

January 31, 2017

By email: swr-psu@ontario.ca

Patrick Spezowka, Supervisor
Ministry of the Environment and
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Southwestern Regional Office
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Dear Mr Spezowka,

Re: Bottled Water Technical Guidance Document (EBR Registry Number: 012-9151)

Canadian Environmental Law Association and Wellington Water Watchers have prepared the following comments regarding the Ministry of the Environment and Climate Change's proposed Bottled Water Technical Guidance Document (EBR Registry Number: 012-9151). We have previously written in strong support of the moratorium on the issuance of new or increasing permits to take water for bottling (EBR Registry Number: 012- 8783; now O Reg 463/16). We appreciate the opportunity to respond to the proposed Bottled Water Technical Guidance Document ("Guidance") and look forward to continuing to engage with the Ministry throughout the moratorium to ensure a comprehensive framework for addressing permits to take water for bottling is established, consistent with the purpose of the *Ontario Water Resources Act*. In particular, we expect that any new Guidance will be used to impact decisions regarding water bottling permits in a meaningful way. Our submission is endorsed by the undersigned and provided for your consideration.

Our comments are organized under topics that include the proposed "new procedural requirements" in the Environmental Registry notice.

Decision Standard:

The proposed Guidance suggests that there will be three impacts (or interferences) that shall not be permitted (p2, emphasis in original):

- unacceptable impacts to the **natural functions of the ecosystem**
- unacceptable impacts with an **established pattern of water use**
- **unacceptable irreversible impacts** to the aquifer

While we support that there are mandatory requirements for ensuring that there are no "unacceptable impacts", we are concerned about how "unacceptable" will be interpreted by permit applicants and by Ministry staff overseeing the permitting process. The definition for "unacceptable" includes "hinders the ability of the water resource to support existing natural functions of the ecosystem" and "prevents an established water user from continuing their established pattern of use" (p2). Further, the decision about whether to approve the permit is proposed to rely on whether the proposed water taking "is

likely to result in unacceptable impacts.” (p8) Later in the proposed Guidance, there is reference to “Unacceptable interference usually means that the new water taking results in existing water users within the same hydrostratigraphic unit(s) being unable to maintain their established pattern of water use” (p22) and “an insignificant risk of unacceptable impacts to the natural functions of the ecosystem in the connected water bodies” (p25). The definitions and their application are expressed in various ways throughout the proposed Guidance and appear subjective. We are concerned that the proposed decision standard is unlikely to be applied consistently across the province. We recommend that the Ministry ensure the definitions and the decision standard are described consistently in the Guidance and based on objective criteria.

Relating specifically to the “unacceptable impacts with an established pattern of water use”, this threshold does not take into account future municipal drinking water sources that are arguably intended to be protected by the *Clean Water Act*. As well, the province has determined that growth will be directed to particular areas through the *Places to Grow Act*. It is crucial that water availability for future population growth and the associated necessary water services are protected. We support a permit to take water framework that prioritizes specific uses, particularly basic human needs and ecological needs over commercial uses.

Further, the decision standard must be consistent with other existing principles in the Permit to Take Water (PTTW) Manual (including the ecosystem approach and adaptive management), as well as the precautionary principle and intergenerational equity. These important principles must be explicitly stated within the Guidance and how they will be applied must be explained.

Qualified Persons:

The proposed Guidance contemplates that required hydrogeological studies be prepared (for permit applicant) and reviewed (for the Ministry) by a “Qualified Person”, which is defined as “a licensed Professional Geoscientist or exempted Professional Engineer as set out in Ontario’s Professional Geoscientists Act, 2000.” (p2) We are very supportive this requirement.

Study Area:

In the proposed Guidance, there are several ways in which the “study area” is described. We recommend that the Ministry ensure consistency for all the different places where the study area is defined or described. As well, we have some concern regarding the definition in the technical section, where the study area is referred to as “the maximum predicted area of influence” and “The study area shall be broad enough to consider local groundwater flow conditions (including local flow boundaries, constant head boundaries and aquifer boundaries) that may be relevant to the assessment of interference.” (p16) Is this sufficient to understand interference both with other groundwater issues and ecological flows (connection to surface water)?

Early Discussion:

The proposed Guidance contemplates that there will be discussion between the permit applicant and Ministry staff in advance of the any application (including an application for renewed permit to take water or for a pump test) being submitted. We are supportive of this pre-application discussion as it will ensure that any potential applicant will have a good understanding of the application process and will have planned for appropriate consultations in advance of submitting their application. It will also allow the Ministry to identify concerns with the proposed location under consideration. We expect that the Ministry will use this opportunity to indicate whether an application will be accepted in any event; for example, this discussion opportunity could allow Ministry staff to advise the potential applicant that no permit to take water for bottling will be accepted for a particular location.

