

**TO: Chair and Members of the Source Protection Committee
Meeting #4/24, October 23, 2024**

**FROM: Behnam Doulatyari, Senior Manager, Watershed Plans and
Source Water Protection**

**RE: Review of the Existing Local Liquid Hydrocarbon Pipeline
Policies and Consideration of Transportation of Dangerous
Goods**

RECOMMENDATION

THAT the CTC Source Protection Committee receive the staff report *Review of the Existing Local Liquid Hydrocarbon Pipeline Policies and Consideration of Transportation of Dangerous Goods* for information.

AND FURTHER THAT the CTC Source Protection Committee endorse amendments to relevant policies consistent with the direction outlined in this staff report.

AND FURTHER THAT staff be directed to incorporate the new policy text as part of a forthcoming amendment to the CTC Source Protection Plan, under Section 36 of the *Clean Water Act*.

EXECUTIVE SUMMARY

The CTC s.36 workplan tasks 6 and 11 respectively require consideration of the transportation of substances as a local threat, and review of the need for new policies resulting from the addition of liquid hydrocarbon pipelines by the Province, as a prescribed threat. A discussion paper was developed for each s.36 task with overlapping policy recommendations. The proposed policy updates include amendments to three existing policies (LO-PIPE-1, LO-G-1, and LO-G-4), and the addition of eight new policies (PIPE-G-1, PIPE-G-2, PIPE-G-3, PIPE-G-4, PIPE-G-5, PIPE-G-6, LO-G-5, and GEN-9).

Background

Transportation of Dangerous Goods

The discussion paper, *Consideration of Transportation of Dangerous Goods* (Attachment 6), is a deliverable under Task 6 of the s.36 workplan:

Task 6: Consider the transportation of substances as a local threat. If deemed a local threat, create a specify action policy to address the threat.

“Dangerous goods” are products identified by the federal government in Schedule 1 and Schedule 3 of the Transportation of Dangerous Goods Regulations (SOR/2001-286), which is administered by Transport Canada.

The Ministry of the Environment, Conservation and Parks (MECP) has listed a total of 22 prescribed activities that could pose a threat to drinking water in the 2021 Technical Rules. The transportation of dangerous goods is *not* listed as a prescribed activity under the *Clean Water Act* as it was considered by the Province and agreed by the inaugural SPC, to have significant oversight and regulation at the provincial and federal level.

Although the transportation of dangerous goods is not an activity prescribed to be drinking water threats in paragraphs 1 through 18 and paragraphs 21 and 22 of subsection 1.1(1) of O. Reg. 287/07 (General), it could be identified as a local threat in line with requirements of [Technical Rule 119](#).

Liquid Hydrocarbon Pipeline

The discussion paper, *Review of the Existing Local Liquid Hydrocarbon Pipeline Policies* (Attachment 5), is a deliverable under Task 11 of the s.36 workplan:

Task 11: Review need for new policies resulting from the addition of liquid hydrocarbon pipelines by the Province, as a prescribed threat.

Hydrocarbon pipelines are used to provide and transport fuel to major cities across the province and there are several that traverse the CTC Source Protection Region (CTC SPR). The CTC Source Protection Committee (SPC) is concerned with potential pipeline incidents (spills and leaks) that could impact drinking water sources.

To address this, the first CTC SPC pursued and established liquid hydrocarbon pipelines as a local threat in 2015 as, at the time, it was not included in the list of provincial prescribed activities. The current CTC pipeline policies (LO-PIPE-1, LO-G-1, and LO-G-2) were developed to address specific event-based modelled threats using rupture scenarios of existing pipelines across tributaries leading into Lake Ontario that could lead to deleterious impacts on CTC drinking water sources.

In 2018, however, the Ontario Regulation 287/07 was amended to add the “establishment and operation of a liquid hydrocarbon pipeline” to the list of prescribed drinking water threat activities for a current total of 22 threats (O. Reg. 385/08, s. 3; O. Reg. 206/18, s. 1).

This amendment now requires the CTC SPR to review the new circumstances identified by the Province, determine whether pipelines are located within these vulnerable areas and develop policies where pipelines could result in a significant threat and develop policies to address where these threats are determined. Refer to Table 1 in the discussion paper for the circumstances for significant threats. The regulation change for pipelines to a Provincial threat, also means that references to the local threat approach described in the CTC Source Protection Plan (CTC SPP) and Assessment Reports are to be removed.

