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CPAWS Wildlands League | Northwatch | The Pembina Institute
The Preservation of Agricultural Lands Society
The Provincial Council of Women Of Ontario | Toronto Environmental Alliance

September 18, 2006

Via Fax (416.325.4437) & E-Mail (adam.ciulini@ene.gov.on.ca)

Adam Ciulini, Team Leader
Waste Management Policy Branch, Ministry of the Environment
135 St. Clair Ave. W., Toronto, ON M4V 1P5

Dear Mr. Ciulini:

Re: Regulatory Amendments to Facilitate Waste Recycling, Use of Alternative Fuels and New and Emerging Waste Management Technologies (EBR Registry Number: RA06E0008)

Introduction

Sierra Legal Defence Fund, Canadian Environmental Law Association, Citizens' Network on Waste Management, CPAWS Wildlands League, Northwatch, The Pembina Institute, The Preservation of Agricultural Lands Society, The Provincial Council of Women of Ontario and Toronto Environmental Alliance write to provide our analysis and recommendations regarding the proposed Regulatory Amendments to Facilitate Waste Recycling, Use of Alternative Fuels and New and Emerging Waste Management Technologies (EBR Registry Number: RA06E0008) that were announced July 19, 2006, with comments due September 18, 2006.

We are very disappointed that the Minister of the Environment did not extend the comment period for this EBR Registry notice per our written request dated September 6, 2006. We strongly feel that additional time was needed for the public to make "informed comment" due to the complexity, level of public interest and timing of this EBR Registry notice. Fully understanding all of the implications of the six categories of regulatory and conceptual proposals within this EBR Registry notice takes a significant amount of time. Residents in Ontario are struggling to understand the repercussions of proposed energy from waste projects under the existing regulations, and required additional time to determine the broader implications of these proposed regulatory changes. Furthermore, notice of the proposals was posted such that the bulk of the comment period fell during the summer months of July and August. Given the timing and the short notice for the only public information session (held on August 22, 2006), many interested members of the public were not able to or found it very difficult to attend.

Given the limited amount of time to respond and in anticipation of further proposals in the future, our work on analysing the government's proposed changes to waste management regulation is ongoing. As such, we reserve the right to make additional submissions.

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General Comments

We support the overall objective of facilitating the 3R's (reducing, reusing and recycling materials) to maximize diversion and minimize residual waste. However the proposed regulatory changes, as currently drafted, do not adequately achieve this objective. There is no comprehensive waste management strategy that properly evaluates the waste stream and stresses each of the 3R's prior to making any disposal decisions. In the Ministry of the Environment (MOE) proposal there is an overemphasis on disposal and a weakening of government's oversight.

No Comprehensive Waste Management Strategy

The proposed regulatory reform is absent a clear overall waste management strategy. When asked, "Are you working from a strategic plan?" at the public information session held in Toronto, the response indicated that the direction for the MOE was to: facilitate waste diversion away from disposal and the better management of residual, streamline approval requirements for some recycling activities and encourage new technologies, and begin to discuss extended producer responsibility systems as potential for future regulation.

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Absent from the MOE's response to the question regarding their strategy is recognition of MOE's mandate to protecting the "quality of the natural environment so as to safeguard the ecosystem and human health." With respect to hazardous waste components, the emphasis needs to be on reductions at the source, pollution prevention and reduced use of toxic substances, not the facilitating the "recycling" of such wastes, a practice which can carry with it greater risks to the environment and public health and safety. MOE has the responsibility of ensuring that any proposed "streamlining" and "facilitating" of waste management does not infringe upon Ontarian's right to a healthful environment and is in line with MOE's mandate and Statement of Environmental Values (SEV).

The MOE's announced Waste Management Strategy on April 5, 2004 included three objectives: 60% waste diversion, improvements to environmental assessment and cooperation on environmental assessment with the federal government. On June 24, 2004, the Minister struck an Advisory Panel of experts to "look at approaches for improving the environmental assessment (EA) process for waste management facilities, transit and transportation projects, and clean energy facilities."¹ The EA Advisory Panel Report and recommendations were submitted on March 15, 2005, and on April 4, 2005 the MOE released the report to the public, inviting comment until July 4, 2005.² Notice was posted to the EBR Registry as "information" and thus the MOE is not required by law to consider the public's recommendations. MOE has not responded in a comprehensive way to the recommendations and public commentary. Announcements about waste management have been piecemeal: June 6, 2006 (proposed changes to EA without any details), June 9, 2006 (proposed regulation to require that Waste Diversion Ontario develop a waste diversion program for municipal hazardous or special waste) and September 10, 2006 (new recycling program for wine and spirit bottles) are the only public announcements we can find since the

¹ Ministry of the Environment. June 24, 2004. News Release. <www.ene.gov.on.ca/envision/news/2004/062403.htm>.

