Canadian Environmental Law Association
EQUITY. JUSTICE. HEALTH.

November 20, 2012 **BY EMAIL**

The Hon. James Bradley
Minister of the Environment
Ferguson Block
77 Wellesley Street West, 11th Floor
Toronto, ON M7A 2T5

Dear Minister:

RE: PROTECTION OF DRINKING WATER QUALITY IN ONTARIO

We are writing to you to convey CELA's observations and suggested reforms in relation to the province's ongoing implementation of key recommendations from the Walkerton Inquiry in order to safeguard drinking water quality in Ontario.

In particular, we are writing to provide CELA's views regarding source water protection efforts under the *Clean Water Act, 2006* (CWA), and the continuing inadequacy of the current tritium drinking water standard under the *Safe Drinking Water Act, 2002* (SDWA).

For the reasons discussed below, it is CELA's overall position that the following steps should be undertaken forthwith:

1. **The Ontario government should immediately commit to providing adequate funding to municipalities, source protection authorities and other parties who will be obliged to implement, enforce and update Source Protection Plans approved under the CWA. The Ontario government should also commit to the continued funding of the Ontario Drinking Water Stewardship Program.**

2. **The scope of future source water protection efforts under the CWA must be expanded to include various types of non-municipal drinking systems (i.e. private well clusters, First Nations systems, etc) which have been largely excluded from the recently submitted Source Protection Plans.**

3. **The definitions, requirements, and modeling methodologies that are currently prescribed by the regulations, Technical Rules and other Ministry documents issued under the CWA should be systematically reviewed and revised (with public input opportunities) before the commencement of the next round of updating Assessment Reports and Source Protection Plans.**

4. **The proposed *Great Lakes Protection Act* should be strengthened, re-introduced and enacted as soon as possible.**

5. The tritium drinking water standard in O.Reg.169/03 should be immediately lowered to 20 becquerels per litre.

The rationale for each of these recommendations is briefly set out below.

PART I – BACKGROUND

Both the SDWA and CWA were enacted in response to the Walkerton drinking water tragedy in 2000 in which seven persons died, and thousands of people fell ill, after bacteriological contamination of a well that supplied the town's drinking water system.

After identifying the factual, technical and institutional factors which converged to create the public health catastrophe, Mr. Justice O'Connor's *Report of the Walkerton Inquiry (Part 2)* made numerous recommendations aimed at preventing a recurrence of the Walkerton tragedy elsewhere in Ontario. Among other things, these recommendations called upon the provincial government to:

- establish a regime for developing watershed-based source protection plans "in all watersheds in Ontario" (Recommendation 1);

- ensure that "sufficient funds are available to complete the planning and adoption of source protection plans" (Recommendation 7);

- set legally binding drinking water quality standards which ensure that "a reasonable and informed person would feel safe drinking the water" (Recommendations 18 and 24), and which are "based on a precautionary approach" (Recommendation 19);

- ensure that "programs relating to the safety of drinking water are adequately funded" (Recommendation 78); and

- invite Ontario First Nations to join in the watershed planning process (Recommendation 88).

To its credit, the Ontario government has implemented – and continues to implement – various measures, programs and initiatives intended to fulfill all 93 recommendations made by Mr. Justice O'Connor.

However, it must be noted that the SDWA and provincial drinking water standards are now approximately 10 years old. Similarly, the CWA is now six years old, and the first round of the five year-long source protection planning process is currently winding down in Source Protection Areas and Regions across the province.

Having regard for the operational experience under the SDWA and CWA to date, it appears to CELA that there are opportunities to improve and strengthen these steps toward to securing the

long-term protection and sustainability of drinking water sources. In Part II of this brief, CELA identifies five key issues which need to be addressed forthwith by the Ontario government.

PART II – OVERVIEW OF OUTSTANDING ISSUES

In the post-Walkerton era, CELA has monitored and responded to the incremental development of the SDWA, the CWA, regulations thereunder, and related drinking water quality programs in Ontario. In our opinion, considerable progress has been made to date in terms of implementing the "multiple-barrier" approach recommended by Mr. Justice O'Connor in the *Report of the Walkerton Inquiry (Part 2).*

However, the recent track record under these statutes suggests that further provincial action is required in order to better protect the quality and quantity of current and future sources of drinking water for the benefit of all Ontarians. Accordingly, the purpose of this submission is to highlight five illustrative examples of key challenges which warrant additional attention and further reform efforts by the Ontario government.

