

TO: Chair and Members of the Source Protection Committee Meeting #1/25, February 19, 2025

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

RE: Proposed CTC Source Protection Plan Transport Pathway Policies

RECOMMENDATION

THAT the CTC Source Protection Committee receive the staff report Proposed CTC Source Protection Plan Transport Pathway Policies for information.

AND FURTHER THAT the CTC Source Protection Committee endorse the proposed Transport Pathway policies consistent with the direction outlined in this 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 2006.

EXECUTIVE SUMMARY

The Source Protection Authorities in CTC were tasked with updating existing transport pathways analysis and considering the need for policies to address transport pathways under the CTC s.36 workplan and Transfer of Payment Agreement with the Ministry of Environment, Conservation and Parks. The proposed policies, should they be approved, will be included in the upcoming amendment under s.36 of the Clean Water Act.

Background

Transport Pathways are a land condition resulting from human activity that may increase the vulnerability of a municipal drinking water system's raw water supply (Ontario Regulation 287/07 Clean Water Act 2006).

Transport Pathways can circumvent the natural protection offered by soils and overlying soil and rock confining layers, resulting in a greater risk of contamination of the aquifer complexes that provide municipal drinking water supplies. Transport Pathways may facilitate the movement of contaminants vertically or laterally below the ground and result in faster or a more widespread distribution of contaminants.

The Technical Rules, 2021 and Conservation Ontario's Guidance document released in December 2022, list the following features as examples of potential Transport Pathways:

- drainage ditches
- storm and sanitary sewer lines
- aggregate pits and quarries
- improperly constructed or abandoned wells
- subsurface construction (deep excavations and pile foundations)
- Earth Energy Systems (Geothermal wells)

Transport Pathways are not identified as a prescribed threat under the Clean Water Act 2006, however presence of Transport Pathways can increase the intrinsic vulnerability of the aquifer and increasing vulnerability scoring in the impacted area. The increase in vulnerability score may result in identification of new significant threat activities that require management through source protection plan policies.

Under S.27(3)(4) of O Reg 287/07, municipalities are required to notify the Source Protection Authority (SPA) and the Source Protection Committee (SPC) if they receive applications to undertake activities within a Wellhead Protection Area (WHPA) or a surface water Intake Protection Zone (IPZ) that may result in the creation of a new pathway or the modification of an existing one.

Under section c.3.8 of the 2022-2024 Transfer of Payment Agreement, the Credit Valley SPA was tasked with completing a pilot study to map Transport Pathways across the source protection area, bringing forward a strategy for updating for transport pathways analyses in Toronto and Region Source Protection Area (TRSPA), and updating the process for municipalities reporting of proposals to create or modify transport pathways across CTC. Additionally, the CTC s.36 workplan includes:

- Task 8 - Consider the creation of a policy or policies to address transport pathways.
- Task 27 - Identify new and existing transport pathways based on in-depth inventory in all three source protection areas.

The CTC Transport Pathways study was completed in November 2022 and [endorsed](#) by the CTC source protection committee on December 7, 2022. The full study was included in the Conservation Ontario's Guidance document, Appendix D. Groundwater based drinking water system in TRSPA are located in York Region and Uxville. The former completed a strategy for updating the relevant Transport Pathway analysis on February 23, 2024 (**Attachment 1**). Transport Pathways for the Uxville system was updated as part of the recently updated Durham Model (Assessment of Drinking Water Threats, Uxville Municipal Water Supply, WSP Canada Inc., March 22, 2023) and will be included in the upcoming amendment under s.36 of the Clean Water Act. The CTC Source Protection Plan currently does not contain any policy for Transport Pathways.

Policy Development

Existing Transport Pathway policies from eight Source Protection Regions (SPRs) across Southern Ontario were reviewed, focusing on the policy work offered in the three neighboring SPRs as detailed in the report submitted to the Committee on February 21, 2024 ([Meeting #1/24](#)). Extensive consultation with implementing municipalities indicated they are well aware of the requirements and screen for Transport Pathways as part of the requirements under section 59 of the clean water act. Capacity for technical assessment of potential Transport Pathways is varied. The proposed policies presented in **Attachment 2** are aimed at addressing the risk from proposed activities that can potentially create a Transport Pathway or modify an existing one in a WHPA, such that it would result in new significant drinking water threat. The proposed policies, in line with S.27(3)(4) of O Reg 287/07, are Specific Action policies directed at the Planning Approval Authority.

Consultation

The draft policy documentation was shared with both the Implementation Working Group (IWG) and the Source Protection Committee (SPC). A review of discussions held with both groups is summarized below, while the full comment matrix is included in the partner portal SharePoint meeting folder.

The municipal implementation working group was consulted on October 5, 2023, November 8, 2023, May 8, 2024, and Sep 11, 2024. Most municipalities supported the policy approach; however, concerns were raised regarding potential impact to development application approval timeline and the required QP confirmation statement in the proposed TP-3 policy, and the applicable areas which were addressed during the consultation.

The draft policies were previously brought to the source protection committee on February 21, 2024 ([Meeting #1/24](#)). The committee directed staff to conduct further review on the language of the proposed policy TP-3, considering the requirement for “completeness” of development application. The policy was updated accordingly and now utilizes language consistent with the Provincial Planning Statement, 2024.

Workshop

To facilitate the implementation of the proposed policies, CVSPA will host a workshop for the Municipal Implementation Working Group in spring/summer of 2025 to review of the technical and policy background, discuss the role of QP in TP-3 and walk through case studies based on examples provided by implementing municipalities.

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:

Kerry Mulchansingh, Program Manager, Hydrogeology, Credit Valley Conservation

T: 905-670-1615, ext. 329

Email: kerry.mulchansingh@cvc.ca

Date: February 6, 2025

Behnam Doulatyari, Senior Manager, Watershed Plans and Source Water Protection, Credit Valley Conservation

T: 905-670-1615, ext. 3290

Email: behnam.doulatyari@cvc.ca

Date: February 6, 2025

Attachments (2)

Attachment 1: York Region Memo entitled “Transport Pathways Strategy and Engagement, Dated February 23, 2024

Attachment 2: Proposed Transport Pathways Policies