² Minister's Environmental Assessment Advisory Panel – Executive Group (EA Advisory Panel), Improving Environmental Assessment in Ontario: A Framework for Reform (March 2005). See EBR Registry Number XA04E0015 <www.ene.gov.on.ca/envregistry/023747ex.htm>.

close of public comment regarding the EA Advisory Panel Report. The announcement in 2004 and limited response to the EA Advisory Panel's recommendations are not a comprehensive response to the challenges of Ontario's current waste issues.

We do not have full information regarding the waste stream. We do not have a commitment to truly reducing and altering its composition prior to sorting out the disposal options. It is unclear how these waste management proposals are linked to *Waste Diversion Act, 2002*. Having some components proposed to be incorporated now, some anticipated in the future, and some just conceptual, does not meet the requirement for an overall, clear, comprehensive waste management strategy.

Recommendation 1: The Ministry of the Environment should develop an overall, clear, comprehensive waste management strategy, prior to implementing any waste management regulatory changes.

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Overemphasis on Disposal

There should be a focus on the reduction, reusing and recycling of waste materials before any consideration of disposal (landfill or incineration/thermal degradation). Their SEV commits the MOE to encouraging the use of the 3R's – reduction, reuse and recycling to divert materials from disposal. Without a comprehensive waste management strategy, it is unknown what efforts are being aimed at *reduction*. In 2002, Canada was producing 860 kilograms per capita of non-hazardous waste from households and industrial, commercial and institutional (IC&I) sources (excluding construction and demolition wastes).³ In 2005, the Ministry of the Environment estimates that 13.3 million tonnes of waste were generated by municipalities and IC&I sources.⁴ These numbers are staggering. Serious effort needs to be focussed on reducing the amount of waste generated.

Incineration and thermal degradation (with or without claims regarding energy recovery) are not diversion nor recovery, but disposal. The use of terms such as “energy from waste” and “diversion” to describe incineration and thermal degradation confuses the public. It should be made clear that incineration and thermal degradation are methods of waste disposal.

Recommendation 2: The Ministry of the Environment should, as part of the development of a comprehensive waste management strategy (see Recommendation 1), set equal priority on *reduction* of wastes generated in order to divert materials from disposal, as is the case for reuse and recycling.

³ Organisation for Economic Co-operation and Development (OECD). 2006. *OECD Factbook 2006 – Economic, Environmental and Social Statistics*. <www.sorceoecd.org/factbook>.

⁴ Ministry of the Environment. August 31, 2006. How Ontario Manages its Waste: The Basic Facts and Figures. <www.ene.gov.on.ca/envision/news/2006/083101.htm>.

Weakening of Government's Oversight

It is not clear that there is a need for “fast tracking” particular projects. Proper environmental assessment requires that there be a demonstrated need for any particular project. Full environmental assessment also requires consideration of the alternatives to the proposed project. “Scoped” environmental assessments are unacceptable. These amendments (and those anticipated) are not consistent with the recommendations of the EA Advisory Panel Report.

The proposed regulatory amendments will weaken the government's oversight of recycling activities while promoting the burning and/or thermal degradation of municipal waste by exempting proposed “pilot” projects from an environmental assessment or hearing for a period of up to five years. A public review such as environmental assessment is essential to address such issues as a project's need, alternatives and environmental impact.

The EBR Registry notice states that the regulatory amendments will “facilitate efforts of municipalities, waste generators and waste managers to divert more wastes from disposal and to better manage residual waste.” In our opinion by “facilitate” the MOE means remove regulatory oversights such as certificates of approval (e.g. for intermediate recycling sites and “beneficial use” of asphalt, glass and shingles) and public review processes like environmental hearings and assessments (e.g. pilot project incinerators/thermal degradation units). Exemptions from public review processes are contrary to the MOE's SEV in which the MOE claims it “is committed to public participation and will foster an open and consultative process in the implementation of the SEV.”⁵

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Recommendation 3: The Ministry of the Environment should ensure adequate regulatory oversight and public review processes in any waste management regulatory changes, consistent with MOE's Statement of Environmental Values.

⁵ Ministry of the Environment. Statement of Environmental Values.
<www.ene.gov.on.ca/envision/env_reg/ebr/english/SEVs/moe.htm>.

Specific Comments

The EBR Registry notice breaks up the activities proposed as part of the regulatory amendments to the *Environmental Protection Act* (EPA) and the *Environmental Assessment Act* (EAA) into six components. In the remainder of our submission, we have analysed the governments stated objectives and our concerns within each of these components.

1) Waste Biomass Used to Produce Ethanol and Biodiesel

Government Proposal

The government indicates that the proposals regarding ethanol and biodiesel are intended to remove the waste approval requirements, but not other environmental permitting requirements (such as the requirement for a certificate of approval for discharge to air under the *EPA*). Ethanol and biodiesel are renewable sources of energy and are considered to be better than non-renewable sources of energy. Ethanol can be made from both waste and non-waste material. Waste biomass is indicated as including agricultural residues, waste from forestry operations and food processing wastes. It is suggested that the production of energy from waste biomass will have a neutral impact on greenhouse gas emissions.

