection Authority, along with Toronto and Region and Credit Valley Source Protection Authorities were approved for a one-month extension to June 1st, 2020 to submit the 2019 Annual Reports.

Those responsible for the implementation of policies in the CTC Source Protection Plan (CTC SPP) were required to submit a report of their activities between January 1st and December 31, 2019 by February 1, 2020. Staff summarized the content of these reports and presented this information to the CTC SPC for their review on April 29, 2020. The CTC SPC is required to comment on the extent to which, in their opinion, the objectives set out in the source protection plan are being achieved. Comments received from the CTC SPC are being presented to the Credit Valley, Central Lake Ontario, and Toronto and Region Source Protection Authorities for endorsement in May 2020, prior to submission to the province by June 1st.

ANALYSIS:

Within the Central Lake Ontario Source Protection Area, the municipalities required to implement policies to address significant drinking water threats have either been implemented or are in the process of implementing these policies. At the time the CTC Source Protection Plan was made effective, 14 significant drinking water threats were present. These threats have all been removed as a result of actions taken by the Region of Durham, the Town of Uxbridge, and the Province. A summary of these actions follows below:

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- All Ministries responsible for issuing Prescribed Instruments (i.e., regulatory tools such as an Environmental Compliance Approval) to conform with policies in the CTC SPP have integrated source protection practices into their business processes.
- MECP (Waste Disposal Sites, Wastewater, Sewage Threats) has reviewed all existing Prescribed Instruments in the Central Lake Ontario Source Protection Area where the activity being carried out could be a significant drinking water threat. Where appropriate, these documents have been amended to include conditions and terms to ensure that the potential threat is managed.
- Durham Region has established business processes to identify potential significant drinking water threats.
- The Province, Durham Region, Peel Region, and the City of Toronto participate in a Lake Ontario Collaborative Group, whose role is to undertake actions to protect Lake Ontario as a source of drinking water. Participation in this group, along with other actions taken by the municipalities and the Province address the 8 locations in CLOSPA's jurisdiction where significant drinking water quality threats to intakes on Lake Ontario were identified.
- CLOSPA municipalities have reported that amending Official Plans for conformity with the CTC SPP is 'in progress'. Most CLOSPA municipalities are expected to align their conformity obligations under the *Clean Water Act, 2006* when completing their conformity with the Growth Plan for the Greater Golden Horseshoe (i.e., July 2022 for Durham Region, July 2023 for lower tier municipalities).
- The Region of Durham has implemented education and outreach initiatives to comply with policies in the CTC SPP. In particular, the Region has developed and distributed educational materials for the General Public and target audiences, conducted site visits, collaborated with local organizations, produced source protection content for websites (<https://www.durham.ca/en/living-here/source-water-protection-new.aspx>) and implemented a social media campaign.
- Although there are no Wellhead Protection Areas (WHPAs) for quality within CLOSPA's jurisdiction, Durham Region has established a Risk Management Office to implement Part IV Tools (Risk Management Plans, Prohibition, Restricted Land Uses) in vulnerable areas outside of CLOSPA's jurisdiction where significant drinking water quality threats have been identified.

Three 'specify action' policies in the CTC SPP are directed at low or moderate threats which can occur in Highly Vulnerable Aquifers (HVAs) and Significant Groundwater Recharge Areas (SGRAs). These policies are non-legally binding and address the application of road salt, as well as the handling and storage of Dense Non-Aqueous Phase Liquids (DNAPLs) and organic solvents. CLOSPA municipalities have largely reported that these policies are 'in progress' or 'no progress made'. CLOSPA staff, with support from CTC Source Protection Region (CTC SPR) staff, will focus on assisting municipalities with the implementation of these policies in 2020.

Based on the summary provided, there is no question that implementation of the CTC SPP within CLOSPA's jurisdiction is progressing well and on target to achieving the timelines outlined in the Plan. However, this is not the case in the two other source protection areas in the CTC SPR. When the CTC SPP was made effective, 10,198 significant drinking water threats had to be addressed through policies in the CTC SPP. At the end of 2019, 424 threats remained to be addressed. All of these threats are associated with the preparation of a Risk Management Plan (RMP) under Part IV of the *Clean Water Act, 2006*; approximately 240 RMPs are expected to remain.