Analysis

Transportation of Dangerous Goods

A large volume of dangerous goods is transported through the Greater Toronto Area (GTA) daily. Of these products, the CTC Source Protection Committee has expressed concerns with petroleum products and potential spills that could pose a threat to drinking water sources.

The CTC SPC discussed adding the transportation of dangerous goods as a local threat when the first SPP was being developed. The SPC did not pursue this, however, based on direction from the Province to avoid the development of duplicative policies, where other agencies already have extensive controls, and instead use prescribed instruments and existing legislation to protect drinking water sources. Refer to **Attachment 1 – Table 1** for a summary of prescribed legislative instruments.

If the CTC SPC believes that it is still prudent to add the transportation of dangerous goods as a local threat, the CTC would need to complete modelling studies within available budgets, to determine if the threat is significant. If found to be significant, the CTC may request that the Province add this as a local threat. If approved, the CTC SPC could then develop policies to eliminate the threat.

Liquid Hydrocarbon Pipeline

It was determined that there are currently no liquid hydrocarbon pipelines that cross Wellhead Protection Areas (WHPAs) or Intake Protection Zones-3 (IPZ-3) where they could pose significant risks. The pipelines in CTC SPR do traverse highly vulnerable aquifers (HVAs), but they currently only pose a low threat. Based on this analysis, existing liquid hydrocarbon pipelines do not pose significant threats to drinking water sources in the CTC SPR based on the vulnerability score-based circumstances.

It may be noted that there are several legislative instruments that currently address the fundamental concerns of drinking water source protection through their provisions and emergency response plans. Refer to **Attachment 1 – Table 2** for a summary of legislation governing hydrocarbon pipelines.

Although no existing significant threat has been identified within CTC, the threat circumstances added in the 2018 Technical Rules, and maintained in the 2021 version, refer to “Conveyance of a Liquid Hydrocarbon by a Pipeline” which necessitates consideration of *future* threats where they can be significant. Considering that the CTC SPR is an area of growth with a demand for liquid hydrocarbon products, it is reasonable to assume that additional or larger pipelines may be constructed and or that changes may be made to existing pipelines in the future. It is recommended that, similar to neighbouring SPRs, CTC develop additional policies to address these potential future threats.

Proposed Policy Alternatives and Discussion

The proposed policy updates include both new (PIPE-G-1, PIPE-G-2, PIPE-G-3, PIPE-G-4, PIPE-G-5, PIPE-G-6, LO-G-5, and GEN-9) and amended policies (LO-PIPE-1, LO-G-1, and LO-G-4).

There are already several instruments that currently address the fundamental concerns of source water protection through their provisions and emergency response plans. It is therefore not recommended at this time, to perform event-based modelling for the potential addition of a local threat for the transportation of dangerous goods. However, to further protect drinking water sources from spills, the CTC should develop policies to update provincial spill prevention, contingency, and response plans per Section 26 (6) of Ontario Regulation 287/07.

The proposed policy updates are intended to improve awareness of sensitive drinking water areas and Source Water Protection policies for spill response planning. The potential future threats associated with Conveyance of a Liquid Hydrocarbon by a Pipeline are addressed through new policies intended to improve awareness and communication with federal and provincial agencies

Consultation

The proposed policy amendments for Task 6: Transportation of Dangerous Goods were discussed at the October 5, 2023, Implementation Working Group meeting. Staff revised the policies based on the discussions. Detailed comments from municipalities and CTC staff response can be found in the [comment matrix](#). Revised policies were discussed at the IWG meeting on February 6, 2024. The proposed policies were presented to the Source Protection Committee on February 21, 2024. The Committee noted that implementing agencies of the LO-G-5 and GEN-9 policies may have restrictions on sharing spill data. This will be addressed through the pre-consultation process.