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Our Analysis

As with the following section on use of woodwaste as alternative fuel, much more thought must be given to the definitions of the waste materials (proposed amendments to Section 1(3) of Regulation 347). In particular, the definitions of waste biomass as it pertains to “(a) waste from harvesting or processing agricultural products or forestry products” and the definition of “(f) woodwaste” are inadequate.

It is unclear how sections 1(3)(a) and 1(3)(f) relate to each other. Is woodwaste different from waste from harvesting forest products, or is it other waste such as waste produced at the mill, if so it should be explained. Furthermore how is it waste and thus not appropriate for use in the manufacturing of other forest products?

From an ecological perspective, there is no woodwaste in a harvesting operation; as noted below forest biomass that is left behind after a forestry operation serves important biological and ecological functions. If the amended definition intends to capture the waste from milling and processing purposes explicitly, it should state so explicitly.

Recommendation 4: The Ministry of the Environment should propose a clear definition of woodwaste, which should be put forward for public comment prior to finalizing any waste management regulatory changes.

We are very concerned about the proposed use of waste biomass from the forest harvesting operations. The “disposal” of biomass within the cut areas is important for returning nutrients to the soil, providing micro-sites for regeneration and providing horizontal habitat structure for wildlife after tree harvesting.

Recommendation 5: The Ministry of the Environment should amend the definition of waste materials to *exclude* biomass from forest harvesting activities.

2) Use of Woodwaste as Alternative Fuel

Government Proposal

There is currently an exemption for woodwaste fuel, whereby sites that combust up to 100 tonnes per day are exempt from waste approval requirements under EPA. The government proposes to remove the maximum limit on combustion from the exemption. The government intends to keep the 500 m³/day limit on storage of woodwaste. All other approvals (such as a certificate of approval for air emissions) remain. And, if the facilities are using woodwaste as fuel to produce electricity, these sites would continue to be subject to Regulation 116/01 under the *Environmental Assessment Act*.

Our Analysis

The proposal to remove the maximum limit of 100 tonnes per day on the exemption from waste regulatory approval of a woodwaste combustor site is problematic. In our opinion more wood and woody debris needs to be left on cutovers and clearcuts for forest regeneration and habitat reasons. We believe the exemption will lead to more scavenging of forest biomass for use as fuel and thus reductions in valuable nutrients and structural diversity left on cutovers. Ontario's silvicultural guides for forest management recognize the important role of downed woody debris and encourages that both fine and coarse woody debris remain on the cutovers, particularly on sites sensitive to nutrient loss. According to the Ontario's *Forest Management Guide for Natural Disturbance Pattern Emulation* published by the Ministry of Natural Resources the provision of downed wood debris is important to "return nutrients to the soil, provide micro-sites for regeneration and to provide horizontal habitat structure for wildlife after harvest."

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We do not support the removal of the 100 tonne per day limit on exemptions for woodwaste combustor sites and we recommend that use of wood as fuel be limited to woodwaste from mills and not woodwaste from cutovers or forest management operations until a clear policy is developed on the use of forest biomass, as described further below. We also recommend that all woodwaste should first be assessed for possible use in the production of other wood or forest based products before being utilized as a fuel.

These policy amendments of the MOE cannot proceed in a silo; while not clearly stated, there is a question raised by the EBR Registry notice and the proposed regulatory amendment as to whether the Government's interest is in facilitating the utilization of woodwaste as an alternative fuel, or the use of forest biomass much more broadly. There are strong and well grounded concerns in the environmental community and the broader public with respect to the latter proposition. Throughout northern Ontario there are impending wood supply shortages (albeit these shortages will be felt more sharply in some species groups than others). At the same time, there is a trend of forest industry consolidation with accompanying mill closures. Of considerable concern to the forest dependent communities of the region and to the environmental community are the potential consequences of introducing and/or increasing new demands for forest fibre, such as could flow from the promotion of "woodwaste" as an alternative fuel.

As indicated above in Recommendation 4, a clear definition of woodwaste should be put forward for public comment prior to finalizing any regulatory amendments.

