



Dr. George Jacoub
Ministry of the Environment, Conservation and Parks
Drinking Water Management Division
Source Protection Programs Branch
40 St. Clair Avenue West
Floor 14
Toronto Ontario
M4V 1M2

November 9, 2020

Sent via Environmental Registry of Ontario

Dear Dr. George Jacoub:

Re: Conservation Ontario's comments on the Proposed amendments to the Director's Technical Rules made under section 107 of the Clean Water Act, 2006 (ERO#019-2219)

Thank you for the opportunity to comment on the Proposed Amendments 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 SPAs 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. We appreciated the efforts that the Source Protection Programs Branch took to assist in understanding the changes and possible local impacts on the Source Water Protection Regions and standalone Source Protection Authorities.

The following comments are submitted for your consideration based upon a review by conservation authorities (CAs). These comments reflect the collective considerations of CAs and are not intended to limit consideration of comments shared individually by Conservation

Authorities.

Part 1. General Comments

There is overall support for many of the Phase II proposed amendments to the Director's Technical Rules. However, some requests for clarification and further considerations are as follows:

Source Protection Plan Amendments Updates

Conservation Ontario requests that the Ministry clarify the process and timeline for updates of Section 36 approvals and the effective date of the approved Director's Technical Rule changes.

Significant Groundwater Recharge Areas (SGRAs)

The vulnerability scoring has been removed. Please clarify the rationale for the removal.

Is the vulnerability scoring more relevant to Highly Vulnerable Aquifer (HVAs) assessments? Often the SGRAs and HVAs overlap and are identified as the most vulnerable areas which tend to be shallow unconfined areas where recharge is direct and significant. Can HVAs have a low vulnerability score?

Delineation and Scoring of Vulnerable Areas (Technical rule 62.1 and 86, 87, 89)

The proposed amendments includes the possible expansion of an IPZ-1 to a maximum of a 1km radius around drinking water intakes. Additional technical work may be required to provide evidence that the transport pathway has the potential to increase risk of contamination of source water. How will MECP support this technical work?

Currently an IPZ-2 cannot have a vulnerability score high enough to meet the threshold for a significant drinking water threat. In areas where the soils data and infiltration characteristics imply an increase in runoff, will it be possible to increase the vulnerability score with the new rules?

ICA (WHPA-ICA or IPZ-ICA) (Technical Rule 47 (7))

The local decision making approach is appreciated.

Further clarification is requested surrounding a tangible meaning and criterion for "evidence of contribution". Any examples of the level of information and/or data required would be appreciated.

Please clarify whether an ICA would also gain status under the PPS (as a standalone vulnerable area).

Guidance material would be beneficial for the Source Protection Authorities would be beneficial for consistent implementation.

Notice of the alternate method or approach (Technical Rule 15.1 (4))

This is a great approach that supports the intimate local knowledge of the Source Protection Authority combined with an effective practical approach to local issues. Please clarify whether the Director must respond prior to the use of the new method and provide an example of the process. For example, is there a pre consultation with the Source Protection Program Branch before a notification is submitted? What is evidence is required to support the use of a new

method? Or can the notice be submitted at the same time as the plan amendment?

Condition Sites (Technical Rule 141)

Further clarification is requested for the changes proposed on the Condition Sites. This change was presented as an editorial change, from 'offsite' to 'migrating' to. This editorial change could have unintentional practical impacts such as assessing the movement of the plume through practical comprehensive monitoring and technical work. It is suggested that a practical approach be considered in conjunction with this editorial amendment in order to not compromise the intent of the rule.

Local Threats (Technical Rule 119)

Further clarification is requested for the proposed editorial change "an approval is not required to engage in the activity pursuant to any Act (Provincial or Federal);" not be included in the technical rules.

Additionally, it would be beneficial for guidance be provided to understand the Provincial and Federal statues regarding source water protection considerations.