We hasten to add that the five issues outlined below are not intended to represent a full inventory of all water-related concerns which should be acted upon by the province in the coming months and years. However, CELA views these five issues as high-priority matters for further action by the Ontario government in order to protect drinking water quality in Ontario.

ISSUE #1: The Need for Post-2012 Provincial Funding

It is CELA's understanding that the province has invested approximately $200 million in the source water protection program since its inception. In our view, this has been an important and necessary investment in safeguarding drinking water sources and protecting public health and safety.

To date, this provincial funding has been used to establish multi-stakeholder Source Protection Committees across Ontario, and to enable these Committees to carry out the detailed assessment and planning work required by the CWA. For example, these funds have helped to: (a) identify vulnerable areas across the province; (b) assess and rank drinking water threats; (c) determine the susceptibility of groundwater or surface water resources to contamination or depletion; (d) conduct sub-watershed water budgets; (e) fund site-specific mitigation measures under the Ontario Drinking Water Stewardship Program (ODWSP); and (f) develop appropriate policies (with public input) in the Source Protection Plans which have been recently submitted for your Ministry's review and approval. In CELA's view, this has been money well spent in order to reach this critical stage of source protection planning.

To our knowledge, however, the Ontario government has not yet made any firm commitment to provide funding for the actual implementation of approved Source Protection Plans. Given the substantial provincial investment in the development of Source Protection Plans, it would be most unfortunate and highly counter-productive if the implementation of approved Plans was delayed or undermined due to the lack of adequate resources.

In particular, provincial financial assistance will undoubtedly be required to ensure that the new tools under Part IV of the CWA (i.e. prohibition, risk management plans, restricted land uses, etc.) are implemented across Ontario in a timely and efficient manner. In addition, CELA views the continuation of the provincially-funded ODWSP as a high priority under the CWA in order to support landowners who may need assistance to address significant drinking water threats on their property.

CELA acknowledges that municipalities and other implementing authorities may be able to eventually utilize other revenue streams to help defray the cost of implementing Source Protection Plans (i.e. water rates, fee-for-service, etc.). However, during the initial years after Plan approval, it appears to us that municipalities (particularly smaller ones) will require some upfront provincial assistance to implement Source Protection Plans in a manner that achieves the purposes of the CWA.

CELA is aware that many municipalities, conservation authorities, Source Protection Committees, and non-governmental organizations across Ontario have been requesting the continuation of provincial funding for the implementation of Source Protection Plans. CELA agrees with such requests, and therefore calls upon the Ontario government to commit to the provision of adequate funding to assist in the implementation of Source Protection Plans. In our view, such provincial funding is both necessary and responsive to Mr. Justice O'Connor's recommendation that Ontario's safe drinking water programs must be adequately funded (Recommendation 78).

CELA RECOMMENDATION #1: The Ontario government should immediately commit to providing adequate funding to municipalities, source protection authorities and other parties who will be obliged to implement, enforce and update Source Protection Plans approved under the CWA. The Ontario government should also commit to the continued funding of the Ontario Drinking Water Stewardship Program.

ISSUE #2: Expanded Application of the CWA to Non-Municipal Systems

The stated purpose of the CWA is "to protect existing and future sources of drinking water" (section 1). No distinction is made in this section between public and private drinking water safety.

However, during the first cycle of assessment and planning work under the CWA, the Ministry of the Environment (MOE) took a number of steps to restrict source water protection efforts to raw water sources drawn by municipal intakes and wellheads, rather than by private wells or other non-municipal systems.

For example, while it was open to municipalities to "elevate" eligible clusters of private wells (i.e. six or more wells) serving hamlets or villages for inclusion within Source Protection Plans, MOE officials issued an early directive that effectively discouraged municipalities from elevating private wells at this time. As a result, few, if any, private well clusters have been included in the Source Protection Plans submitted to date, despite evidence indicating that private wells – like municipal wells – are vulnerable to chemical or pathogenic contamination.

The net result is that the numerous Ontarians who rely upon private wells for drinking water purposes generally lack the direct protection conferred under the CWA (although private well owners fortunate enough to be located within municipal Wellhead Protection Areas may derive indirect protection under approved Source Protection Plans).