Recommendation 6: Before any waste management regulatory changes are finalised, the Ministry of the Environment should develop a clear policy on the utilization of forest biomass for fuel, which must address / include:

- **clear definitions**
- **consideration of how the increased demand for fibre would affect**
 - **the ecological health of the forest**
 - **the conventional forest industries**
 - **new and emerging forest-dependent industries, such as non-timber forest product gatherers and producers**
 - **the tourism and recreational industries**
 - **other forest uses and forest users**
- **clear identification of how this fibre stream would be integrated within the existing forest management regime, including the Ministry of Natural Resources silvicultural guidance**

3) Pilot and Demonstration Sites for New and Emerging Waste Management Technologies

Government Proposal

The government proposes an “alternative approvals process” for new and emerging waste management technologies in order to encourage their development. The different technologies that fall under the definition of “thermal degradation” (i.e. incineration, gasification, pyrolysis and plasma arc treatment) would all follow this alternative approvals process. The process is “streamlined” in order to assist proponents in obtaining information that will allow future approvals and acceptance of the technology.

Currently, Ontario’s environmental approvals process does not distinguish between pilot/demonstration versus “full-scale” operations, nor between proven and unproven technologies. The pilot/demonstration proposals will be small (with a maximum capacity of 75 tonnes per day municipal waste) and last for three years (with the possibility of extending to five) at which time the exemption will expire and approval must be sought. Finally, “The ministry proposes that hearings for pilot and demonstration projects be discretionary rather than mandatory as may currently be the case.” In response to the question “what would trigger the discretionary hearing?” the answer from government (at the public info session was) “same factors that are currently considered: if municipality is concerned, public opposition, etc.”

Our Analysis

Unless confined to truly just residual waste (which is what is left after best practices in recycling and composting) we are concerned that pilot projects will undermine efforts to divert waste from disposal through recycling and composting.

Ontario has a 60% diversion goal for the end of 2008. The last reported rate of diversion by the city of Toronto, which is considered to be among one of the highest southern Ontario municipalities, was 40%.⁶ In a recent presentation the MOE reported a province wide

⁶ The Ministry of the Environment’s Fact Sheet (*supra*, note 4) stated a diversion rate in 2005 of 40% for Toronto.

diversion rate of just 25%.⁷ Given the province of Ontario is not even half way to the 60% diversion goal, the focus of the government's efforts should be on how to improve diversion province wide rather than how to facilitate disposal.

It is very likely that thermal degradation pilot projects will destroy materials that could otherwise be reused, recycled or composted and undermine efforts and desire to reduce and divert waste. This results in the greater use of raw resources such as trees, oil and minerals to manufacture replacement products at a much greater ecological and financial cost.

Net energy flows from thermal degradation projects are uncertain. Life cycle assessments show that incineration or thermal degradation even with energy recovery (energy-from-waste) consumes more energy than recycling.^{8,9} Studies also show that a variety of environmental impacts including global warming, acidification, eutrophication, emission of criteria air pollutants, and human and ecological toxicity are greater with incineration and thermal degradation than with recycling.

The MOE proposal states that "new and emerging waste management technologies, including EFW technologies such as gasification and plasma arc, are operating in other jurisdictions; however, facilities are generally small scale and are not well proven for use with municipal waste." Given that thermal degradation technologies have not been demonstrated with respect to municipal solid waste, extra scrutiny is recommended rather than the lightening the approval requirements.

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Recommendation 7: The Ministry of the Environment should ensure that thermal degradation technologies that have not been proven for use with municipal solid waste be given extra regulatory scrutiny.

Although touted as having low emissions (less than traditional mass burn incinerators) actual thermal degradation facilities have not always lived up to that claim (e.g. projects in Karlsruhe Germany, Romoland and Red Bluff California, Wollongong New South Wales Australia).¹⁰ Emissions reported include dioxins and furans, hexachlorobenzenes, polycyclic aromatic hydrocarbons, heavy metals, oxides of nitrogen and hydrogen chloride. Furthermore, several proposals for such facilities have been withdrawn or did not receive final approval when proponents could not provide proof regarding the emissions claims they made (e.g. projects in Hanford in San Joaquin Valley California, Chowchilla California, Alamenda California, Sierra Vista Arizona, and Red Bluff California).¹¹ Several of the above mentioned thermal degradation projects were also prone to technical problems and breakdowns.

⁷ Ministry of the Environment. September 14th, 2006. Waste Management Initiatives presentation at the Ontario Bar Association.

⁸ Jeffery Morris. 2004. Comparative LCAs for Curbside Recycling Versus Either Landfilling or Incineration with Energy Recovery. Int J. LCA 2004.

⁹ Sound Resources Management Group Inc. 2004. Comparison of Environmental Burdens. Recycling, Disposal with Energy Recovery from Landfill Gases, and Disposal via Hypothetical Waste to Energy Incineration.

¹⁰ Greenaction and GAIA. April 2006. Incinerators in Disguise. Case Studies of Gasification, Pyrolysis, and Plasma in Europe, Asia and the United States.

¹¹ *Ibid.*

The pilot project proposed by EnQuest Power at the landfill site on the Fifth Line in Sault Ste. Marie is an example of why such projects require extra scrutiny (not a streamlined process with discretionary public hearings). The EnQuest proposal provided no information to the public on which the approvals could be assessed. The EnQuest project proposes to use an experimental technology. There was no analysis provided to the public as to the content of the various waste streams and the character of the anticipated effluent and emissions. The proposal provides for *addition* of contaminants to the waste stream in order to test the technology. There is also a suggestion on the proponent's website that the intent is to operate beyond the 12-month pilot project.