Mandatory Presubmission Notification:

The proposed Guidance contemplates that a permit applicant will be required to conduct consultation with municipalities, conservation authorities, and other interested persons prior to submitting an application. Two of the purposes of this pre-application consultation are to “create an opportunity to develop proponent commitments in response to local input” and “focus on and consider public concerns along with regulatory procedures and administration” (p6). We welcome this procedural addition. Community input can assist in the determination of both whether an application ought to be made and what will be necessary within a proposed application to ensure local water conditions are properly considered. Our only concern is that the process contemplates the permit applicant will conduct the consultations and relay the information to the Ministry. We recommend that the Ministry consider whether this process is set up to meet the stated purpose of “provide appropriate information to the ministry to enable a fair and balanced decision” (p6). Is there a way to set up the process so that the pre-application consultation is reported in a completely unbiased way?

Mandatory First Nations and Métis Presubmission Notification:

As above, the proposed Guidance contemplates that a permit applicant will be required to conduct consultation with First Nation and Métis communities prior to submitting an application. We expect that the Ministry will meet its constitutional obligations by ensuring that any proposed notification process is developed through meaningful consultation with First Nation and Métis communities.

Mandatory Public Consultation:

The proposed Guidance contemplates that notices for proposed permits to take water for bottling will continue to be posted to the Environmental Registry for public input. Further, the proposed Guidance suggests that the minimum consultation will be 60 days. The longer consultation period is welcome as proposed water takings from groundwater will include technical documents that take a great deal of time to review and provide feedback on.

Mandatory Public Reporting:

The proposed Guidance contemplates a requirement that permit applicants maintain a website where the following is included (p13):

- the permit application
- all technical reports submitted to the ministry
- annual monitoring report
- 2-3 page plain language executive summary of the water taking activity
- the well interference protocol and any complaints made under the protocol must be reflected in annual monitoring reports
- weekly water taking records
- monitoring data, as required by the permit

We support this level of transparency and accountability to the public. Although implicit, we recommend that the Ministry ensure that the expectation is that all annual monitoring reports are to be maintained on the website (not just the most recent or current annual report). Similarly, we recommend that the Ministry make explicit that the weekly water taking records and the monitoring data maintained on the website includes all the available data (not just the most recent). We believe that ensuring full, timely and unconstrained public access to all permit applications and supporting documentation without filing a freedom of information request is in keeping with the Province's commitment to Open Government and wish to see such transparency extended beyond just water bottlers.

Mandatory Reductions in Times of Drought:

The proposed Guidance contemplates including, within permit conditions, mandatory reductions during times of low water. The proposed mandatory reductions are based on the actual volumes of water pumped on average over the prior 3 months and fixed reductions of 10% in Level 1, 20% in Level 2, and 30% in Level 3. Moving from reductions that are voluntary is a very welcome change. We believe that the proposal is a workable system and are particularly pleased that the reductions necessary will be based on actual use (not permitted volumes).

Regular review:

The proposed Guidance contemplates that permits to take water for bottling will be issued for 5 years (or less), rather than the 10-year maximum term. This proposed reduction in the maximum term of a permit is to ensure regular review of science and the public's input. We are very supportive of this requirement. We further encourage the Ministry to set criteria that will be used to determine when a bottled water permit will be authorized for shorter time periods, for example in situations where there

is uncertainty about whether there are “unacceptable impacts”, community concerns about future public water supplies, etc.

New Stringent Conditions:

As summarized in the Environmental Registry notice, “new stringent permit conditions for bottled water will include:

- Monitoring and recording the total volume of water taken each day using devices that are capable of direct volumetric flow measurement and data recording.
- All data, interpretations, plans, or proposals for Permit changes submitted to the Ministry will be required to be supported by technical documentation prepared by a Qualified Person.
- Annual monitoring report is to be submitted to the Ministry that summarizes, presents and interprets all monitoring data that is collected under the authority of the Permit.
- Prior to commencement of water taking, the Permit Holder will be required to have a Well Interference Protocol prepared by a Qualified Person to address any public complaints of well interference. The Permit Holder will be required to provide a copy to the Ministry, the local conservation authority and the relevant municipality and have it posted publicly on a website.
- Permit Holders will be required to develop and maintain a public website that contains the following: the Permit; all technical reports submitted to the Ministry; annual monitoring reports; executive overview of the taking; Well Interference Protocol; graphical or numerical presentation of all daily water takings at each source (to be updated weekly); and all monitoring data.
- The Permit Holder will be prohibited from discharging water or any type of effluent to the natural environment without the appropriate approval.
- The Director has the discretion, based on reasonable grounds, to amend or revoke a Permit at any time.”

