

March 15, 2002

Frank Coschi  
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Toronto, Ontario  
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**Re: EBR Postings RA01E0023 and RA01E0027 – Strengthening Ontario’s Hazardous Waste Management Framework (Next Steps)**

Dear Mr. Coschi,

I am writing to you regarding the Ministry of the Environment’s proposals posted on the EBR Registry on December 18, 2001, and the announcement of decisions regarding the implementation of hazardous charges and annual generator registration on the same day (EBR Registry No.RA01E0003).

The Pembina Institute supports the Ministry’s overall direction towards the strengthening of Ontario’s hazardous waste management framework. Gaps in the existing framework have been identified as a major factor in the growth of hazardous waste imports into Ontario since the mid-1990’s, when the United States adopted new standards regarding the handling and disposal of hazardous wastes.<sup>1</sup> The current situation with respect to hazardous waste standards in Ontario places the health, safety and environment of the province’s residents at risk, and needs to be addressed on an urgent basis.

However, the Institute is seriously concerned by several aspects of the Ministry’s December 2001 proposals, particularly with respect to the mandating of the destruction of PCB’s currently in storage within three years, and certain aspects of the Ministry’s proposals regarding biomedical wastes. Our specific comments are as follows.

**1. Decision Re: Hazardous Waste Charges and Annual Generator Registration (EBR Registry No. No.RA01E0003)**

The Institute strongly supported the Ministry’s proposals to introduce annual generator registration in its September 2001 comments on this proposal, and welcomes the adoption of this measure.

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<sup>1</sup> See M.Jacott, C.Reed, and M.Winfield, The Generation and Management of Hazardous Wastes and Transboundary Hazardous Waste Shipments between Mexico, Canada and the United States. (Austin: Texas Centre for Policy Studies, April 2001).

However, the Ministry's decision announcement fails to address a number of key issues raised in our September 2001 comments.

In particular, the provisions regarding public access to generator registration data beyond the generator name, date of posting, generator registration number and waste class identification numbers remain unclear. As stated in our September 2001 comments, the Ministry's website postings should include all information provided through the generator registration process, including industrial sector, total waste generation, total of each waste type generated, and total amounts of wastes sent to each fate. Specific policies, similar to those employed by Environment Canada for the purposes of the National Pollutant Release Inventory, should be adopted regarding information that may be subject to business confidentiality claims.

The Ministry's proposed hazardous waste information website should be designed in a manner which facilitates customized analysis of the posted data, in a manner similar to the NPRI Query page<sup>2</sup> and North American Commission for Environmental Cooperation's Pollutant Release and Transfer Registry<sup>3</sup> website. This would facilitate analysis by the Ministry and members of the public.

## **2. Mandating the Destruction of PCBs within a fixed time period.**

The Ministry is proposing that all PCB waste in storage at the time of the regulation will be required to be destroyed within three years. The proposal also has provisions for accelerated destruction dates for PCBs being stored at sensitive locations throughout the province (e.g. schools and hospitals).

The Institute has serious concerns regarding this proposal, and believes that its implementation may place the health and safety of Ontario residents and residents of other provinces at higher risk than the current situation, where PCB storage sites are subject to extensive federal and provincial regulatory requirements and oversight.

The Ministry's proposal fails to provide any assessment of the adequacy of existing PCB disposal capacity in Ontario to destroy these wastes safely. There are currently only two approved PCB destruction facilities in Ontario. One of these facilities, Gary Steacy Dismantling in Northumberland County, approved in December 1997, is only authorized to deal with low-level PCB wastes.<sup>4</sup> The second facility, the SRBP Resource Recovery facility in Cornwall, approved in December 1999, was the subject of an investigation and the laying of charges by the Ministry in November 2001. These charges related to discharges of mercaptan to the air from the facility.<sup>5</sup>

Serious concerns have been raised regarding the manner in which the approvals for both facilities were handled by the Ministry, resulting in the filing of a Request for Review of the approvals

<sup>2</sup> <http://www.npri-inrp.com/queryform.cfm>.