The possibility of "fly by night" prospects is curtailed with a full and individual environmental assessment. The "turnover" from pilot/demonstration project to full approval would require a certificate of approval. We are concerned that, given the length of a pilot project, a proponent could apply for approval during the exemption period and obtain approval by the end. Having allowed the investment in the pilot/demonstration project, will the government have the will to turn down the request for a "waste management" certificate of approval?

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Pilot/demonstration projects can have serious impacts on a community because:

- they rarely have any data from operations elsewhere and, therefore, there is no satisfactory way to know that the potential impacts will not be serious;
- they can operate for five years, which means that negative impacts can build up;
- it usually takes a long time for test results to come in and the facility is usually allowed to continue operating while waiting for test results. This means that even if testing shows serious problems, a seriously polluting facility could continue operating for a substantial amount of time.

As has been revealed in the EnQuest project, it is virtually impossible for the public to make cogent comments on EBR Registry notices on these because the applications are so sketchy and not supported by data. The MOE faces the same limitations. Therefore, the only way to have a real review before deciding on the permit is by requiring a hearing (not discretionary) so that there can be a thorough questioning which pulls out the information – if it exists – from the applicant.

Finally, having this approval usually makes it easier to get a permit in the future, after the demonstration. A new regulation for EFW projects currently being developed by the Ministry would institutionalize this by exempting them from a full EA.

Volume I of the EA Advisory Panel Report recommended that the current EAA exemption for "research undertakings" be considerably tightened up by imposing stringent operational criteria (i.e. cost, scale, duration, etc) for such exempted undertakings.¹² This broad recommendation was not limited to the waste sector, but was generally intended to apply to other sectors (i.e. energy, transportation, etc) that would normally be subject to the EA Act. In making this recommendation, the EA Advisory Panel indicated that the overall intent was

¹² See EA Advisory Panel Report, *supra*, note 2, page 123 (of Volume I).
<www.ene.gov.on.ca/envision/env_reg/er/documents/2004/XA04E0015%20volume%201.pdf>.

to facilitate or expedite the development of “green” technologies (rather than simply provide a wholesale exemption for smaller variations of currently available waste disposal technologies).

The MOE’s current proposal for pilot/demonstration sites for new/emerging waste management technologies (including EFWs) appears to adopt the EA Advisory Panel’s suggestion that the project life of exempted undertakings should be 3 years. However, the EA Advisory Panel did NOT recommend that this duration could be extended to 5 years upon application by the proponent, as proposed by MOE.

Similarly, the EA Advisory Panel did NOT specify that the maximum capacity of exempted undertakings should be 75 tonnes/day of municipal waste. This proposed capacity seems to have originated with the MOE, but no rationale has been provided to demonstrate the appropriateness or safety of this suggested threshold.

In addition, the EA Advisory Panel did NOT stipulate that otherwise mandatory EPA hearings should become discretionary. Again, this appears to be solely an MOE proposal, but no criteria have been suggested by MOE to provide direction or clarity as to when the Director may – or may not – elect to send an exempted pilot project to an EPA hearing.

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The MOE’s proposal lacks details with respect to the MOE’s approval and oversight of pilot and demonstration projects and fails to address many questions. For example, what are the criteria for determine a project is a pilot or demonstration? Will the proponent be required to demonstrate the need for any particular project? Will the proponent be required to consider alternatives to the proposed project? Will the MOE permit multiple pilot or demonstration project using the same technology when really all that is needed is one to test performance with respect to municipal solid waste? At what point does a pilot or demonstration project stop being a pilot or demonstration project? Will there be full transparency with respect to the operations and monitoring of the pilot and demonstration projects including the results of all emissions and residuals testing?

As stated above given these are unproven technologies with respect to municipal solid waste, extra scrutiny is needed before MOE approves any pilot projects.

The MOE should consider forming an advisory committee to look at these new technologies in a generic manner. The committee could examine the viability of these technologies in relation to municipal solid waste, their environmental performance, and their associated energy flows and green house gas emissions. The findings of the committee should be publicly reported and be the basis for any proposed program to test these new technologies.

Recommendation 8: The Ministry of the Environment should consider forming an advisory committee to look at any new or emerging technologies in a generic manner.

It would be premature with out this information to recommend exemptions of any pilot or demonstration projects.

Recommendation 9: At a minimum, the Ministry of the Environment should carefully reconsider the proposed scope and nature of this proposal. The MOE should downsize the scale/type of research undertakings/pilot projects that might be eligible for *Environmental Assessment Act* exemption, as per the EA Advisory Panel suggestions.