The proposed policy amendments for Task 11: Liquid Hydrocarbon Pipeline were discussed at the September 26, 2023, Implementation Working Group meeting. Municipalities did not have objections to expanding the policies if it does not add onerous requirements. It was also noted that the Education and Outreach policies could be duplicated for groundwater policies, as the initial policies only applied to Lake Ontario. This was addressed through the addition of GEN-9. Detailed comments from municipalities and CTC staff response can be found in the [comment matrix](#). Revised policies were discussed at the IWG meeting on February 6, 2024. The proposed policies were presented to the Source Protection Committee on February 21, 2024. The Committee recommended including the Technical Standards and Safety Authority (TSSA) as an implementing body of the LO-PIPE-1 policy as they oversee pipeline operations and development of spill response plans. The Committee also discussed adding the word 'pipelines' or 'utility corridors' to the policy text for LO-G-5 and GEN-9. This has been incorporated into the proposed policy text.

Task 6 and Task 11 have overlapping policy recommendations as they both address the concern potential spills could have on drinking water sources. To explain how the new policy text satisfies the requirements of the s.36 workplan, they were presented separately to the Source Protection Committee in February. However, for the purposes of this report, the policies have been merged to improve readability. Refer to **Attachment 3: Proposed Policy Alternatives**.

Discussions determined that the proposed policy updates are acceptable, would pose no significant impact to municipal operations and would enhance the protection of drinking water in the CTC SPR.

Next Steps

Pending endorsement of the policy amendments by the SPC, source protection authority staff will prepare edits to the CTC Source Protection Plan and Explanatory Document. This amendment is expected to be made at the time of the next amendment to the SPP under section 36 of the *Clean Water Act*.

Report prepared by:

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Attachments (4)

Attachment 1: Summary of Legislation Governing Spills on Transportation Corridors and Hydrocarbon Pipelines

Attachment 2: Proposed Policy Alternatives

Attachment 3: Discussion Paper: Consideration of Transportation of Dangerous Goods

Attachment 4: Discussion Paper: Review of Existing Local Liquid Hydrocarbon Pipeline Policies

Attachment 1: Summary of Legislation Governing Spills on Transportation Corridors and Hydrocarbon Pipelines

Table 1: Summary of Prescribed Legislative Instruments for Spills on Transportation Corridors

| Legislation | Administrative Body | Purpose | Source Protection Provisions |
|---|---|---|---|
| Transportation of Dangerous Goods Act 1992 – Federal/ Provincial regulations | Transport Canada | To promote public safety when dangerous goods are being handled, offered for transport or transported by road, rail, air, or water and establishes safety requirements. | Unknown |
| Canadian Environmental Protection Act (CEPA) Federal – Spills | Environment and Climate Change Canada | To help prevent or reduce the risk of spills of pollutants and prevent, eliminate or ameliorate any adverse effects that result or may result from spills. | Unknown. The Province has shared the information and maps with all relevant agencies and promotes use of said information in operational as well as for response planning. |
| Environmental Protection Act, 1990 – Provincial | Ministry of Environment, Conservation and Parks | To provide protection and conservation of the natural environment in Ontario, which includes provisions for spills of contaminants. | The Province, municipalities, the Spills Action Centre (SAC) and pipeline companies all have been provided with Source Water Protection data and mapping. |
| The Spills Action Centre (SAC) - Ontario | Ministry of Environment, Conservation and Parks | Handles reports of spills, adverse drinking water results and environmental concerns from the public. | The SAC has access to the Source Protection Program data and maps. The SAC is aware of highly vulnerable drinking water areas. |
| Emergency Management and Civil Protection Act (EMCPA) Provincial – O. Regulation 380/04 | Emergency Management Ontario | Requires municipalities to have a Municipal Emergency Control Group (MECG) that is responsible for directing a municipal response to an emergency, such as spills. | Municipalities have been provided with Source Water Protection data and mapping. |