<sup>3</sup> <http://www.cec.org/takingstock/querybuilder/index.cfm?varlan=english>

<sup>4</sup> PCB wastes below 500ppm. The facility was approved to operate a Class 2 Mobile PCB Waste Destruction Facility in February 2002. EBR Registry Number: IA9E0868

<sup>5</sup> Ministry of the Environment, Press Release, "MATERIAL RESOURCES RECOVERY CHARGED FOR DISCHARGES OF MERCAPTAN, November 1, 2001

process for hazardous waste disposal facilities under the *Environmental Bill of Rights* in December 1999.<sup>6</sup> In both cases, the Environmental Assessment Board expressed concerns in its approval decisions regarding the lack of opportunity to consider alternatives to the incineration technologies for PCB destruction presented by the proponents, particularly in light of the Board's November 1996 approval<sup>7</sup> of the use of the non-incineration, thermal reduction technology for this purpose.<sup>8</sup>

A third commercial PCB destruction facility is currently under consideration by Ministry, to be located in Kirkland Lake. As with the Steacy Dismantling and SRBP facilities, the review of alternative PCB destruction technologies has been scoped out of consideration in the approval process for this facility.<sup>9</sup>

In the absence of adequate disposal capacity in Ontario, Ontario PCBs will likely be shipped for disposal to the hazardous waste disposal facility owned by the Alberta government in Swan Hills, Alberta. In addition to the history of serious problems associated with the operation of this facility, including significant contamination of the surrounding environment with PCBs, the long distance transport of PCB wastes from Ontario to Alberta raises the possibility of spills on route.<sup>10</sup> In fact, transportation has long been identified as a significant area of risk with respect to the handling of hazardous waste,<sup>11</sup> with the chance of spills rising with the distance traveled. A serious spill of PCBs being transported from Ontario to Alberta occurred near Kenora in 1985.

The Institute believes that the issue of the destruction of PCB stocks should be subject to an independent review process prior to the implementation of any destruction plan. This could be achieved by designating the destruction of the province's PCB stocks as an undertaking for the purposes of the *Environmental Assessment Act*. The terms of reference for such an assessment would need to be defined in a manner which includes a consideration of need, existing disposal capacity and the availability, effectiveness and safety of all disposal technologies. A commission of inquiry or independent expert review panel, including opportunities for public submissions and intervenor funding for *bona fide* public interest intervenors could be employed for the same purposes. The last such public review of PCB destruction technologies in Ontario occurred in 1984.<sup>12</sup>

Given the extremely serious concerns that exist regarding the adequacy and safety of the province's current and proposed PCB disposal capacity, and safety implications of the long-distance transport of Ontario PCB wastes to Swan Hills, Alberta, the Institute believes that the province's proposals

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<sup>6</sup> See Environmental Commissioner for Ontario, Changing Perspectives: Annual Report 1999/2000 (Toronto: ECO, October 2000), pp.100-102.

<sup>7</sup> See Environmental Assessment Board, EP-96-01, November 1996.

<sup>8</sup> See Environmental Assessment Board, *Re: Gary Steacy Dismantling*, EP 97-03, pg.28, and Environmental Assessment Board *Re: SRBP Resource Recovery* EP-98-123 pg. 36 note 6.

<sup>9</sup> Approved Terms of Reference Pursuant to the Environmental Assessment Act Bennett Environmental Inc. Proposed Kirkland Lake Thermal Oxidizer Facility, April 2001.

<sup>10</sup> See M. Winfield, Hazardous Waste Management in Ontario: A Report and Recommendations (Toronto: CIELAP, 1998) pg.V-4

<sup>11</sup> Environment Council of Alberta, Hazardous Waste Management in Alberta: Report and Recommendations (Edmonton: ECA, 1980).

<sup>12</sup> Commission on the Regulatory Control of Mobile PCB Destruction Facilities, Report of the Commission (Toronto: Ministry of the Environment, 1985).

for the destruction of PCB stocks within three years should be deferred until a thorough investigations of the province's PCB destruction needs and options can be completed.

### **3. Biomedical Waste Proposals**

#### *Phasing Out of Existing Hospital Incinerators*

The situation with respect to emissions from hospital incinerators has been one of long-standing serious concern, given the lack of adequate air pollution control systems on many of these facilities in Ontario. As noted in the province's proposals, these facilities have been identified as the 13<sup>th</sup> largest source of mercury emissions in the province, and the single largest sources of dioxins, as well as being major sources of emissions of particulate matter, heavy metals, hydrogen chloride and carbon monoxide. Although the number of facilities in operation in Ontario has fallen significantly over the past few years, 45 remain in service. Numerous studies have highlighted that the volume of biomedical wastes actually requiring incineration (principally body parts and cytotoxic drugs) is very limited and by implication the large incineration capacity remaining in service at Ontario hospitals is unnecessary. The Institute supports the Ministry's proposal to phase-out the operation of these facilities for these reasons.

