



VISION 2016 – 2020

Conservation Ontario will be the leader in engaging Conservation Authorities in matters of common interest and in shaping effective policy related to Conservation Authorities

Conservation Ontario Council Report

From: Chitra Gowda, Source Water Protection Lead (CO)

Date: November 24, 2016

Subject: Conservation Ontario Submission on the “Proposed Amendment to the Director's Technical Rules made under Section 107 of the Clean Water Act, 2006”

Summary

On September 21, 2016, the Ministry of the Environment and Climate Change (MOECC) posted a Policy Proposal Notice titled “[Proposed Amendment to the Director's Technical Rules made under Section 107 of the Clean Water Act, 2006](#)” (EBR #012-8507) to the Environmental Registry for public review and comment ending November 5, 2016. CO’s letter acknowledges the positive impacts of most of the proposed changes and provides suggestions for improvement to ensure the protection of drinking water sources.

Recommendation

THAT Council endorse the letter, dated November 4, 2016 on the “Proposed Amendment to the Director's Technical Rules made under Section 107 of the Clean Water Act, 2006” (EBR #012-8507) submitted to the Ministry of the Environment and Climate Change.

Background

On September 21, 2016, the Ministry of the Environment and Climate Change (MOECC) posted a Policy Proposal Notice titled “[Proposed Amendment to the Director's Technical Rules made under Section 107 of the Clean Water Act, 2006](#)” (EBR #012-8507) to the Environmental Registry for public review and comment ending November 5, 2016. As stated on the Environmental Bill of Rights (EBR), the proposed amendments are intended to address challenges identified during the implementation of approved plans, recommendations made in the 2014 Auditor General of Ontario’s Source Water Protection Value For Money Audit Report, and lessons learned during the development of the assessment reports and source protection plans.

Current Status

CO received comments on the EBR posting from Conservation Authorities. The final letter incorporates comments received, and acknowledges the anticipated positive impact of most of the proposed amendments. The province is encouraged to retain vulnerability scoring for significant groundwater recharge areas, and to address non-point sources of pollution. The circumstances that influence if certain activities are significant-level threats should be revised to ensure protection to drinking water sources. Lastly, some of the proposed changes will require assessments and updates to assessment reports, source protection plans, and municipal official plans. Therefore the MOECC should ensure that these tasks are eligible expenses for the Conservation Authority source protection budgets.

Conclusion

CO staff have submitted the final letter to the Ministry of the Environment and Climate Change on November 4, 2016. Conservation Ontario staff will continue to leverage the relationship between this file, and the *Clean Water Act* with a priority on technical studies supporting policies to protect our drinking water sources.



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November 4, 2016

Dear Ms. Lavender:

Re: Proposed Amendment to the Director's Technical Rules made under Section 107 of the Clean Water Act, 2006 (EBR 012-8507)

Thank you for the opportunity to comment on the Proposed Amendment to the Director's Technical Rules made under Section 107 of the Clean Water Act, 2006. Conservation Ontario represents Ontario's 36 Conservation Authorities, which are local watershed management agencies, mandated to ensure the conservation, restoration and responsible management of Ontario's water, land and natural habitats through programs that consider human, environmental and economic interests and needs.

Under the *Clean Water Act, 2006*, the source protection authorities (SPAs) in Ontario are the 36 conservation authorities, Severn Sound Environmental Association and Municipality of Northern Bruce Peninsula. These source protection authorities support the science and policy development, and implementation of local Source Protection Plans for the protection of sources of drinking water.

The proposed amendments to the Director's Technical Rules will have an impact on Clean Water Act related technical studies, resulting policies and implementation. The following comments are submitted for your consideration based upon a review by Conservation Authorities. These comments reflect the collective considerations of Conservation Authorities and are not intended to limit consideration of comments shared individually by Conservation Authorities.

