





ENVIRONMENTAL | DEFENCE

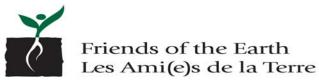




Federation of Ontario Cottagers' Associations















September 23, 2009

Heather Malcolmson Manager Ministry of the Environment Drinking Water Management Division Source Protection Programs Branch 2 St. Clair Avenue West Toronto, ON M4V 1L5

Dear Ms. Malcolmson:

RE: EBR Registry No. 010-7573: Proposed amendments to the technical rules made under section 107 of the *Clean Water Act*, 2006 with respect to the preparation of an assessment report

These are the comments of the Canadian Environmental Law Association ("CELA") in relation to the Ministry's proposed amendments to the *Clean Water Act*, 2006 ("CWA") Technical Rules. These comments are being provided in accordance with the EBR Registry notice for this proposal.

The Canadian Environmental Law Association is a non-profit, public-interest group established in 1970 to use existing laws to protect the environment and advocate environmental law reform. Funded as a community legal clinic specializing in environmental law, CELA represents individuals and citizens' groups before trial and appellate courts and administrative tribunals on a wide variety of environmental protection and resource management matters.

Since its inception, CELA has advocated the timely development of effective laws, regulations and policies to protect water resources within Ontario and across Canada. Among other things, CELA represented the Concerned Walkerton Citizens at the Walkerton Inquiry, and was actively involved in the development of the *Safe Drinking Water Act*, 2002 ("SDWA"), the CWA, and regulations, policies and guidelines thereunder.

These comments have been endorsed by the following organizations: the Canadian Association of Physicians for the Environment, Concerned Walkerton Citizens, Ecojustice, Environmental Defence, Federation of Urban Neighbourhoods (Ontario), Federation of Ontario Cottagers' Associations, Friends of East Lake, Friends of the Earth, Mississippi Valley Field Naturalists, Northwatch, the Ontario Headwaters Institute, Toward Balance Support Network, and the Wellington Water Watchers.

CELA is supportive of the need to make major, minor and administrative changes to CWA Technical Rules, although the late timing of some proposed amendments may prove to be problematic for some Source Protection Committees ("SPCs") whose Assessment Report work has been well underway. We are particularly supportive of Rule 15.1, which appears to confer additional flexibility to SPCs to depart from prescribed approaches or methodologies. Nevertheless, we have a number of comments and questions on other proposed amendments, as discussed below.

#### (1) Rule 1: Calculating Water Demand

In Rule 1(2), it is suggested that monthly groundwater supply ("QSUPPLY") should be calculated by simply dividing the annual amount by 12. CELA questions whether this rigid formula will adequately take into account seasonal fluctuations that may occur from month to month, or season to season (i.e. spring to summer). In our view, it is preferable to calculate water budgets (and any associated stresses within the watershed or subwatershed) on the basis of actual field measurements, where available or easily obtainable.

CELA also questions the empirical basis for the suggestion in the Rule 1(2) definition of "QRESERVE" that a minimum of 10% of the groundwater supply should be maintained as a reserve. Does the Ministry have any scientific data to suggest that in all cases, a 10% reserve will be adequate? Will SPCs be able to reserve amounts greater than 10% where necessary to address local circumstances? These questions are also applicable to the Rule 1(3) definition of

"QRESERVE", which suggests that 10% of the median baseflow of surface water should be reserved.

#### (2) <u>Proposal of Policy: Road Salt (includes comments on Rule 16[11])</u>

It is noted in the Proposal of Policy section of the posting on the EBR Registry that input from the public is sought concerning road salt applications. Specifically, input is sought with respect to two questions:

Should the province use road/impervious surface densities to prescreen areas where the activity of road salt application would be a significant, moderate, or low drinking water threat or should this determination be made based on a road/impervious surface specific basis in each vulnerable area[?]; and

What types of application rates should be used to identify significant, moderate, or low threats in any of the vulnerable areas?

In response to the first question, CELA recommends that determining drinking water threat severity should be made using *both* approaches. In our view, neither of these approaches is mutually exclusive, and both should be available to SPCs. This strategy is self-evidently more comprehensive than relying on a single approach, and is in line with the "inherently precautionary" nature of the CWA.

In response to the second question, on using application rates to identify drinking water threats in vulnerable areas, CELA recommends that the MOE consult the federal government's Code of Practice for the Environmental Management of Road Salt, Annex B: Guidance for Identifying Areas Vulnerable to Road Salts; and Appendix C to the Federal Road Salt Implementation Guide. (At present the province of Ontario has no code of practice concerning road salts.)

However, CELA submits that application rates in themselves are not necessarily an indicator of drinking water threat severity. In general, road salt concentrations (from highest to lowest) are found in roadside ditches, creeks and rivers in highly populated areas, small ponds and lakes, and larger lakes.<sup>2</sup> We therefore strongly recommend that application rates in vulnerable areas be based on road salt concentrations as reported through site-specific monitoring of roadside ditches, creeks, rivers, ponds and lakes from which drinking water is taken and/or which could indirectly contaminate sources of surface and groundwater used for drinking.