MOE has stated it is committed to public participation and in so has established triggers for mandatory EPA hearings. Pilot or demonstration projects should not be exempt from mandatory EPA hearings. An EPA hearing is the only means for the public and other stakeholders to have their concerns and questions addressed if an EA is not required.

Recommendation 10: The Ministry of the Environment should ensure that pilot and demonstration projects are *not* exempt from mandatory hearings under the *Environmental Protection Act*.

4) Production and Use of Recyclable Materials Recovered from Waste

Government Proposal

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The intent of the proposal is to provide policy support for recycling. There will be an exemption from the EPA approvals for waste management, but other approvals will continue to be required. The current regulatory regime requires approval for waste management when materials are being stored, processed or transferred at an intermediate site prior to recycling. Similarly, manufacturers that are processing waste prior to using them in production need waste management approval. These requirements are considered to discourage recycling that required intermediate storage or pre-processing. The proposed amendments will list the following as “recyclable materials”: waste paint or waste coatings recycled into paint, printed circuit boards recycled by smelters, emission control dust recycled by smelters, spent activated carbon recycled by being reactivated, metal bearing waste recycled by smelters, and crumb rubber recycled into products (not fuels). Furthermore, the proposed amendments will exempt the collection, storage and transfer systems from EPA waste management approvals for the following wastes: batteries, mercury containing devices and materials (e.g. electrical switches, thermostats, fluorescent lamps), waste electrical and electronic equipment (WEEE) (intact or disassembled) and printed circuit boards.

The MOE also proposes to amend EPA regulations “to exempt sites used for dismantling intact WEEE so that reusable components can be salvaged and non-reusable components can be sent to a processor for recovery of materials for recycling.”

According to the government presentation at the public session, “The rules on storage have been taken from other protocols that have been around for years. There has been some minor tweaking to those protocols, but the amendments are basically the same protocols.”

Our Analysis

MOE’s proposals include modifications to the definition of recyclable materials with intention of expanding the scope of activities that would qualify for exemptions from Part V of the EPA as “recycling.” The ministry also proposes to exempt the “recycling” of a number of specific wastes from the requirements of Part V of the EPA. These wastes include paint and coatings, printer circuit boards, emission control dust, spent activated charcoal, metal bearing waste, and crumb rubber. Finally the ministry proposes to exempt collection, storage and transfer systems for recycling batteries, mercury containing equipment, waste electrical and electronic equipment (WEEE) and printer circuit boards from the requirements of Part V of the EPA.

These proposals revive many ideas that were advanced as part of the previous government's 1996 regulatory review, and were subsequently abandoned by that government. The proposals were subject to extensive criticism then as responding to special interest lobbying as opposed to any overall policy framework and presenting significant threats not only to the environment, but also to public health and safety. These concerns remain as valid now as they were then. These proposals should not be adopted for these reasons.

The current definition of "recycling" which includes requirements that wastes be shipped directly to recycling sites, and that materials be "wholly" used contains these requirements for a number of reasons. These include:

- The long and well-documented history in Ontario of the operation of illegal waste handling and storage facilities under the guise of "recycling." In many cases these facilities have caused significant environmental damage, and have had to be remediated at public expense.
- A recognition that waste "recycling" operations may require the extensive handling of hazardous materials, with the risk of spills, accidents and other incidents. In some cases, "recycling" wastes may result in the generation of even more hazardous by-products that require careful management.
- Recognition that even legitimate recycling businesses may encounter difficulties in processing or finding markets for materials, with the result that they end up functioning as unregulated *de facto* storage or even disposal facilities, with the attendant risks of fire, accidents and spills.
- Recognition that major fires and other incidents have occurred at facilities operating under the existing "recycling" exemption, including the 1997 Plastimet fire in Hamilton, and 2006 fire in Amherstberg.

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The proposals to exempt the "recycling" of specific waste streams (paint, circuit boards, emission control dust, spent activated carbon, metal bearing waste and crumb rubber) from Part V of the EPA raise a number of serious concerns. The proposals appear to be the result of special interest lobbying, as opposed to any policy based rationale for such exemptions. There are no criteria presented as to why these materials should be exempted from the requirements of Part V relative to other materials, and no specific evidence presented as to why the current requirements present barriers to their recycling. Indeed we note that "recycling" activities with respect to a number of these waste streams are already taking place in Ontario, with the implication that the current requirements do not present significant barriers to these activities.

All of the material streams in question are likely to contain a wide range of very hazardous materials, particularly heavy metals, and therefore require careful handling, transportation and storage, as they present significant risks to public health, safety and the environment. The proposed exemptions would imply the loss of the ministry's ability to track the fate of these wastes, or even identify facilities engaged in their handling or "recycling." In addition, "recycling" of these materials is likely to create a wide range of potentially hazardous by-products that will also require careful management. Wholesale exemptions from the requirements of Part V of the EPA of recycling activities involving these materials cannot be supported for these reasons.