Cont'd

The current timeline in the approved CTC SPP (2019) states that all RMPs to address existing significant drinking water threats must be completed by December 31, 2020. On an annual basis, there is great variation across municipalities in the length of time needed to create a RMP based on its complexity, the number of threats being addressed through the Plan, and the willingness of the parties carrying out the activity(ies) to negotiate the parameters of the Plan. Due to these reasons, as well as the restrictions currently in place as a result of the COVID-19 pandemic, it will be impossible for several municipalities in the Credit Valley and Toronto and Region Source Protection Areas to meet the 2020 deadline for the completion of RMPs. The Committee intends to render a decision at the its May 13, 2020 meeting regarding an extension to the December 2020 timeline to complete these remaining RMPs.

The MECP has provided three different categories (Progressing Well/On Target; Satisfactory/Limited Progress; No Progress) for source protection committees to select from in commenting on the extent to which the objectives set out in the source protection plan are being achieved. At Meeting #1/20 held on April 29, 2020, the CTC SPC communicated that implementation of the CTC SPP is progressing well, but short of target. The Committee felt that since 96% of the existing significant drinking water threats have been addressed, this shows tremendous progress. However, given that 240 RMPs will not meet the timeline outlined in the CTC SPP and the Committee is contemplating an extension to this deadline, progress falls just short of target. A summary of the CTC Source Protection Plan is attached (Attachment 1).

To comply with the annual reporting requirements under the *Clean Water Act, 2006*, through the CLOSPA, the CTC SPR will submit the annual progress reporting results by June 1, 2020. This submission will also include comments, if applicable, from the Board of the CLOSPA. In addition, the CTC SPR will post the Source Protection Annual Progress Report, the ten page summary report from the CTC SPC, on the CTC SPR website (www.ctcswp.ca) by June 1, 2020.

RECOMMENDATION:

THAT Staff Report #SP-018-20 be received for information, and FURTHER THAT the CLOSPA endorses the recommendation of the CTC SPC to report to the Ministry of the Environment, Conservation and Parks that the CTC Source Protection Plan is progressing well, but short of target based on the timelines outlined in the Plan; and FURTHER THAT staff be directed to submit the Annual Progress Report to the Ministry by June 1, 2020.

Attach.

CD/JS/lv
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Source Protection Annual Progress Report

I. Introduction

This annual progress report outlines the progress made in implementing our source protection plan for the Credit Valley, Toronto and Region, and the Central Lake Ontario (CTC) Source Protection Areas, as required by the Clean Water Act and regulations for the 2019 calendar year. Together, these source protection areas comprise the CTC Source Protection Region.

Protecting the sources of our drinking water is the first step in a multi-barrier approach to safeguard the quality and quantity of our water supplies. The source protection plan is the culmination of extensive science-based assessment, research, consultation with the community, and collaboration with local stakeholders and the Province. When policies in the plan are implemented it ensures that activities carried out in the vicinity of municipal wells and lake-based intakes will not pose significant risk to those drinking water supplies.



DRAFT**II. A message from your local Source Protection Committee**

- P : Progressing Well/Short of Target – The majority of the source protection plan policies have been implemented and/or are progressing; some fall short of target.
- S : Satisfactory – Some of the source protection plan policies have been implemented and/or are progressing.
- L : Limited progress – A few of source protection plan policies have been implemented and/or are progressing.

PROPOSED WORDING:

This is the third Annual Report on implementation progress of the Drinking Water Source Protection Program in the CTC Source Protection Region since the CTC Source Protection Plan took effect on December 31, 2015.

In the fourth year of implementation, 100% of the legally-binding policies to address significant drinking water threats have been implemented or are in progress. At the end of the 2019 calendar year, 96% of the significant drinking water threats that existed at the time of source protection plan approval had been addressed through policy implementation or removed through threats verification. Further, the majority of applicable plan policies that address significant drinking water threats are implemented or in progress. Therefore, the CTC Source Protection Committee determined that implementation of the CTC Source Protection Plan (SPP) is progressing well.