#### (3) Rule 115: Anthropogenic or Natural Causes

We presume that this Rule would not prevent SPCs from discussing in their Assessment Reports drinking water issues that may result from natural causes, or from a combination of anthropogenic or natural causes. Indeed, in some instances, it may be difficult for SPCs to precisely distinguish between natural or anthropogenic sources of contaminants (e.g. arsenic) or

<sup>&</sup>lt;sup>1</sup> Copies of this Annex and Appendix were enclosed with our electronic and fax submissions of this brief.

<sup>&</sup>lt;sup>2</sup> See M. Evans & C. Frick, "The effects of road salts on aquatic ecosystems" (2001) National Water Research Institute.

pathogens (e.g. *E. coli*) which may be present or increasing in the raw water supply. At the very least, even where there are known or suspected natural sources of a particular contaminant, SPCs should not be precluded from attempting to identify, evaluate and mitigate anthropogenic sources of the contaminant under the "issues" approach.

Furthermore, CELA supports the Rule 72 suggestion that for the purposes of delineating an IPZ-2 or IPZ-3, both natural and anthropogenic transport pathways should be considered.

### (4) Rule 119: Other Drinking Water Threats

Rule 119 states that an activity in a vulnerable area will be listed as a drinking water threat if it is both identified by the SPC as an activity that may be a drinking water threat *and* that the Director's information indicates the chemical and pathogen hazard ratings are greater than 4.

CELA recommends Rule 119 be amended to give SPCs the authority to prescribe such an activity as a drinking water threat regardless of the Director's information concerning the activity's pathogen and hazard ratings. Marked concern (and accompanying technical evidence) over such a potential threat would have to have been displayed by a SPC, in order for the SPC to have identified such an activity as a potential threat in the first place. Whether this activity is then prescribed as a drinking water threat should not necessarily depend on the Director's discretion or approval, although the MOE's chemical and pathogen information concerning the threat should certainly be used in determining whether it is a low, moderate or significant threat.

The authority we are recommending be given to SPCs through our proposed amendment is in line with the locally-driven nature of the source protection planning process.

#### (5) Rule 126: SPCs and the Listing of Past Conditions as Threats to Drinking Water

Rule 126 states that if SPCs are aware of certain past conditions identified in the sub-Rules, they are to list them as drinking water threats.

It is CELA's view that it is incumbent upon SPCs, as key members of the source protection planning process, actively to seek out such conditions. Such actions on the part of SPCs could take the form, for example, of soliciting members of the general public for local knowledge on past conditions, as well as directing SPC staff or consultants to proactively search for such conditions. This comment is also applicable to Rule 114, which is apparently triggered only if the SPC is "aware" of qualitative threats to drinking water.

## (6) <u>Threat Assessment of Issues at Drinking Water Systems not Listed in a Source Protection Area's Terms of Reference</u>

The MOE is proposing to identify issues at drinking water systems not listed in a source protection area's Terms of Reference as moderate drinking water threats. The issues to which this proposal would apply are those in wellhead protection areas, intake protection zones, significant groundwater recharge areas and highly vulnerable aquifers. It is stated in the policy summary of this EBR Registry posting that this decision was made because of the MOE's and

various stakeholders' concern about identifying significant drinking water threats associated with systems not identified in an SPC's Terms of Reference.

Although CELA supports the inclusion of the identification of issues at all drinking water systems in vulnerable areas – and, by extension, the mitigation of these issues – we disagree with the decision to automatically identify issues at systems not in approved Terms of Reference as "moderate". Threat levels assigned to issues should be based on the nature and severity of the issues. This approach would avoid creating two-tiered source protection for vulnerable areas, and would eliminate the rather awkward possibility of identifying an issue as "moderate" that, for a system in a Terms of Reference, would be identified as "significant". Similarly, it is illogical and a potential waste of resources to develop or implement policies to mitigate threats deemed "moderate" if, in fact, the threat would be identified as "low" for a system in a Terms of Reference.

We therefore recommend that issues in vulnerable areas be assessed in the same manner for all drinking water systems within the area, regardless of whether or not the systems are listed in a Terms of Reference.

#### (7) Additions to the Glossary in the Table of Drinking Water Threats

CELA is generally supportive of the proposed amendments to the Glossary Table concerning the application and storage of agricultural source materials; the application of non-agricultural source materials and commercial fertilizer; the use of land as an outdoor confinement area or a farm-animal yard; and the use of livestock grazing and pasturing land. These amendments were made to align the CWA with definitions in the Nutrient Management Act, 2002, and will help ensure that chemical and pathogen threats are assessed consistently for all relevant agricultural and pasturing lands.

CELA wishes to emphasize the importance of the vulnerability of an area in the threat assessment process, and that even small, or low intensity, farm operations can have potentially serious effects on drinking water sources. We trust, however, that the importance of area vulnerability will always be duly considered when assessing drinking water threats.

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We trust that the foregoing comments will be taken into account by the Ministry, and we appreciate this opportunity to provide input on the proposed amendments to the Technical Rules.

Yours truly,

CANADIAN ENVIRONMENTAL LAW ASSOCIATION

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