Climate Change Considerations (Technical Rules 15.2 & 15.3)

Climate change vulnerability assessments are essential to building resiliency to climate change. Proposed changes outlining the methodology to be used are a positive step. The Province may consider including further details such further detailed guidance on what the outcomes of the climate change assessment, means in terms of including policy options for mitigation and adaptation measures.

Furthermore, is there an opportunity to overlap with other climate change initiatives such as the provincial climate impacts assessment being developed?

Clarification is requested for which entity/authority will undertake the climate change risk assessment and how drinking water systems are chosen. The proposed change indicates that source protection committees will undertake this work.

Part 2. Drinking Water Threats Table

The threats table is based on protecting source water to the highest standard using the best evidence based scientific approach. Conservation Ontario requests that the Ministry confirm if the changes to the Drinking Water Threats Table will remain consistent with past practice and be mandatory to update.

1. Application of Road Salt (page 84)-

Please clarify the criterion for an IPZ with a score of 10. The new circumstance suggests that the score of 10 can never be less than 8% imperviousness but can be greater than 6%.

Furthermore, can the application of road salt increase the vulnerability factors from 0.5 to 0.7?

Will impervious calculation methodology, to support the proposed changes, be provided? For example will modelling be performed for the entire IPZ, sub areas, or by 1km grid or a combination of both? Providing a definition of the sub area would be beneficial.

Finally, who will be responsible for the work to be completed?

2. Handling and Storage of Road Salt (page 85)-

As a result of the lower storage threshold of 25kg, is the intent to capture residential storage? These new thresholds and conditions will likely create numerous new threats and risk management plans.

3. Wastewater Collection Facilities and Associated Parts (page 87)-

Some clarification is requested to better understand the implications if the combined or sanitary sewer is not located in the IPZ or WHPA, but the discharge could flow into the zone. Would modelling be required to determine if overflows and discharges from combined and sanitary sewer could impact an IPZ or WHPA E's with a score of 10?

Who is responsible for this work?

Accompanying guidance material to explain all the changes (past to approved) would be beneficial.

4. Storm Water Management Facilities and Drainage Systems (page 93)-

Please clarify areas that could qualify for risk (surface water now only the IPZs and WHPA-Es: 8-10 and WHPA:10 vs all land or surface water.)

Accompanying guidance material to explain all the changes (past to approved) would be beneficial

5. Wastewater Treatment Facilities and Associated Parts (page 99)-

This proposed change provides risk circumstances to help focus on discharge for the various parts of the facility.

Please provide any Provincial and Federal statues applicable to Source Water Protection

6. Industrial Effluent Discharges (page 103)-

This proposed change will benefit identifying circumstances where industrial effluent is discharged to land.

7. Snow Storage(page 105)-

Please provide further clarification for the 200m² threshold suggested and a minimum area.

Please provide the scientific rationale for the proposed area of 200m².

8. Handling and Storage of DNAPLs (page 107)-

Further clarification is requested in the determination between used vs fresh/unused DNAPL products. Evidence from the field suggests that waste product contain a number of mixed chemicals and may include DNAPLS.

Practical guidance for the implementation of this change in coordination with any waste oil prescribed instruments.

Please consider the revising the calculation method of an area within a WHPA A for application measures in an area greater than 10 ha. This will ensure that any pesticides as significant threats in a WHPA A is properly captured.

9. Storage and Handling of NASM (page 108)-

Please provide the scientific rationale regarding this change.

Additionally, please note a suggested editorial correction required - "Significant risk would be identified in IPZs/WHPA-E scored 8 to 10 and WHPA"

10. Application of NASM (page 112)-

This is a good supportive circumstance focused on key areas of vulnerability.

11. Handling and Storage of Fuel (page 116)-

Due to the lower threshold volumes to 250L, which will likely create new significant drinking water threats. Accordingly, there will be implications to threat counts and risk management plans.

Additionally, clarification is requested on the definition and description storage tanks within guidance materials.