Some policies in the CTC SPP require the establishment of a risk management plan (RMP) to address significant drinking water threats. Three municipalities in the CTC Source Protection Region will not meet the December 31, 2020 deadline to complete these legally-binding documents, as there are 240 which remain to be negotiated. The CTC Source Protection Committee is currently considering an extension to this timeline by 2 or 3 years. For this reason, the Committee concluded that, based on the original timeline set out when the CTC Source Protection Plan was approved, progress falls just short of target.

DRAFT**III. Our Watershed**

The CTC Source Protection Region contains 25 large and small watersheds and spans over 6,400 km², from the Oak Ridges Moraine in the north to Lake Ontario in the south. The region contains portions of the Niagara Escarpment, Oak Ridges Moraine, Greenbelt, Lake Ontario, and the most densely populated area of Canada. The CTC Source Protection Region includes 25 local municipalities and eight single tier, regional or county municipalities, 66 municipal supply wells, and 16 municipal surface water intakes on Lake Ontario. The region is complex and diverse in terms of geology, physiography, population, and development pressures. There are many, often conflicting, water uses including, drinking water supply, recreation, irrigation, agriculture, commercial and industrial uses, and ecosystem needs.

The Credit Valley Source Protection Area covers an area of 1,000 km². The Credit River Watershed contains 22 subwatersheds, each representing a major drainage area of the Credit River. Nearly 1500 km of streams and creeks empty into the Credit River including Black Creek, Silver Creek, West Credit River, Shaw's Creek, East Credit River, Fletchers Creek, Caledon Creek, and several others. There are thirteen municipal water systems operating in the source protection area, two are surface water based – accessing Lake Ontario as the source; the remainder are groundwater-based. There are no municipal water sources on the Credit River.

The Toronto and Region Source Protection Area comprises nine watersheds, plus their collective Lake Ontario waterfront shorelines, to incorporate portions of six upper-tier and 15 lower-tier municipalities. These nine watersheds include Carruthers, Duffins, Etobicoke, Highland, Mimico, and Petticoat Creeks, as well the Don, Humber and Rouge Rivers. More than 3.5 million people live within the source protection area with the population expected to grow significantly in the years to come. There are ten municipal water systems operating in the source protection area, five are surface water based – accessing Lake Ontario as the source; the remainder are groundwater-based.

The Central Lake Ontario Source Protection Area covers an area of 638.6 km² that is fully contained within the Regional Municipality of Durham. There are 15 watersheds within its boundaries, with the five major watersheds originating at the Oak Ridges Moraine. There are no municipal wells within source protection area; municipal drinking water comes from Lake Ontario. There are there are municipal drinking water systems: Whitby, Oshawa, and Bowmanville.



DRAFT**IV. At a Glance: Progress on Source Protection Plan Implementation****1. Source Protection Plan Policies**

The CTC Source Protection Committee included 165 policies in the CTC Source Protection Plan to address 21 prescribed threats and two local threats, actions considered necessary to protect sources of drinking water, and policies for monitoring implementation. Some policies are required to be implemented by one stakeholder, while others are to be implemented by several.

At the end of the fourth year of implementation, 92% of legally binding policies addressing significant drinking water threats have been implemented, and 4% of these policies are in the process of being implemented.

P: Progressing Well/On Target

2. Municipal Progress: Addressing Risks on the Ground

All municipalities in the CTC Source Protection Region are subject to the policies in the CTC Source Protection Plan. However, only 21 municipalities have vulnerable areas where significant drinking water threat policies apply. All municipalities where a future significant drinking water threat to sources of drinking water is possible, have processes in place to ensure that their day-to-day planning decisions conform with the CTC Source Protection Plan. Since the CTC Source Protection Plan has one land use planning policy that applies to the application of road salt (SAL-10), all 33 municipalities will need to review and update their Official Plan to ensure that it conforms to the CTC Source Protection Plan.

Municipalities in the CTC Source Protection Region are amending their Official Plans as required to conform with the Growth Plan for the Greater Golden Horseshoe, 2017. The Growth Plan requires that all upper tier municipalities complete their review by summer 2022 and lower tier municipalities by summer 2023. As of December 2019, 28 of the 33 municipalities have completed or are in the process of completing their conformity exercise.