#### *Revision of Guidelines Regarding Operation and Monitoring of Biomedical Waste Incinerators*

This guideline would apply to new or upgraded biomedical waste incineration facilities. In general the adoption of a new guideline, employing emission limits rather than point of impingement standards is a welcome development. However, the guideline should be adopted as a regulation rather than a guideline, to ensure its application to all biomedical waste incineration facilities. The relationship between the guideline and the proposed phase-out of existing incinerators is unclear. It is specifically unclear if the guideline is to apply immediately to existing facilities that remain in operation during the phase-out period.

The guideline focuses exclusively on an emission control technology-based approach to limiting emissions. It fails to take a pollution prevention approach, and introduce limits on inputs into biomedical waste incineration facilities. Such measures would be particularly relevant with respect to the input of wastes containing mercury, other heavy metals, or chlorinated plastics such as PVC, which are the source of some of the most problematic types of emissions from biomedical waste incinerators. Pollution prevention requirements of this type would also be supportive of a number of initiatives within the hospital community to reduce or eliminate such materials, such as mercury bearing instruments, from their facilities.

#### *Implementation of a New Biomedical Waste Management Regulations and Guidelines*

The Institute supports the overall direction of the proposed regulations and guidelines, which is to clarify which types of wastes are required to be treated as biomedical wastes as opposed to those which may be treated as conventional municipal solid wastes. The Guideline also designates the types of waste for which incineration is required, and for which non-incineration technologies may be employed. This may significantly reduce the amounts of waste requiring incineration, although the same provisions are not included in the proposed regulation.

The proposed regulation would also prohibit the disposal of biomedical wastes into sewage works (i.e. sanitary sewers and sewage treatment plants) except for very small quantities of blood. This limit is appropriate given the potential risks to sewage works staff, possibility of interference in sewage works operation posed by biomedical wastes, and the increasing beneficial use of sewage sludge as a soil conditioner. However, it is important to note that, as a result of the adoption of the *Water and Sewerages Services Improvement Act* and *Services Improvement Act* in 1997, certain types of sewage systems, such as septic systems are no longer regulated under the *Ontario Water Resources Act*.<sup>13</sup> Provision needs to be made with respect to the disposal of biomedical wastes to these systems, such as the disposal of materials from funeral homes in rural areas.

The proposed regulations state that “Treated Biomedical Waste” is not biomedical waste, and imply that it can therefore be disposed of in a non-hazardous waste landfill, subject to certain conditions.

The issue of the disposal of “Treated Biomedical Waste” as non-hazardous waste was raised in the Canadian Institute for Environmental Law and Policy’s February 1998 report Hazardous Waste Management in Ontario. In that report, it was recommended that the Ministry provide its scientific and technological justifications of the environmental and health safety of this practice prior to its adoption. This recommendation has not been addressed within the materials provided through the Ministry’s EBR posting of this proposal.

Furthermore, the Ministry’s proposals in this regard are inconsistent with the “derived-from” rule adopted by the Ministry with respect to other hazardous wastes in November 2000.<sup>14</sup> Under this rule, once wastes are designated as hazardous, they cannot be re-defined and disposed of as non-hazardous as a result of treatment. The derived-from rule is intended to prevent the improper disposal of wastes that have been treated in some manner which escapes the technical definition of hazardous wastes, but which still pose potential risks to the environment or human health and safety.

In light of these considerations, the Ministry should make available for scientific review and public comment a statement of the environmental and health safety rationale for permitting the disposal of “Treated Biomedical Wastes” in non-hazardous waste landfills, prior to the adoption of provisions that would permit the disposal of derivatives of hazardous wastes as non-hazardous wastes.

#### **4. Proposal for Pre-Treatment Requirements for Hazardous Wastes Prior to Land Disposal – Discussion Paper (EBR Registry No.PA01E0027)**

In this discussion paper, the Ministry proposes to adopt the U.S Universal Treatment Standards (UTS) as the primary means of establishing pre-treatment standards for hazardous wastes prior to land disposal. As noted in the Ministry’s proposal, the principle of land disposal restrictions is to prohibit activities that involve placing untreated hazardous wastes in or on the land when better treatment or destruction alternatives exist. Through such restrictions hazardous wastes cannot be

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<sup>13</sup> See M.Winfield and H.Benevides, Drinking Water Protection in Ontario: A Comparison of Direct and Alternative Delivery Models (Issue Paper Prepared for Part II of the Walkerton Inquiry) (Ottawa: Pembina Institute, June 2001), Appendix 2.