Vulnerability Scoring

- Part VII.3 – Source Vulnerability Factor Table 3 - Clarification regarding details, impact and the process is needed. Rule 95.1 – This new rule is vague, but its intent (to increase vulnerability scores for Great Lakes Intake Protection Zones) is welcome. Definitions should be included for “shallow waters”, “close proximity to shoreline”, and “history of water quality concerns” as these terms are likely to be interpreted differently across the province.
- There are concerns with the implications of enabling Great Lakes intakes to be identified as having higher vulnerability scores that enable drinking water threats to be significant under the technical rules and requiring policies to be developed. While Great Lakes intakes can be more vulnerable, the threats to Great Lakes intakes are not always a result of impacts from single, point source activities but rather from watershed wide, non-point, cumulative impacts from various land uses. Therefore the Clean Water Act should also provide the necessary tools to address non-point sources of contamination. A comprehensive integrated watershed management based tool box should be made available to address significant drinking water threats that are non-point sources of contamination.
- The vulnerability of the Significant Groundwater Recharge Areas (SGRAs) should not be removed. The Sault Ste. Marie Region Source Protection Committee (SPC) has strongly supported the increase in vulnerability of SGRAs. The SPC has sent letters and emails to Ministry of the Environment and Climate Change (MOECC) in the past. This was noted in the Sault Ste. Marie Region Source Protection Plan (SPP) with the inclusion of a moderate threat policy for the area. In the Sault Ste. Marie Region, there is only one SGRA and it feeds the entire groundwater system. To decrease or eliminate the SGRA from having any vulnerability negates the official plan policies that have been in place in the Sault Ste. Marie Region for the past 15 years. Contamination of any of this area will have a direct effect on the Sault Ste. Marie Region groundwater systems.
- The Source Vulnerability Factor of an intake in Part VIII.3 only allows consideration of three attributes: depth, distance and history of water quality concerns. This is a serious concern, because these attributes alone are inadequate for assessing the vulnerability of some intakes. The lack of history of water quality concerns is incorrectly implied to be evidence of reduced vulnerability. In the North Bay Mattawa region, the continued high quality of the source water is due to early identification of the need to protect it (well before 1950 in a City Engineer’s report to council) and an ongoing commitment by the municipality and residents in that regard. Specifically, it is recommended that there should be the opportunity to consider the resilience of the source i.e. how long the source water could continue to be impaired following an incident. The source for North Bay is a headwater lake with minimal flushing. If a contaminant enters the IPZ-1, the source could continue to be compromised for an extended period.
- The older Guidance Module 4 specifically identifies hydrodynamic/hydrological conditions in addition to limnology as factors pertinent to characterizing an intake, for purposes of assigning a vulnerability score. Considering the Guidance Modules, the Technical Rules seem to establish minimum requirements rather than limiting the factors considered when assigning vulnerability scores. The status of the Guidance

Modules relative to the Technical Rules should be clarified by the MOECC.

- The Source Protection Plan can only require compliance with policies if the threat being addressed is significant. Therefore it is important that all factors pertinent to scoring be recognized.

Table of Drinking Water Threats and Circumstances

Dense Non-Aqueous Phase Liquids (DNAPLs)

- When originally released, under the handling and storage of a dense non-aqueous phase liquid prescribed drinking water threat, the quantity circumstances stated 'any quantity'. After questions and concerns were raised, the MOECC released guidance and suggested that common sense be used when applying this rule. However, there is no proposed amendment to reflect the Ministry's advice. The circumstance of 'any quantity' should be changed to wording such as 'a single quantity greater than 50 mL' or 'a total quantity exceeding 1000 mL'.

Sewage system/works

- Under the threat subcategory Sewage System or Sewage Works – Discharge of Untreated Stormwater from a Stormwater Retention Pond, the chemical quantity circumstance relates to the drainage area of a single catchment area. There are numerous areas where catchment areas abut each other with a total area exceeding the area defined in the original single area. Currently, there is no consideration of the total contaminate loading. The rule should be amended to consider the entire drainage area, if catchment areas abut.

Stormwater management

- The Tables of Drinking Water Threats only apply to treated storm runoff. Given that stormwater treatment is a relatively new requirement, the vast majority of stormwater outfalls are not considered a threat, even though in most cases the stormwater outfalls from a pipe right out into surface water. Given that untreated stormwater presents a much higher risk of threatening the intake protection zones, considerations should be given to adding a threat circumstance to the tables of drinking water threats to allow this threat to be enumerated and therefore managed using source protection plans.

Sewage bypasses

- Most sewage pumping stations have bypasses connected to outfalls that bypass during high flows or in the event of pump failure. While such bypasses are reported to Spills Action Centre, and MOECC guidance explains that this is indeed captured in the tables of drinking water threats, there is no clear circumstance within the tables to capture this threat. A circumstance that clearly identifies the threat should be added to relieve this confusion and remove the possibility of misinterpretation.