Table 2: Summary of Legislation Governing Hydrocarbon Pipelines

| Legislative Instruments | Administrative Body | Purpose |
|---|--|--|
| Canadian Energy Regulator Act, 2019 | Canadian Energy Regulator (CER) | Review and make decisions regarding pipelines and power lines in Canada that cross provincial or international boundaries. |
| Ontario Energy Board Act, 1998 | Ontario Energy Board (OEB) | Establishes the OEB as a regulator of Ontario’s electricity and natural gas sectors. |
| Canadian Standards Association Z662 | N/A | To achieve safety and integrity of a pipeline throughout its lifecycle. Requires pipeline companies to identify and document Designated Geographical Areas (DGAs) in the vicinity of the pipeline. The criteria for DGAs includes impacts on major drinking water sources. |
| Technical Standards and Safety Act, 2000 | Technical Standards and Safety Authority’s | To help protect the public, environment, and property from fuel-related hazards such as spills, fires, and explosions. They oversee the ongoing operation and maintenance of existing hydrocarbon pipelines. |
| Fisheries Act, 1985 | Environment and Climate Change Canada (under contamination section of the Act) | To prevent the deposit of deleterious substances of any type in water frequented by fish. |
| Canadian Environmental Protection Act (CEPA) Federal – Spills | Environment and Climate Change Canada | To help prevent or reduce the risk of spills of pollutants and prevent, eliminate or ameliorate any adverse effects that result or may result from spills. |
| Environmental Protection Act, 1990 – Provincial | Ministry of Environment, Conservation and Parks | To provide protection and conservation of the natural environment in Ontario, which includes provisions for spills of contaminants. |
| The Spills Action Centre (SAC) - Ontario | Ministry of Environment, Conservation and Parks | Handles reports of spills, adverse drinking water results and environmental concerns from the public. |
| Municipal Dangerous Goods Spill Response Plans | Municipalities | Outlines how municipalities will respond and monitor spills as well as ensure appropriate steps are taken by the responsible party to clean the spills. |

Attachment 2: Proposed Policy

Note: Yellow highlights indicate the proposed policy text. Blue highlights indicate new revisions to the proposed policies since the February 21, 2024, SPC meeting.

| Policy ID | Threat Description | Implementing Body | Legal Effect | Policy | Where Policy Applies | When Policy Applies | Related Policies | Monitoring Policy |
|-------------------------------------|--|------------------------------------|--------------|---|--|---|-------------------------------|-------------------|
| PIPE-G-1 (NEW) Specify Action | Establishment and operation of a liquid hydrocarbon pipeline | CER, TSSA | K | Specify Action Where the establishment and operation of a liquid hydrocarbon pipeline is an existing significant drinking water threat, the Canada Energy Regulator and Technical Standards and Safety Authority are recommended to ensure that their regulatory requirements manage liquid hydrocarbon pipelines through appropriate design standards (including the location of safety valves), monitoring, maintenance (including integrity management programs) and other relevant practices, such that drinking water sources are protected. | EBA See Map 4.1 | Existing – The existing significant threat activity is located about 12 kms from the Lake Ontario shoreline | LO-PIPE-1 LO-G-1 LO-G-2 | MON-4 PIPE-G-6 |
| PIPE-G-2 (NEW) Specify Action | Establishment and operation of a liquid hydrocarbon pipeline | CER, OEB | K | Specify Action Where the establishment and operation of a liquid hydrocarbon pipeline could become a significant drinking water threat, the Canada Energy Regulator and Ontario Energy Board in their consideration of a liquid hydrocarbon pipeline application are recommended to ensure that the applicant has complied with and included appropriate design standards (including the location of safety valves), monitoring, maintenance (including integrity management programs) and other relevant practices, that when implemented will prevent a pipeline from becoming a significant drinking water threat. | EBA (no scores) See Map 4.1, WHPA-A & B - V. score 10, WHPA-E – V. score 9 | Future | LO-PIPE-1 LO-G-1 LO-G-2 | MON-4 PIPE-G-6 |
| PIPE-G-3 (NEW) Specify Action | Establishment and operation of a liquid hydrocarbon pipeline | Liquid Hydrocarbon pipeline owners | K | Specify Action Where the establishment and operation of a liquid hydrocarbon pipeline is or could be a significant threat to drinking water sources, liquid hydrocarbon pipeline owners are requested to use threats risk assessment information from assessment reports approved under the Ontario Clean Water Act, 2006 | EBA (no scores) See Map 4.1, WHPA-A & B - V. score 10, WHPA-E – V. score 9 | Existing Future | LO-PIPE-1 LO-G-1 LO-G-2 | MON-4 PIPE-G-6 |