P: Progressing Well/On Target

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3. Septic Inspections

There are 371 septic system inspections that are required to be complete every five years to satisfy the requirements of the Mandatory Septic System Inspection Protocol. The first round of septic systems was required to be complete in January 2017. Municipalities in the CTC Source Protection Region are now in the midst of the second round of inspections, which are to be completed by January 2022. In 2019, two septic system inspections were completed to conform with the Ontario Building Code. Inspections at these systems confirmed that both are functioning as designed or carrying out required pump-outs.

P: Progressing Well/On Target

4. Risk Management Plans

In 2019, 41 risk management plans were established in the CTC Source Protection Plans. This number reflects the most risk management plans generated in any one calendar year. At the end of 2019, 72 risk management plans are in place within the CTC Source Protection Region.

Municipalities have reported that 27 risk management plans are in the process of being completed. There were 45 inspections carried out by a risk management inspector for prohibited or regulated activities. In 2018, there was a 100% compliance rate with risk management plans and prohibited activities that were inspected.

Although municipalities across the CTC Source Protection Region have made significant progress in establishing risk management plans, it is unlikely that the estimated remaining 236 plans will be complete by the December 2020 deadline. On an annual basis, there is great variation across municipalities, in the number of risk management plans that can be developed based on the complexity of these documents, the number of threats being addressed through the Plan, and the willingness of the parties carrying out the activity(ies) to negotiate the parameters of the Plan. For those municipalities with a large number of risk management plans yet to negotiate, the Risk Management Officials will need to increase the rate at which the Plans are established.

S: Satisfactory

DRAFT**7. Source Protection Plan Policies: Summary of Delays**

As with the CTC Source Protection Plan, all such documents prepared in the Province were required to have a policy or policies to address significant drinking water threats. The CTC Source Protection Committee chose to also include policies to address three moderate and low drinking water threats. These drinking water threats include the application of road salt and the handling and storage of certain chemicals. Since the implementation of these four moderate and low threat policies (SAL-10, SAL-12, DNAP-3, OS -1) is non-legally binding, their execution varies greatly across the source protection region with several municipalities indicating some progress, while others indicating no progress made.

The establishment of incentive programs to encourage and support property owners and businesses with best management practices is one policy tool used by the CTC Source Protection Committee to address significant drinking water threats. The majority of municipalities with significant threat policies have not been able to establish such programs, therefore, the implementation of Policy GEN-5 has made very limited progress across the source protection region. The Committee was aware that this policy would be difficult to implement, hence it was established as a non-legally binding commitment.

DRAFT**8. Source Water Quality: Monitoring and Actions**

Fourteen (14) drinking water issues have been identified at four (4) drinking water systems in our source protection region.

For these drinking water systems, the source protection plan requires that the municipality establish more frequent raw water quality monitoring to further characterize this data and determine the impact of policies established to manage potential threats contributing to these increased values. This information can be accessed by contacting the local municipality.

Since these monitoring initiatives have only recently been established, there is insufficient data to be able to discern the impact of source protection plan policies on activities which may contribute to these concentrations.

Orangeville Drinking Water System (5 municipal wells)

Sodium: Wells 6, 9A, 9B - An increasing trend/concentration has been observed.

Chloride: Wells 6 and 10 - An increasing trend/concentration has been observed.

Chloride: Wells 9A, 9B - A decreasing trend/concentration has been observed.

Chloride: Well 10 - No change in trend/concentration.

Inglewood Drinking Water System (1 municipal well)

Pathogens: Well 2 - A decreasing trend/concentration has been observed.

Acton Drinking Water System (2 municipal wells)

Nitrates: Davidson Wells 1 and 2 - No change in trend/concentration.

Georgetown Drinking Water System (3 municipal wells)

Chloride: Cedarvale Wells 1, 4, and 4A - No change in trend/concentration.

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9. Science-based Assessment Reports: Work Plans

No work plans were required to be implemented for our assessment reports.