We support all these proposed conditions, as we believe that it will provide the necessary transparency, accountability, and monitoring information necessary to adaptively manage groundwater resources impacted by water bottling. We are particularly supportive of the proposed standard conditions relating to discharging water to waste:

- “The Permit Holder shall not discharge water to waste in order to increase the average daily water taking.” (6.d., p12)
- “The Permit Holder shall not discharge water to the natural environment unless applicable regulatory approval to do so has been obtained. This prohibition includes, but is not necessarily limited to, the discharge of excess water from a free-flowing well.” (7., p12)

Further, we recommend that any well interferences be made public for full disclosure and that the monitoring data be displayed or available in a dynamic electronic format (eg, not just in .pdf or other type of static format).

Application Fee:

The proposed Guidance suggests that all permits to take water for bottling will pay an application fee of \$3000. As well, the proposed Guidance would require a new permit application upon any change in ownership or sale. We support the proposed application fee because of the necessary administrative requirements for properly reviewing these permits. We also support the requirement of a new permit application when there is a change in ownership or sale, as being an appropriate time to assess the prior use and any impacts resulting of the change in ownership/sale.

Cumulative Impact:

To understand the cumulative impact of water takings, both the "local" (eg drawdown on nearby stream inflow from groundwater) and the "regional" (eg consideration of the water budget at a watershed level) must be taken into account. Further, guidelines for when "surface water field studies are likely required" need to include triggers that reflect consideration of cumulative impact. Finally, we have concerns about the following statement from a cumulative impact perspective: "NOTE: 10% is usually within the range of error and uncertainty for groundwater measurements. As a result, it is not possible to economically and reasonably measure changes in surface water flow/levels below this amount and to attribute these changes to the groundwater taking." (p25) Under this range of error, ten projects with a just under 10% lowering of surface water flows would essentially eliminate that feature.

We have some concerns about a permit applicant being required to assess cumulative impact. The current Permit to Take Water (PTTW) Manual (PIBS 4932e, April 2005) states "The Ministry will consider the cumulative impacts of water takings." (Principle 4, p4) The description of the cumulative impacts principle goes on to state that the Ministry may conduct (or commission) a cumulative impact assessment when it "believes that cumulative impacts need to be considered." (PTTW Manual, p4) And, the PTTW Manual goes on to suggest when a cumulative impact study is to be triggered. The Ministry is best positioned to know the intensity of water takings within a particular watershed/aquifer and assess whether there needs to be adjustments to the impacted permits. Although it is appropriate for the Ministry to require that the permit applicant assess the impact within the "area of study", we recommend that the Ministry be responsible for assessing cumulative impacts and adaptively managing permit conditions as necessary. As well, we recommend that the Ministry explain how cumulative impact assessments will be incorporated, eg, beyond "considering" cumulative impact, how will permit holders within the watershed or aquifer be required to change their water takings?

Deficiencies in Reference to Modeling:

Now that fully-integrated, transient-state models have been developed, tested and used for assessment of water-taking effects for many Tier 3 Study areas in Southern Ontario, these models, where available, must be used to provide meaningful assessment of effects of proposed water takings for the various scenarios outlined above including climate change, drought, and cumulative impacts.

The technical guidance portion of the proposed Guidance needs extensive revision to give prominence to modeling as the core tool for assessment. The current document relegates modeling to "additional analysis" and concludes with comments that discourage modeling.

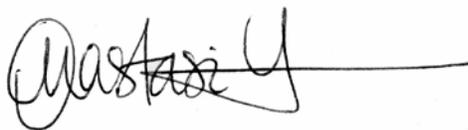
We recommend that the Ministry ensure peer feedback and recommendations are provided by professional associations and/or academic experts on the appropriate models to be incorporated and used.

Pump Tests:

It is unclear how or if pump tests are going to meet the requirement to obtain more long-term data in order that the effects of climate change can more robustly be incorporated into the evaluation and review process for new and existing permits. We recommend that such a requirement on pump tests be made clear.

We hope that our submission is of assistance. We are happy to meet with you and discuss further.

Regards,



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Ensuring the Healthy Future of Our Waters

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