| Policy ID | Threat Description | Implementing Body | Legal Effect | Policy | Where Policy Applies | When Policy Applies | Related Policies | Monitoring Policy |
|-------------------------------------|--|---|--------------|---|--|---------------------|-------------------------------|-------------------|
| | | | | and relevant watershed information while developing and updating emergency planning zones (EPZs) and designated geographical areas (DGAs). | | | | |
| PIPE-G-4 (NEW) Specify Action | Establishment and operation of a liquid hydrocarbon pipeline | Liquid hydrocarbon pipeline owners and owners | K | Specify Action Where the establishment and operation of a liquid hydrocarbon pipeline is or could be a significant threat to drinking water sources, to Lake Ontario municipal intakes, facility owners are requested to update emergency preparedness/contingency plans to include the location of municipal intakes, actions to be taken to protect drinking water sources should an incident occur, and the requirement for inclusion of the protection of drinking water sources in emergency preparedness exercises. | Event-based IPZ-3 (no scores) See Map 4.1; Pipelines: WHPA-A, B - V. score 10, WHPA-E - V. score 9 | Existing Future | LO-PIPE-1 LO-G-1 LO-G-2 | MON-4 PIPE-G-6 |
| PIPE-G-5 (NEW) | Establishment and operation of a liquid hydrocarbon pipeline | Ministry of the Environment Conservation and Parks MECP | K | Specify Action Where the establishment and operation of a liquid hydrocarbon pipeline is an existing significant threat to drinking water sources and or to Lake Ontario drinking water sources: a) The Ministry of the Environment, Conservation and Parks shall ensure that the Intake Protection Zone -3s and the location of Significant Drinking Water Threats data provided to the Spills Action Centre (SAC) are up to date and the Spills Action Centre, if necessary, shall modify procedures to ensure that the operators of all water treatment plants that could be affected by a spill are notified. b) By February 1 of each year, the Ministry of the Environment, Conservation and Parks shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, including the number, type, and location of spills reported within intake protection zones three, adjusted thresholds, and actions taken or recommended to improve the efficiency and effectiveness of the spill reporting system. | Event-based IPZ-3 (no scores) | Existing | LO-PIPE-1 LO-G-1 LO-G-2 | MON-4 PIPE-G-6 |

| Policy ID | Threat Description | Implementing Body | Legal Effect | Policy | Where Policy Applies | When Policy Applies | Related Policies | Monitoring Policy |
|---|--|----------------------------------|---------------------|--|---|-----------------------------|-------------------------------|-------------------|
| PIPE-G-6 (NEW) Education and Outreach | Establishment and operation of a liquid hydrocarbon pipeline | CTC SPA Conservation Authorities | F Monitoring Policy | <p>Education and Outreach</p> <p>Where the establishment and operation of a liquid hydrocarbon pipeline is or could be a significant threat to Lake Ontario municipal intakes and groundwater municipal drinking water sources, the CTC Conservation Authorities shall on a biennial basis:</p> <ul style="list-style-type: none"> a) Provide educational awareness sessions on drinking water source protection to interested liquid hydrocarbon pipeline companies; b) Provide relevant website addresses for approved assessment reports and the source protection plan and watershed information if available, to liquid hydrocarbon pipeline companies; c) Request the Canada Energy Regulator and Technical Standards and Safety Authority to confirm their requirements for liquid hydrocarbon pipelines to manage existing significant drinking water threats; d) Request the Canada Energy Regulator and Ontario Energy Board to confirm that their requirements for pipeline design standards, monitoring, maintenance and other relevant practices in vulnerable areas prevents a pipeline from becoming a significant drinking water threat; e) Request information updates including new or changes to liquid hydrocarbon pipelines including 'leave to abandon' changes; and f) Request an invitation from liquid hydrocarbon pipeline owners, to observe emergency preparedness exercises relevant to the CTC Source Protection Region; and request a copy of their emergency preparedness plans when amended to protect municipal drinking water sources. | Pipeline, threats: Event based IPZ-3 (no scores); WHPA-A, B - V. score 10; and WHPA-E - V. score 9. | Existing Future | LO-PIPE-1 LO-G-1 LO-G-2 | |
| LO-PIPE-1 | Pipelines Transporting Petroleum | MECP TSSA CER | K | Specify Action (Spill Prevention, Contingency Plans and Emergency Response) | EBA See Map 4.1 | Existing & Future: Consider | LO-G-1 LO-G-2 | MON-4 |