10. More from the Watershed

For more information about source protection implementation in the CTC Source Protection Region, please see our story map, which is available on our website: <https://ctcswp.ca/>

CTC Source Protection Region

Source Protection Committee

April 30, 2020

Mr. Bob Chapman
Chair, Central Lake Ontario Conservation Authority
100 Whiting Avenue
Oshawa, Ontario
L1H 3T3

Dear Mr. Chapman:

In accordance with Ontario Regulation 287/07, Central Lake Ontario Source Protection Authority (TRSPA) is required to submit its third Annual Progress Report to the Ministry of the Environment, Conservation and Parks on the implementation of the CTC Source Protection Plan by June 1, 2020. This report documents the status of policy implementation, as well as the progress in achieving the source protection plan objectives during the reporting period. This third Annual Progress Report reflects implementation efforts between January 1, 2019 and December 31, 2019 (see attached).

On April 29, 2020, the CTC Source Protection Committee passed the following resolution:

IT IS RECOMMENDED THAT a summary of implementation activities in 2019 obtained through Annual Reports submitted by February 1, 2020 be received by the CTC SPC for input on progress achieved in accomplishing source protection plan objectives;

AND THAT in the opinion of the CTC SPC, implementation of the CTC Source Protection Plan in 2019 is progressing well, although short of target;

AND THAT CTC SPR staff be directed to take the necessary action to communicate the Committee's assessment of implementation progress, as well as any feedback from the CTC SPC to the Credit Valley, Toronto & Region, and Central Lake Ontario Source Protection Authorities at meetings scheduled for May 8th, May 12th, and May 22nd, 2020.

AND FURTHER THAT the CTC SPR staff be directed to take the necessary action to submit the 2019 Annual Progress Report and 2019 Annual Report – Supplemental Form to the Ministry of the Environment, Conservation and Parks, along with any Source Protection Committee comments, in accordance with Section 46 of the *Clean Water Act, 2006* and any Director's instructions established under O. Reg. 287/07 S.52.

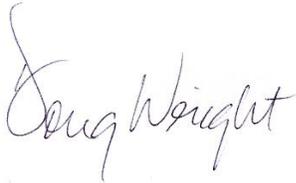
At the time the CTC Source Protection Plan was made effective, 10,198 existing significant drinking water threats were identified in the Credit Valley – Toronto and Region – Central Lake Ontario (CTC) Source Protection Region (SPR). At the end of the current reporting period, only 424 (4%) significant drinking water threats remain to be addressed. Additionally, the majority of applicable plan policies that address significant drinking water threats are implemented or in progress. Therefore, the CTC Source Protection Committee determined that implementation of the CTC Source Protection Plan (SPP) is progressing well.

However, some policies in the CTC SPP require the establishment of a risk management plan (RMP) to address significant drinking water threats. Three municipalities in the CTC Source Protection Region will not meet the December 31, 2020 deadline to complete these legally-binding documents, as there are 240 which remain to be negotiated. The CTC Source Protection Committee is currently considering an extension to this timeline by 2 or 3 years. For this reason, the Committee concluded that, based on the original timeline set out when the CTC Source Protection Plan was approved, progress falls just short of target.

On behalf of the CTC Source Protection Committee, the Central Lake Source Protection Authority is now tasked with considering this Annual Progress Report and submitting it to the Ministry of Environment, Conservation and Parks along with any comments the source protection authority wishes to make. Similarly, both Toronto and Region and Credit Valley Source Protection Authorities are reviewing the comments received from the CTC Source Protection Committee and will report their assessment of implementation status to the Ministry within the same timeframe.

If you have any questions regarding this letter, or the CTC Source Protection Plan 2019 Annual Progress Report, please contact Jennifer Stephens at 416-892-9634 or jennifer.stephens@trca.ca.

Sincerely,

A handwritten signature in cursive script that reads "Douglas Wright".

Douglas Wright
Chair, CTC Source Protection Committee

Copy to:

Chris Darling, Chief Administrative Officer, Central Lake Ontario Conservation Authority
Rod Wilmot, GIS / IT Systems Supervisor, Central Lake Ontario Conservation Authority
Jennifer Stephens, Manager - Source Water Protection, Toronto and Region Source Protection Authority

November 22, 2019

Dear Ms. Innis, Ms. Ras, Mr. Chapman, and Mr. Wright,

Thank you again for the submission of the annual progress reports on implementation of the CTC Source Protection Plan in April.