<sup>14</sup> EBR Registry No. RA00E0002.

disposed of on land until the waste meets specific treatment standards to reduce the mobility or toxicity or its hazardous components.

The Environmental Commissioner and others have identified the absence of such standards as a major gap in Ontario's regulatory framework for hazardous waste management.<sup>15</sup> The Ministry has considered the adoption of such standards since the late 1980's,<sup>16</sup> but to date they have not been implemented.

The absence of land disposal restrictions has been identified as a major factor, if not the key factor, in the growth of hazardous waste imports into Ontario since 1994/95, when the *Resource Conservation and Recovery Act* (RCRA) land disposal restriction rules were finalized by the US Environmental Protection Agency.<sup>17</sup>

In addition to strengthening the protection of the health, safety and environment of Ontario residents, and reducing the inflow of US generated wastes for disposal into Ontario, the adoption of land disposal restrictions by Ontario would assist Canada in meeting its obligations under the *Basel Convention on the Transboundary Movement of Hazardous Wastes and Their Disposal* to ensure the environmentally sound management of all wastes entering Canada for disposal.

The Institute strongly supports rapid movement by the Ministry on this matter for these reasons. At the same time, the Institute notes that the Ministry needs to consider the upgrading of other aspects of Ontario's hazardous waste handling and disposal standards where they lag behind those in place in the United States. The absence of modern operating and emission standards for facilities burning hazardous wastes for destruction, or as fuel, are a particularly important gap in this regard. New standards for hazardous waste combustion facilities were adopted by the United States under the RCRA and *Clean Air Act* in July 1999.

## Conclusion

The Pembina Institute supports the Ministry's overall direction towards the strengthening of Ontario's rules for hazardous waste management, and congratulates the Ministry on the adoption of an annual waste generator registration requirement. The Institute strongly supports the Ministry's initiative to adopt land disposal restrictions with respect to hazardous wastes generated in Ontario or imported into the province for disposal, and encourages the Ministry to begin the modernization of other aspects of the province's regulatory framework for hazardous waste handling, treatment and disposal.

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<sup>15</sup> See for example, M.Winfield, Hazardous Waste Management in Ontario: A Report and Recommendations (Toronto: CIELAP, 1998).

<sup>16</sup> See Ontario Waste Management Corporation, Environmental Assessment for a Waste Management System (Toronto: OWMC, 1988) pg. 2-29.

<sup>17</sup> See M.Jacott, C.Reed, and M.Winfield, The Generation and Management of Hazardous Wastes and Transboundary Hazardous Waste Shipments between Mexico, Canada and the United States (Austin: Texas Centre for Policy Studies, April 2001).

The Institute supports the overall direction of the Ministry's proposals with respect to the management of biomedical wastes. However, the Institute is concerned regarding the Ministry's proposed abandonment of the derived-from principle with respect to the disposal of "Treated Biomedical Wastes," particularly in the absence of any information regarding the environmental and safety rationale for permitting the disposal of these wastes in non-hazardous waste landfills. In addition, the Ministry's proposal with respect to the disposal of biomedical wastes into sewage systems needs to address facilities that are now regulated outside of the *Ontario Water Resources Act*.

The Institute is seriously concerned by the Ministry's proposals regarding the destruction of PCB wastes now in storage in Ontario. Given the current lack of disposal capacity in Ontario, concerns regarding the adequacy of the environmental and safety review accompanying the approval of the existing and proposed facilities, and environmental and safety implications of the long distance transport of PCB wastes for disposal, we believe that implementation of the Ministry's proposals could actually place the health, safety and environment of Ontario residents, and those of other provinces, at greater risk than leaving these wastes in properly regulated storage, pending a thorough and timely public review of the province's destruction needs and options.

We would be pleased to respond to any questions that you may have regarding our comments in this matter.

Yours sincerely,

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Director, Environmental Governance.

Cc: The Hon. E.Witmer, Minister of the Environment (Ontario)  
The Hon. D.Anderson, Minister of the Environment (Canada)  
The Hon. J.Bradley, M.P.P., Liberal Environment Critic  
The Hon. M.Churley, M.P.P. N.D.P. Environment Critic.  
Gordon Miller, Environmental Commissioner for Ontario  
Keith West, Director, Waste Management Branch, Ministry of the Environment.