| Policy ID | Threat Description | Implementing Body | Legal Effect | Policy | Where Policy Applies | When Policy Applies | Related Policies | Monitoring Policy |
|-----------|---|-------------------|--------------|--|----------------------|--|------------------|-------------------|
| | Product (Containing Benzene) Crossing Tributaries of Lake Ontario | OEB | | <p>Where event based modelling has shown that a spill from a petroleum pipeline system reaching a tributary would be a significant drinking water threat and where the establishment and operation of a liquid hydrocarbon pipeline is or could be a significant threat to drinking water sources, the Ministry of the Environment, Conservation and Parks, the Technical Standards and Safety Authority (TSSA), Canada Energy Regulator (CER) and Ontario Energy Board (OEB) should work with facility owners and provincial and federal regulators to develop, review and recommend necessary improvements to existing spill prevention, spill management, risk reduction, and Contingency Plans to ensure the following:</p> <ol style="list-style-type: none"> Plans are based on the depth of ground cover at surface water crossings. Spill response time frames are established. Responsibilities of first responders are established to ensure a prompt unified regulatory command structure to manage the spill response. Notification protocols are established jointly with the Spills Action Centre to ensure direct notification to all potentially affected water treatment plant operators and appropriate communication to the public and media. Notification protocols are established for significant threat activities to ensure the water plant operators are notified appropriately for a given magnitude of spill. That information is communicated to all responsible parties (e.g., the originators of the spill, emergency response/clean-up personnel, medical officer of health, municipal water owner and water operating authority) who are responding to the spill. That there are appropriate spills response plans for each crossing. That appropriate pipeline system failure and shut down measures and policies are included. | | within 2 years (T-15) unless otherwise specified in the policy | | |

| Policy ID | Threat Description | Implementing Body | Legal Effect | Policy | Where Policy Applies | When Policy Applies | Related Policies | Monitoring Policy |
|-----------|--------------------------|-------------------|--------------|---|----------------------|---|--|-------------------|
| | | | | <ul style="list-style-type: none"> i) A review is undertaken on the depth of ground cover over the pipeline at each crossing, including an assessment of erosion and flood risk. j) That the facility owner provides assurance concerning the integrity of their infrastructure to prevent spills where these could be a significant drinking water threat. k) That a report on the inspection of the pipeline crossings at each tributary is provided to the Source Protection Authority. l) That the pipeline design and operational best management practices are in place (including potential additional design and operational best management practices). m) That any new or expansions or pipeline replacements are constructed to meet current best design criteria. n) A provision is included in the Contingency Plan that the facility owner work with the Office of the Fire Marshal and Emergency Management to ensure that testing of the Contingency Plan is carried out within 3 years from the date the Source Protection Plan takes effect, followed by regular (frequency and priority to be determined in consultation) emergency response preparedness exercises to address the significant threats identified. | | | | |
| LO-G-1 | All Lake Ontario Threats | MECP | K | <p>Specify Action (Spill Prevention, Contingency Plans and Emergency Response)</p> <p>To protect drinking water sources from potential spills along highways, shipping lanes and railways, the Ministry of the Environment, Conservation and Parks shall:</p> <ul style="list-style-type: none"> a) In consultation with the Spills Action Centre and other appropriate bodies, update notification protocols for spills to ensure direct notification of all potentially affected water treatment plant operators and appropriate communication to the public and media. | EBA See Map 4.1 | Existing & Future: Consider within 2 years (T-15) unless otherwise specified in the policy | LO-NGS-1 LO-SEW-1 LO-SEW-2 LO-PIPE-1 LO-FUEL-1 | MON-4 |

| Policy ID | Threat Description | Implementing Body | Legal Effect | Policy | Where Policy Applies | When Policy Applies | Related Policies | Monitoring Policy |
|-----------|--------------------|-------------------|--------------|---|----------------------|---------------------|------------------|-------------------|
| | | | | <p>b) In consultation with the Spills Action Centre and the affected municipalities, review the notification protocol for significant threat activities and adjust the protocols as required to ensure that water plant operators are notified appropriately for a given magnitude of spill;</p> <p>c) Ensure that information is communicated to all responsible parties (e.g., the originators of the spill, emergency response/clean-up personnel, medical officer of health, municipal water system owner and water system operating authority) who are responding to the spill; and to ensure that source water protection drinking water area maps and data are included in pipeline route planning exercises, all existing and future emergency response plans and protocols;</p> <p>d) In consultation with the owners and operators of municipal drinking water systems, require that a Contingency Plan is developed, reviewed and/or updated under the Drinking Water Quality Management Standard to ensure that significant drinking water threats identified in the Assessment Report are included and amend the municipal drinking water license, as required;</p> <p>e) In consultation with the Office of the Fire Marshal and Emergency Management and other appropriate bodies, ensure that testing of the Contingency Plan is carried out within 3 years from the date the Source Protection Plan takes effect, followed by regular (frequency and priority to be determined in consultation) emergency response preparedness exercises to address the significant threats identified, that the determined frequency and priority is reported to the relevant source protection authority;</p> <p>f) In consultation with appropriate bodies (regulators associated with prescribed threats), promote the use of Source Water Protection</p> | | | | |