I am writing in response to comments about Lake Ontario from the CTC Source Protection Committee that were included with the submission of your annual progress report. As the committee noted, the Ministry reported that we have implemented these policies and our commitment to review and consider their requirements, and that the Ministry's spill response and notification procedures have been updated. The comments also referred to recommendations in several "Lake Ontario" policies, notably LO-NGS-1, LO-SEW-1 & 2, LO-FUEL-1 & 2, LO-G-1 and LO-PIPE-1.

As you may know, the Ministry established a cross-divisional working group to consider all non-binding policies directed at the Ministry and to identify: 1) where existing programs already achieve the policy outcomes, and 2) where we should further consider program and regulatory improvements. MECP has completed its review of the policy outcomes and annual reporting has included some information where policy outcomes have already been achieved through new or existing programs or regulatory amendments. I would like to take this opportunity to provide additional information on the Ministry's review and actions undertaken.

The above-noted Lake Ontario policies include requests for the Province to work with relevant authorities to **evaluate existing Risk Mitigation or Contingency Plans** for a range of facilities. This work is most appropriately led by the operators and regulators of the facilities in question, whether they are bulk fuel storage, oil pipelines, nuclear generation stations, or sewage treatment plants.

Under the *Emergency Management and Civil Protection Act (EMCPA)*, all Ontario municipalities are required to appoint a Community Emergency Management Coordinator (CEMC) who evaluates risks and hazards within the municipality and creates an emergency plan to address those risks. Those plans are reviewed by the Office of the Fire Marshal and Emergency Management on an annual basis. Industry-specific plans are developed in accordance with applicable regulatory bodies for those industries. Industry-specific plans should be linked to municipal plans to ensure appropriate coordination under the Provincial Emergency Response Plan (PERP). Provincial resources are coordinated at the Provincial Emergency Operations Centre (PEOC) to support municipal response efforts. Federal supports may also be requested through the PEOC.

For the **nuclear generation industry (policy LO-NGS-1)** the explanatory document for the CTC Source Protection Plan noted that the Provincial Nuclear Emergency Response Plan (PNERP) might not be triggered by a release of tritiated water. However, there is a stand-alone provincial

procedure in place, held by the Office of the Fire Marshal and Emergency Management, called the Provincial Liquid Emergency Response Procedure (PLERP). The purpose of the PLERP is to provide a coordinated response for events where the discharge of radioactivity from Ontario's nuclear power plants may result in radioactive concentrations at nearby water intakes that may exceed Ontario's Drinking Water Quality Standards (per O. Reg. 169/03 made under the Safe Drinking Water Act). The PLERP focuses on sampling arrangements for discharges of cooling waters or other discharge waters with elevated tritium levels.

The initial response to elevated waterborne radiological discharges depends on the amount of radioactivity in the discharge waters, its projected or potential effect on local drinking water supplies, and the ability of community and local health authorities to deal with the situation. A response to elevated radiation discharges is similar to other events that involve an unusual or unanticipated release of contaminants into the environment, and escalates when necessary from the discharger to the community, and finally to the Province. A response to elevated waterborne radiological discharges will involve the nuclear facility, the affected community, and may escalate to involve the Ministries of the Solicitor General, the Ministry of Labor, the Ministry of the Environment, Conservation and Parks, and the Ministry of Health and Long-Term Care who are members of the Provincial Liquid Emergency Response Team. Decisions for action in these situations would be based on the circumstances at the time of the event and depend on the season, as well as the nature, scope and length of the release.

In 2016, the Office of the Fire Marshal and Emergency Management conducted a discussion-based exercise related to the updated PLERP. The exercise focused on testing decision making processes and validating communication procedures related to notification, reporting and situational awareness.

