

The new bottled water guidance, a troubling precedent for science?

By Simon Gautrey, MSc, MBA, P.Geo.

The Ministry of Environment and Climate Change has recently posted a draft guidance document on the EBR site that tells companies what requirements they would be expected to meet if they want permission to take water from aquifers for bottled water. Included in the document is a direction to Ministry staff to consider comments from “any interested party” to reach a “fair and balanced decision” when awarding a permit. The guidance document does not, however, provide instructions to Ministry staff on how to evaluate public comments. This oversight leaves the process open to interpretation, and invites political involvement in what was formerly a scientific process.

While bottled water takings are a small proportion of groundwater takings in the province, this guidance is coming at a time when the Ministry has announced it will be reviewing the permit process for all groundwater takings. It is therefore likely that this bottled water guidance will become a model for all groundwater permits in the province. In this context, water professionals and geoscientists should take note and consider making their own comments on the Ministry EBR.

Water professionals, and in particular geoscientists, are duty bound to protect the public interest. In our efforts to protect the public, we rely on science and engineering, but we can also draw upon a history of groundwater supply in the province. In terms of groundwater resource management, or as it is more fashionably referred to, as groundwater governance, Ontario can look at the many decades of success at the Region of Waterloo, York Region and the City of Guelph, where close to a 800,000 people rely on groundwater for their daily needs. We can also look to our academics and practitioners in the field of hydrogeology, who are considered world leaders.

This experience is not only gained through success, but is also hard won through some painful losses, of which the Walkerton Tragedy is the most prominent. Justice O’Connor was charged with investigating the cause of the tragedy, and in the process of his inquiry interviewed hundreds of expert witnesses and ordinary people. In his report on the tragedy, Justice O’Connor made many recommendations which are applicable to good groundwater governance. Key amongst these recommendations are:

- The Ministry of Environment (and Climate Change) should play a lead role,
- Local voices are important to promote stewardship, and
- Science is important in decision making.

It is with this background in mind that water professionals must evaluate the merits of the proposed guidance document.

The new guidance includes technical requirements that are almost identical to the existing 2008 guidance document. By not changing the technical requirements, the Ministry is signaling its satisfaction with the technical components. The only significant addition is a requirement to include an assessment of cumulative takings, but this aspect is already considered in other regulations, and is effectively a clarification. There is no reason to be concerned about the technical requirements of the new guidance.

This leaves the new mandatory consultation and reporting requirements. Public consultation is not new to groundwater extraction, but requiring Ministry staff to consider comments from “any interested party” to reach a “fair and balanced decision” represents a significant shift from the former consultation process which was mainly intended to inform the process rather than decide the outcome. The guidance does not contain definitions of these terms, but a Ministry glossary of terms indicates that “Interested persons are not required to demonstrate that they will personally be affected by a particular undertaking”, which essentially allows anyone to be an interested party. The glossary does not include a definition of a “fair and balanced decision”, but this is a phrase frequently used in the legal profession and mediation, which might point to the source of these new requirements.

The lack of guidance from the Ministry in this important aspect of what is fair and balanced does, however, provide an opportunity for water professionals to suggest some workable criteria:

- The Ministry of Environment and Climate Change should play a lead role: this means that the Ministry should not default decision making to a process based on optics and opinions, and be prepared to make unpopular decisions when supported by science. Ministry staff, who are generally governed by the Geoscientist Act, must know that they will be supported in their decisions when the technical arguments support the less popular decision. It would also be wise of the Ministry to consider additional steps to increase independence to Ministry staff reviewing permit applications to avoid conflicts of interest with a political process. As a safeguard, such steps might include a technical appeals process that can be triggered either by the Minister or the proponent.
- Local voices are important: this means local voices should have greater say in how local groundwater resources are governed, over those voices from outside the subject watershed. Aquifers are distinct geographic entities, and unlike environmental issues like climate change, should not be addressed through province wide solutions like cap and trade. Local involvement is key to successful aquifer governance, as recognized by Justice O’Connor and as demonstrated by successful management of aquifers on a municipal level by the Region of Waterloo, York Region and City of Guelph.
- Science is important to the decision making process: Although this seems obvious, it must be clearly stated as an evaluation criteria. Such a statement would be consistent with the Ministry’s own statement of values that “in making decisions, the Ministry will use the best science available”. Without a statement to this effect, Ministry staff may have to contend with a politicized process that usurps scientific opinion.