| Policy ID | Threat Description | Implementing Body | Legal Effect | Policy | Where Policy Applies | When Policy Applies | Related Policies | Monitoring Policy |
|-----------------|--|-------------------|--------------|--|----------------------|--|--------------------------|-------------------|
| | | | | <p>mapping and data in planning, operation and emergency response protocols;</p> <p>g) In consultation with appropriate bodies, promote spill prevention and share information about source protection with the public.</p> | | | | |
| LO-G-4 | Significant/ Moderate/ Low Threats All Lake Ontario Threats | MECP | J, K | <p>Education and Outreach</p> <p>The Ministry of the Environment, Conservation and Parks is requested to establish an outreach program to discuss the findings and policies arising from the source water protection program with the National Energy Board, Canada Energy Regulator, Ontario Energy Board, Environment Canada, Health Canada, New York State and US government agencies in order to:</p> <p>a) Encourage collaboration on protecting our shared drinking water sources.</p> <p>b) Raise profile of the importance of Lake Ontario as a source of drinking water for Ontario and.</p> <p>c) Develop and deliver Lake Ontario focused Source Water Protection awareness campaigns every 8 years regarding the status and trends in Lake Ontario as a Drinking Water Source as well as existing Source Protection policies.</p> | See Maps 4.1 and 4.2 | Existing & Future: Consider within 2 years (T-15) | N/A | MON-4 |
| LO-G-5 (NEW) | All Spills | MECP CER | K | <p>Specify Action (Spill Prevention, Contingency Plans and Emergency Response)</p> <p>To protect drinking water sources from potential spills along highways, shipping lanes, railways, and utility corridors that could impact Lake Ontario's drinking water intakes, the Ministry of the Environment, Conservation and Parks and its Spills Action Centre, and the Canada Energy Regulator (CER) shall:</p> <p>a) Provide all available sampling data associated with a spill that could result in a significant threat to drinking water intakes located in the CTC Source Protection Region to the lead Source Protection Authority and relevant Municipality</p> | IPZs | Existing & Future: Consider within 2 years | LO-G-2 GEN-9 (new) | MON-4 PIPE-G-6 |

| Policy ID | Threat Description | Implementing Body | Legal Effect | Policy | Where Policy Applies | When Policy Applies | Related Policies | Monitoring Policy |
|-------------|--------------------|-------------------|--------------|---|----------------------|--|------------------|-------------------|
| | | | | <p>for use in local analysis and model development;</p> <p>b) Consider the use of data for watersheds and 'sewershed and outfall location data' for flow analyses maintained by the Conservation Authorities; and</p> <p>c) Consider the use of data for newly established Lake Ontario monitoring stations as well as enhanced tools such as the Lake Ontario Water Quality Forecasting System developed by the Lake Ontario Collaborative Group.</p> | | | | |
| GEN-9 (NEW) | All Spills | MECP CER | K | <p>Specify Action (Spill Prevention, Contingency Plans and Emergency Response)</p> <p>To protect drinking water sources from potential spills along highways, shipping lanes, railways, and utility corridors that could impact the CTC Wellhead Protection Areas, the Ministry of the Environment, Conservation and Parks and its Spills Action Centre, and the Canada Energy Regulator (CER) shall:</p> <p>a) Provide all available sampling data (including that from third parties) associated with a spill that could result in a significant threat to Wellhead Protection Areas located in the CTC SPR to the lead SPA and relevant Municipality for use in local analysis and model development; and.</p> <p>b) Consider the use of data for watersheds and 'sewersheds' for flow analyses maintained by the Conservation Authorities.</p> | WHPAs | Existing & Future: Consider within 2 years | LO-G-5 (new) | MON-4 |