The ministry's proposal to exempt collection, storage and transfer systems for recycling batteries, mercury containing equipment, waste electrical and electronic equipment (WEEE) and printed circuit boards again raise a number of serious questions. A more general exemption for WEEE dismantling sites is also proposed. All of these waste streams contain a wide range of extremely hazardous materials, which require careful management to ensure public safety.

Recycling programs exist for a number of these waste streams already, and no evidence has been presented by the ministry that existing requirements present a serious barrier to the establishment of recycling programs for these materials. The proposed exemptions would imply a loss of the ministry's capacity to track the fate of materials in these waste streams or even identify facilities engaged in their storage or transfer. WEEE dismantling sites have been identified, in particular, as presenting significant risks related to the handling and storage of the wide range of hazardous materials, particularly heavy metals and a wide range of hazardous chemical substances.

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More generally, we believe that the Ministry's proposals place an excessive emphasis on facilitating recycling, particularly with respect to hazardous wastes, and opposed to waste reduction and pollution prevention based approaches. The ministry's apparent assumption that hazardous waste recycling is a safe and environmentally benign activity that should be facilitated through weaker regulator requirements than those applied to waste disposal is open to serious challenge.¹³ The risks associated with hazardous waste recycling activities have been demonstrated through a range of serious incidents in Canada and the United States over the past thirty years. The ministry needs to focus on source reduction and pollution prevention rather the facilitation of hazardous waste recycling for these reasons.

Recommendation 11: The Ministry of the Environment should retain the current definition of "recycling" in Regulation 347 under the *Environmental Protection Act*.

Recommendation 12: The proposed exemptions from Part V of the EPA for "recycling" activities for specific waste streams should *not* be adopted. The Ministry of the Environment should develop a policy framework and criteria for assessment of requests for such exemptions in the future.

Recommendation 13: The Ministry of the Environment should ensure that any exemptions granted from EPA Part V for "recycling" activities are subject to conditions regarding the safe storage and handling of materials, fire and spill prevention, staff training, facility location, and reporting on the quantities of materials received, processed, stored and their fate, as well as the production and fate of by-products and wastes.

Recommendation 14: The Ministry of the Environment should adopt a strategy for hazardous waste reduction at source, including pollution prevention planning and toxics use reduction legislation, rather than attempting to facilitate hazardous waste "recycling."

¹³ See generally M. Winfield. 1998. *Hazardous Waste Management in Ontario* (CIELAP). Recommendation IV-20 suggested that the existing exemption for hazwaste "recycling" be withdrawn.

5) Beneficial Use of Wastes

Government Proposal

The MOE currently requires approvals for any “placement of waste materials on land”. In some cases, it is felt that the “placement” is not “disposal but for some beneficial purpose that uses the waste.” The MOE proposes to exempt “beneficial uses” of waste from selected EPA approvals for the following wastes: asphalt shingles, asphalt and glass.

Our Analysis

Exempting glass will result in downcycling instead of recycling.

Recycling means taking a used material and making the same type of product out of it. For example, making a bottle out of recycled bottles. Downcycling means taking an item and making a use of it that is of inferior value. Downcycling results in more loss of resource value. Therefore, this approach should not be encouraged relative to recycling.

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Exempting waste glass “placement” on land from EPA approvals will be contrary to the Premier’s announcement last week regarding wine and spirit recycling. The proposed LCBO deposit-refund system is aimed at both a higher recovery rate and higher quality glass so that it can be reused – not downcycled.

Recommendation 15: The Ministry of the Environment should exclude waste glass from the proposed “beneficial use” exemptions.

Recommendation 16: The Ministry of the Environment should ensure that all exemptions for “beneficial use” guarantee that the land application of the waste material is not “downcycling” and does not harm the environment.

6) Extended Producer Responsibility Systems

Government Proposal

At this point, the MOE is proposing future regulatory changes that will be based on the principle of extended producer responsibility. The MOE hopes to encourage producers to get involved with the management of their wastes by providing a simpler regulatory mechanism for extended producer responsibility systems, whether developed voluntarily or under the *Waste Diversion Act, 2002*.

Our Analysis

As discussed earlier, we feel that any regulatory change proposed should be a component of a clear, complete, comprehensive waste management strategy. According to the OECD, the most important considerations in designing an extended producer responsibility system is the identification and establishment of policy goals and programme objectives, which are

directly linked to specific environmental improvements.¹⁴ Given the lack of a comprehensive waste management strategy, moving ahead with this conceptual regulation is premature.

Recommendation 17: Once a comprehensive waste management strategy is developed (per Recommendations 1 and 2), the Ministry of the Environment should ensure that any proposed program (such as extended producer responsibility systems) be the subject of a more focussed and extensive public consultation.