Similarly, while it was possible under the CWA for First Nations' drinking water systems to be "elevated" for inclusion with Source Protection Plans, it is our understanding that only two such systems in Ontario have been specifically included to date.[1] Thus, while First Nations representatives have served as members of some Source Protection Committees, it appears that the vast majority of First Nations drinking water systems in Ontario remain outside of the CWA coverage. In our view, such omissions are unfortunate, particularly in light of Mr. Justice O'Connor's well-founded observation that "the water provided to many Metis and non-status Indian communities and to First Nation reserves is some of the poorest quality water in the province."[2]

Given the novel nature of the CWA, CELA presumes that the Ontario government may have wanted to initially focus the first round of source protection planning on municipal drinking water systems that serve millions of Ontario residents. However, now that this round is nearly complete, CELA submits that the Ontario government should draw some "lessons learned" in the source water protection program to date (see below), and apply them during the next round of source planning, when it will be incumbent upon the province to expand the CWA regime to include various types of non-municipal drinking systems.

In particular, the Ontario government should take all reasonable steps to further engage with aboriginal communities across the province, in accordance with Recommendation 88 of the Walkerton Inquiry. Among other things, this means that where requested, Ontario should be prepared to provide technical and financial assistance to aboriginal communities that wish to develop, utilize, or "opt-in" to the various source water protection tools available under the CWA. In our view, a coordinated and cooperative approach is necessary to effectively prevent the ingress of contaminants into groundwater or surface water used to supply drinking water to aboriginal communities.

CELA RECOMMENDATION #2: The scope of future source water protection efforts under the CWA must be expanded to include various types of non-municipal drinking systems (i.e. private well clusters, First Nations systems, etc) which have been largely excluded from the recently submitted Source Protection Plans.

ISSUE #3: Reviewing and Updating the Regulatory Framework under the CWA

After the CWA was enacted in 2006, the Ontario Cabinet passed a number of regulations to: (a) provide more detailed definitions of key terms under the Act; (b) list prescribed instruments subject to the Act; (c) list 21 specific drinking water threats; (d) specify content requirements of

[1] Chippewas of Kettle and Stony Point First Nation; and Six Nations of the Grand River: see O.Reg.287/07, s.12.1.
[2] *Report of the Walkerton Inquiry (Part 2)*, p.486.

Source Protection Plans; and (d) prescribe other documentary and consultation requirements under the Act. The regulations were further supplemented by lengthy Technical Rules promulgated by the MOE, as well as other bulletins, memoranda, Tables of Drinking Water Threats, and other guidance materials circulated by the MOE from time to time.

However, Source Protection Committees sometimes encountered difficulty in interpreting and applying these various legal and technical requirements, partly because some of the MOE's documents were not released until well after the source protection planning process had commenced. In addition, some provincial requirements or directions were established or amended mid-way through the process, causing some Committees to voice concerns about trying to meet constantly "moving targets" within tight planning timeframes. Moreover, some of the prescribed approaches in the Technical Rules were perceived to be too inflexible or unresponsive to local situations or circumstances which confronted Source Protection Committees.

In CELA's view, some of these interpretative difficulties and evolving requirements were not entirely unexpected as the MOE endeavoured to prescribe particulars for the source protection regime under the CWA, which included new tools not previously available under provincial law.

However, now that the first round of source protection planning is nearing completion, it would be highly instructive for the MOE (with input from Source Protection Committees and other stakeholders) to take stock of the experiences to date, and to learn which approaches worked, which ones did not, and which ones require further revision. Ideally, these "lessons learned" should be reviewed and reflected in the regulations, Technical Rules, and other guidance materials well before the next round of assessment and planning work commences under the CWA.

CELA RECOMMENDATION #3: The definitions, requirements, and modeling methodologies that are currently prescribed by the regulations, Technical Rules and other Ministry documents issued under the CWA should be systematically reviewed and revised (with public input opportunities) before the commencement of the next round of updating Assessment Reports and Source Protection Plans.

ISSUE #4: Enacting the *Great Lakes Protection Act*

When enacted in 2006, the CWA contained several provisions which, if utilized, would have provided much-needed direction to more fully protect the Great Lakes as a source of drinking water for millions of Ontarians. For example, the CWA empowered the Minister to: (a) establish provincial or regional Great Lakes advisory committees (section 83); (b) direct Source Protection Authorities to report upon "any matter" relating to the use of the Great Lakes as a source of drinking water (section 84); and promulgate and/or allocate specific Great Lakes targets for source protection areas that contribute water to the Great Lakes (section 85).

However, despite repeated calls by CELA and other organizations for the establishment of a Great Lakes advisory committee, successive Ministers of the Environment refused to create such a committee. Similarly, these Ministers refused to exercise their discretion to impose specific

Great Lakes targets, or to otherwise provide detailed direction to Source Protection Authorities to review and report upon specified Great Lakes drinking water matters.