12. Handling and Storage of Commercial Fertilizer (page 119)-

Clarification is requested to better understand the handling and storage as separate activities. For example in situations where the storage occurs outside a significant threat policy area, but mixing occurs inside the area; and/or the current circumstance that fertilizer be stored for retail/wholesale sale.

Additional clarification is requested in the calculation method for liquid fertilizer (storage) as a threat.

Finally is a mobile unit considered as a potential threat activity?

13. Waste Transfer/Processing Sites (page 121)-

This reiterates the focus on key vulnerable areas.

Please include any Provincial or Federal statutes to be applied to Source Water Protection

14. Waste Generating Facilities (page 123)-.

Please include any Provincial or Federal statutes to be applied to Source Water Protection

15. Waste: Application and Storage of Processed Organic Waste or Waste biomass (page 125)-

Please provide clarification determining the application and storage for different levels of risk.

16. Waste: Application and Storage of Hauled Sewage (page 130)-

Please include any Provincial or Federal statutes to be applied to Source Water Protection

Part 3. Gaps/Issues/ Concerns

Liquefied nitrogen

Conservation Ontario notes that the updated technical rules do not contain the new rules on the inclusion of Liquefied Nitrogen pipelines as a new water quality threat to IPZs.

Pesticides

Conservation Ontario recommends that the Ministry consider updating the pesticides (an enhanced chemical list) within the circumstances table in order to better protect drinking water sources from an effective practical approach.

Considerations for a proactive approach to address vulnerability

Currently there is limited framework to address the vulnerability side of the risk equation (hazard x vulnerability = risk) resulting in minimal opportunities to proactively address activities on the landscape that could affect/change the vulnerability of a well or intake. To be able to proactively address activities that affect the vulnerability of a well or intake, amendments to the *Clean Water Act* would be necessary to allow a wider range of policies to be included in local Source Protection Plans (e.g., *Planning Act* policies and potentially Part IV policies under the *Clean Water Act*).

For example, policies addressing transport pathways are limited to stewardship programs, best management practices, pilot programs, research, and specify actions (O. Reg. 287/07, Section 27). These policies are for the most part reactive, and cannot proactively prevent or minimize effects on the vulnerability of an area around a well/intake.

Updating the *Clean Water Act* to address not only activities that can discharge chemicals and pathogens, but to include a framework to address activities that could affect the vulnerability of a well or intake, may mean a significant change in the conceptual framework, but it is an important change to have a more proactive approach in protecting drinking water resources.

Part 4. Implementation Considerations

Guidance documents/training/ education and outreach

The Phase II proposed amendments to the Director's Rules are very technical in nature. We strongly encourage that the practicality of implementation be considered during the review of received comments.

In order to relay any approved changes accurately, a detailed description of the changes for each circumstance should be provided, along with adequate guidance material for the implementation of any approved changes. We suggest that this may be achieved through a collaborative means to ensure strong, effective and comprehensive guidance is created. Conservation Ontario offers our assistance in developing and distributing such guidance materials.

It is suggested that the implementation guidance material include prescribed instruments applicable to the circumstance in a more comprehensive document. It would be beneficial if this guidance would also include clear direction on the use and documentation of the various versions of the Director's Technical Rules.

Funding

The proposed new rules will result in additional policy review and revision. It is strongly recommended that adequate funding be made available to assist SPA/Rs with implementing the approved technical rules.

Thank you for the opportunity to review and provide comments on the Proposed amendments to the Director's Technical Rules made under section 107 of the Clean Water Act, 2006 (ERO#019-2219). Should you have any questions regarding the above comments and questions, please contact me directly (dbalika@conservationontario.ca, 905-251-2802).

Sincerely,
Debbie Balika
Source Water Protection Lead
c.c. All Conservation Authorities' Source Water Protection Project Managers

Conservation Ontario
120 Bayview Parkway, Newmarket ON L3Y 3W3
Tel (905) 895-0716 Fax (905) 895-0751
Cell: 1-905-251-2802
www.conservationontario.ca