The Lake Ontario policies also recommend **testing of contingency plans through emergency exercises**. At the request of industry, the Ministry participates in various levels of exercises. These exercises may range from low level participation, such as notifications to the Spills Action Centre (SAC) as required in their plans to higher levels and a wider range of participation by regional staff and the Ministry's Emergency Management Program Office. The Ministry has participated in exercises for specific scenarios, including:

- Imperial Oil (Toronto 2018): based on a pipeline spill to the Humber River
- Shell Oil (Sarnia 2017): based on a large-scale incident at the Sarnia Manufacturing Center with tank fire and marine oil spill
- Trans-Northern Pipeline (Mississauga 2016) - "Exercise Elaion Response East" hosted by the Canadian Safety and Security Program. This exercise was led by Defence Research and Development Canada's Centre for Security Science, in partnership with Public Safety Canada. Exercise focused on a terrorist threat targeting the petroleum industry in North America (Provincial participation from the PEOC)

In addition to physical participation in exercises, the Ministry supports testing of plans at the local level with industry and municipalities as it relates to local emergency plans. For the period of 2016 to present, the Ministry has participated in over 50 exercises.

Nuclear generating stations are required, as a condition of licensing, to conduct exercises of different types on an annual basis. There is also a requirement for those facilities to conduct full scale exercises on a rotational basis. During full scale exercises, provincial ministries with

responsibilities under the PNERP participate as they would in an actual event along with the various levels of government and industry who have responsibilities under the plan. Recent exercises include:

- Huron Resilience 2019 – seismic event scenario impacting Bruce B
- OPG Pickering Nuclear Generating Station “Exercise Unified Control 2017” - involving contaminated worker and leading up to the point of release of radioactive material into the environment
- Huron Resolve 2016 – nuclear release involving both Bruce A and B modelled after Fukushima
- Amherstburg 2016 – nuclear exercise in support of FERMI II Nuclear Generating Station (Michigan)
- OPG Pickering Nuclear Generating Station 2016 - Provincial Liquid Emergency Response Plan exercise.

With regard to **contingency and notification plans for wastewater treatment plants (LO-SEW-1)**, the Ministry reported in February 2019 that we have completed our review of previously issued Environmental Compliance Approvals (ECAs) for sewage works that are significant drinking water threats, to ensure these instruments conform with source protection plan policies. All wastewater treatment plant ECAs for significant threat facilities include a requirement for the operator to create and maintain a spill prevention and contingency plan, in accordance with O. Reg 224/07. Recent ECAs for wastewater treatment plants includes a condition requiring the owner to develop a notification procedure, in consultation with the Ministry, to ensure downstream water users (including drinking water systems) are appropriately notified in the event of a bypass or overflow. SAC and MECP District Office staff review the plans shared with the Ministry and provide feedback to the operators. Part of this feedback includes reminding operators to consider source protection vulnerable areas.

Policy **LO-G-1** also refers to **contingency plans for municipal drinking water systems**. Operating authorities for municipal drinking water systems are accredited by a third party to meet the requirements of the Drinking Water Quality Management Standard. As part of this accreditation, operating authorities are required to document, implement and conform to a procedure for emergency preparedness. This includes preparing a list of potential emergency situations and processes for emergency response and recovery. Operating authorities are also required to undertake a risk assessment for their system at least once every 36 months. The Safe Drinking Water Act (s.13) requires municipal drinking water system owners to have an accredited operating authority in charge of the system at all times – and having an accredited operating authority is a requirement for the municipal drinking water licence.

The Drinking Water Quality Management Standard was updated in April 2017. This update included mandatory risks that must be considered within the risk assessment – including a “chemical spill impacting source water”. All risk assessments conducted by operating authorities since April 2017 are required to consider the mandatory risks. As operating authorities are required to undertake a risk assessment once every 36 months, all operating authorities will have evaluated this risk by April 2020.

As you know, the MECP is also participating on the **Lake Ontario Collaborative Group (LOCG – LO-G-2)** along with the municipalities of Durham, Toronto and Peel and the Toronto & Region Source Protection Authority. The LOCG’s Communications Working Group is currently working

on a collaborative spill response protocol for each of the major spill scenarios identified in the CTC Lake Ontario policies. Ontario Power Generation has done a presentation for the group on their spill response procedures, tritium notification thresholds and emergency response preparedness exercises. Meetings with pipeline companies regarding their communication protocols to SAC and municipal contact information are being planned for early 2020. In addition to the communications work, the LOCG is also in the process of developing modelling solutions to support enhanced spills response.

I hope this additional information on implementation of the Lake Ontario policies is helpful, and I thank you for your ongoing efforts to protect drinking water sources.

Sincerely,



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