In CELA's view, the inexplicable refusal to utilize the above-noted statutory powers represents an unfortunate squandering of an important opportunity to start addressing Great Lakes drinking water matters in the first cycle of assessment and planning under the CWA. This refusal also appears to have resulted in some inconsistency, confusion or consternation among Great Lakes Source Protection Committees, which have been left more or less on their own to grapple with Great Lakes matters that involve macro-level threats (i.e. climate change, invasive species, etc.) beyond the effective reach of individual Committees, or that involve complex inter-jurisdictional issues on a larger scale or lake-wide basis.

Thus, when the proposed *Great Lakes Protection Act* (Bill 100) was introduced in June 2012, CELA and other organizations supported the legislation since it appeared to promise overdue action on various Great Lakes matters.[3] At the same time, CELA and other organizations recommended certain improvements to Bill 100, such as: (a) adding decision-making principles; (b) reforming the Great Lakes Guardians Council; (c) revising governmental obligations in relation to the Great Lakes Strategy; (d) imposing a mandatory duty to set Great Lakes targets; (e) expanding implementation and reporting duties regarding Great Lakes initiatives; and (f) clarifying other miscellaneous matters.[4]

However, Bill 100 died on the order paper when the Ontario Legislature was recently prorogued. Accordingly, CELA strongly submits that the Ontario government must commit to the expedited re-introduction and passage of a new and improved *Great Lakes Protection Act*.

CELA RECOMMENDATION #4: The proposed *Great Lakes Protection Act* should be strengthened, re-introduced and enacted as soon as possible.

ISSUE #5: The Long-Overdue Revision of Ontario's Tritium Standard

It is astounding to CELA that in 2012, it is still necessary to call upon the provincial government to lower the tritium drinking water standard in O.Reg. 169/03 from 7,000 becquerels/litre to 20 becquerels/litre.

The 20 becquerels/litre standard has long been advocated by CELA and numerous other environmental organizations, public health groups, and interested stakeholders across Ontario. In 1994, Ontario's former Advisory Committee on Environmental Standards (ACES) recommended that the tritium standard should be lowered to 20 becquerels/litre within five years. Unfortunately, this sound advice from the ACES was not implemented by the Ontario government.

More recently, this matter was referred in 2007 by the Minister of the Environment to the Ontario Drinking Water Advisory Council (ODWAC), which recommended in May 2009 that

[3] CELA et al., "Comments of the Great Lakes Protection Act Alliance and Undersigned Groups re Bill 100 (EBR Registry No. 011-6461)" (July 31, 2012).
[4] *Ibid*.

the tritium standard should be lowered to 20 becquerels/litre.[5] This standard was selected after the ODWAC asked and answered the threshold question arising under Recommendation 18 of the Walkerton Inquiry Report: what tritium standard would enable a reasonable and informed person to feel safe consuming drinking water in Ontario?[6] Unfortunately, the ODWAC's carefully crafted advice to reduce the standard to 20 becquerels/litre has not been implemented by the province to date.

In our view, the continuing inaction on lowering the tritium standard cannot be justified by the Ontario government. On this point, we note that representatives of the nuclear industry have repeatedly assured Ontarians that nuclear generating stations can meet the 20 becquerels/litre standard without incurring additional cost. Accordingly, there is no compelling reason for the Ontario government's inordinate delay in acting upon the ODWAC's recommendation.

CELA RECOMMENDATION #5: The tritium drinking water standard in O.Reg.169/03 should be immediately lowered to 20 becquerels per litre.

PART III - CONCLUSIONS

For the foregoing reasons, CELA concludes that while significant progress has been made to implement the "multi-barrier" approach recommended by Mr. Justice O'Connor, Ontario still has some unfinished business in relation to source water protection and the tritium drinking water standard. In particular, this submission highlights five specific actions which should be immediately undertaken by the Ontario government in order to protect drinking water quality.

We trust that the above-noted recommendations will be duly considered and acted upon by the Ontario government, and we would respectfully request your written response to each of the five recommendations made by CELA in this submission.

If requested, we would be pleased to meet with you or your staff to further discuss these necessary improvements to Ontario's drinking water regime.

Yours truly,
CANADIAN ENVIRONMENTAL LAW ASSOCIATION

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cc. MOE Chief Drinking Water Inspector
Director, MOE Source Protection Programs Branch
Environmental Commissioner of Ontario
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[5] ODWAC, *Report and Advice on the Ontario Drinking Water Quality Standard for Tritium* (May 21, 2009).
[6] *Ibid.*, p.40.