As water professionals and geoscientists, our knowledge of groundwater places a duty on us to participate in issues of groundwater governance. You are encouraged to read the new guidance manual and provide comments on the EBR posting. Some specific concerns are listed below, but you should participate as you see fit:

1. The Ministry should provide groundwater specific criteria to Ministry staff as to how to evaluate public comments when reaching a “fair and balanced decision”. Ontarians should be able to comment on these criteria and help determine whether we want local voices to lead in the decision making on how local resources are used, or open such decisions to province wide opinions. In responding to this comment, the Ministry should consider the recommendations of the Walkerton Inquiry, in which Justice O’Connor recommended governance of source water on a local (watershed) basis as one of the main elements of source water protection to “ensure local

considerations are fully taken into account”. To do otherwise risks disenfranchising local populations best suited to be stewards of their aquifers.

2. Any additional principles given in an updated guidance should recognize that different environmental issues operate at different scales and frequently defy one size fits all approaches. Groundwater issues in California and Alberta are different from groundwater issues in Ontario. Groundwater issues in the Norfolk sand plain are different from groundwater issues north of Thunder Bay.
3. The Ministry should prepare a holistic guidance document that looks beyond a single industry issue. Water is essential to almost all economic activity, and creating expectations that special interest groups can nullify proposals by squashing water permits might set a chilling precedent for investment in rural and northern Ontario where groundwater is an important source of water. Efforts to use groundwater governance as a convenient tool to rein in an unpopular activity at one location may have unintended consequences to other parts of the Ontario economy.
4. The Ministry should take steps to distinguish between comments generated by bot software and comments prepared by people. The recent moratorium on bottled water generated more than 20,000 comments, however a large proportion of them were identical, suggesting they are possibly bot comments and not representative.
5. The Ministry should take the opportunity to explain how Treaty Rights will affect groundwater takings in Ontario, including the preparation of scientific criteria for the evaluation of when Treaty Rights might be infringed. It is time for more explanation from the province on these fundamental agreements that shape the interrelationships of our provincial community.
6. The reporting requirements proposed for bottled water facilities if expanded to all water takings in the province could represent a significant financial burden. To assist smaller or less sophisticated water users, the Ministry should consider providing a website to perform this function at a set fee as a more cost efficient solution.
7. The Ministry should examine the effectiveness of regulating the bottled water industry through other methods such as taxation or mandatory recycling. Forcing the closure of bottled water plants in Ontario will simply result in more imported bottled water. A quick scan of any super market shelf will find bottled water from Quebec, Europe and Fiji. How will shifting bottled water production to places like Fiji and Europe help battle climate change? How will closing bottled water supplies in Ontario increase our preparedness to face disasters such as Walkerton or other emergency interruptions to the water supply, including those due to climate change?
8. The requirement for in depth consultation for a simple pumping test represents a significant hurdle to the application of the science to groundwater issues. It stands in contrast to a proposal from the Modernization of Approvals Branch to allow pumping tests to proceed under the EASR regulations, which presently allow long term groundwater pumping for construction projects without a permit. It is absurd that long term groundwater takings of multi-year construction projects do not require a permit, while a mere multi-day pumping test must wait months for Ministry approval. The Ministry should rapidly implement the long awaited proposal to extend EASR regulations to cover pumping tests, and remove a significant hindrance to the application of groundwater science in Ontario. This single move would effectively reduce the cost of groundwater science in this province, and assist the Ministry in promoting groundwater science at no additional cost to the province.
9. Finally, Ontario is known as a world leader in the study and management of groundwater. It has some of the best academic centres in the science of hydrogeology, and is home to some of the

world's most recognized hydrogeologists as both academics and practitioners. The world will look to Ontario for world class regulation on groundwater takings. Typically, the Ministry does a commendable job in consulting academics and practitioners on groundwater regulation, but this guidance document was prepared without the usual expert input. Ontario experts should be properly consulted on changes to this guidance documents so Ontario can remain a world leader in this field.

A link to the EBR posting is provided below. The public comment period closes on January 31, 2017.

<https://www.ebr.gov.on.ca/ERS-WEB-External/displaynoticecontent.do?noticeId=MTMwMjU1&statusId=MTk4OTEw>

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References:

MOECC, 2016: Procedural and Technical Guidance Document for Bottled Water: Permit to Take Water Applications and Hydrogeological Study Requirements, prepared by the MOECC Operations Division, November 2016.

Justice O'Connor, 2002: Part 2: Report of the Walkerton Inquiry: A Strategy for Safe Drinking Water. The Honourable Dennis R. O'Connor, 2002