Handling and storage of fuel

- It is extremely encouraging to see that release and impact modifier for above grade, or partially below grade handling and storage of fuel was increased for surface water to allow for more significant threats to surface water intakes. However, this does not address the risk posed by above grade tanks for groundwater. The risk to drinking water posed by surface mounted external tanks far exceeds that of tanks in basements. The

likelihood of noticing a failure of an external tank is much less than one in a basement where the smell is easily detected or a minor drip is seen. Many agencies, including the Insurance Board of Canada report that outdoor above grade oil tank leaks, if left untreated, can quickly contaminate soil and groundwater. Yet, there is nothing in the tables of circumstances to address the threat that these outdoor, above grade fuel tanks pose on groundwater. The rule should be changed to include lower volume, above grade tanks for groundwater as well.

Application of pesticides

- The Table of Drinking Water Threats threat circumstances related to the application of pesticides make it impossible to cease the application of pesticides within the WHPA-A. The circumstances for pesticide application are based on total application area of the pesticide. The WHPA-A has a small area of 3.14 hectares. Of the nine pesticide chemicals considered significant threats, only two have a circumstance with an area small enough to trigger a significant threat (total application area is 1-10 hectares) within the WHPA-A. The other seven must have a total application area greater than 10 hectares to trigger a significant threat. This means that a total prohibition of these pesticides cannot happen, and seven of these pesticides can be sprayed right beside a municipal well. The circumstances should be altered for the additional seven to ensure that pesticide application can be prohibited within the WHPA-A, giving it a similar approach to the *Nutrient Management Act* which restricts the application of nutrients within 100 metres of a municipal well.

Delineations

- In the rules for delineating IPZ-1, 2 and 3, the added wording in 62 (2), 65 (1)(b), and 68 (2) (b) refers to delineating the area to include the land that drains into the respective IPZ-1, 2 or 3. This results in defining a term by using the term itself. For example, it seems that the proposed amendment in 62(2) currently reads, “If the area delineated in accordance with rule 61 includes any land, the IPZ-1 shall include ... only land that drains into the IPZ-1.” So, rather than saying the land that “drains into the IPZ-1”, perhaps it should be described as the “land that drains into (or toward) the surface water portion of” the IPZ-1.
- There is nothing in the Technical Rules to explain the delineation of the Issues Contributing Area. This makes it difficult to not only determine the best approach and most scientific zones but also makes it difficult to apply for Director’s Approval to vary from the rules as stipulated in the *Clean Water Act*, 2006. A more definitive method for delineation of an issues contributing area should be added to the Technical Rules.

Definitions and Editorial:

- Part I.1 –proposed definition of transport pathways for Surface Water - The proposed definition is specific to IPZs. There is a technical bulletin for groundwater transport pathways, but groundwater transport pathway definitions should also be included in the Technical Rules. Clarification should be provided, and may increase reporting of new Transport Pathways as per Reg. 287 s27 if more guidance on what should be reported were available.

- High Water Mark definition – while the definition seems reasonable, there is not always sufficient data along the inland watercourses to meet the definition. It would take a significant, i.e., long and costly effort to develop this mapping.
- Part VII.3 – Source Vulnerability Factor - definitions should be included for “shallow waters”, “close proximity to shoreline”, and “history of water quality concerns” as these terms are likely to be interpreted differently across the province.
- The definition of total impervious surface area refers to subrule 16(11a) and there is no 11a (should perhaps be 11).
- Table of Drinking Water Threats – Waste Disposal Sites, Storage of Small Quantity Exemptions (SQE’s) – Need definition of SQE.
- Threat wording for Waste Disposal Site – Storage of wastes described in clauses (p), (q), (r), (s), (t) or (u) of the definition of Hazardous Waste – should state where this definition is, i.e. EPA.

Budget considerations

- Some of the proposed changes will require assessments and updates to ARs, Plans and EDs, as well as municipal official plans. The MOECC should ensure that these tasks are eligible expenses for the CA source protection budgets in 2017-18.

Questions

The following information is requested:

- When will the updated Technical Rules become available and when will they be in effect?
- When will the updated Table of Drinking Water Threats become available and when will they be in effect?
- What is the process for updating the assessment reports to reflect the amendments to the Technical Rules (e.g.: updating to account for new significant fuel threats created through the change in hazard rating for the handling and storage of fuel in an IPZ?)

Should you have any questions regarding the above comments and questions, please contact myself (ext. 225).

Comment ID: 196376

Sincerely,

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c.c. All Conservation Authorities’ Source Water Protection Project Managers

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