Recommendation 18: The Ministry of the Environment should ensure that future EBR Registry notice about extended producer responsibility systems incorporates any comments received from this conceptual section of the EBR Registry notice and results from the development of a detailed proposal – including case studies, scenarios and any proposed regulatory changes with supporting rationale.

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Summary and Recommendations

We support the overall objective of facilitating the 3R's (reducing, reusing and recycling materials) to maximize diversion and minimize residual waste. However the proposed regulatory changes, as currently drafted, do not adequately achieve this objective. In the proposal there is an overemphasis on disposal and a weakening of government's oversight. We do not have full information regarding the waste stream. We do not have a commitment to truly reducing and altering its composition prior to sorting out the disposal options. It is unclear how the proposal is linked to *Waste Diversion Act, 2002*. Having some components proposed to be incorporated now, some anticipated in the future, and some just conceptual, does not meet the requirement for an overall, clear, comprehensive waste management strategy. Without such a strategy it is not possible to properly assess the government's proposals. As such, we make three general recommendations, reproduced below for ease of reference.

Recommendation 1: The Ministry of the Environment should develop an overall, clear, comprehensive waste management strategy, prior to implementing any waste management regulatory changes.

Recommendation 2: The Ministry of the Environment should, as part of the development of a comprehensive waste management strategy (see Recommendation 1), set equal priority on *reduction* of wastes generated in order to divert materials from disposal, as is the case for reuse and recycling.

Recommendation 3: The Ministry of the Environment should ensure adequate regulatory oversight and public review processes in any waste management regulatory changes, consistent with MOE's Statement of Environmental Values.

¹⁴ Organisation for Economic Co-operation and Development (OECD). 2001. *Extended Producer Responsibility: A Guidance Manual For Governments*. <213.253.134.29/oced/pdfs/browseit/9701041E.PDF>.

Should the MOE continue to implement changes with respect to waste management without first preparing a comprehensive waste management strategy, we have provided some additional recommendations that we hope will strengthen the regulatory amendments as proposed. Recommendations 4-18 are reproduced below for ease of reference.

Recommendation 4: The Ministry of the Environment should propose a clear definition of woodwaste, which should be put forward for public comment prior to finalizing any waste management regulatory changes.

Recommendation 5: The Ministry of the Environment should amend the definition of waste materials to *exclude* biomass from forest harvesting activities.

Recommendation 6: The Ministry of the Environment should develop a clear policy on the utilization of forest biomass for fuel, which must address / include:

- clear definitions
- consideration of how the increased demand for fibre would affect_
 - the ecological health of the forest
 - the conventional forest industries
 - new and emerging forest-dependent industries, such as non-timber forest product gatherers and producers
 - the tourism and recreational industries
 - other forest uses and forest users
- clear identification of how this fibre stream would be integrated within the existing forest management regime, including the Ministry of Natural Resources silvicultural guidance

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Recommendation 7: The Ministry of the Environment should ensure that thermal degradation technologies that have not been proven for use with municipal solid waste be given extra regulatory scrutiny.

Recommendation 8: The Ministry of the Environment should consider forming an advisory committee to look at any new or emerging technologies in a generic manner.

Recommendation 9: At a minimum, the Ministry of the Environment should carefully reconsider the proposed scope and nature of this proposal. The MOE should downsize the scale/type of research undertakings/pilot projects that might be eligible for *Environmental Assessment Act* exemption, as per the EA Advisory Panel suggestions.

Recommendation 10: The Ministry of the Environment should ensure that pilot and demonstration projects are *not* exempt from mandatory hearings under the *Environmental Protection Act*.

Recommendation 11: The Ministry of the Environment should retain the current definition of “recycling” in Regulation 347 under the *Environmental Protection Act*.

Recommendation 12: The proposed exemptions from Part V of the EPA for “recycling” activities for specific waste streams should *not* be adopted. The Ministry of the Environment should develop a policy framework and criteria for assessment of requests for such exemptions in the future.

Recommendation 13: The Ministry of the Environment should ensure that any exemptions granted from EPA Part V for “recycling” activities are subject to conditions regarding the safe storage and handling of materials, fire and spill prevention, staff training, facility location, and reporting on the quantities of materials received, processed, stored and their fate, as well as the production and fate of by-products and wastes.

Recommendation 14: The Ministry of the Environment should adopt a strategy for hazardous waste reduction at source, including pollution prevention planning and toxics use reduction legislation, rather than attempting to facilitate hazardous waste “recycling.”

Recommendation 15: The Ministry of the Environment should exclude waste glass from the proposed “beneficial use” exemptions.

Recommendation 16: The Ministry of the Environment should ensure that all exemptions for “beneficial use” guarantee that the land application of the waste material is not “downcycling” and does not harm the environment.

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Recommendation 18: The Ministry of the Environment should ensure that future EBR Registry notice about extended producer responsibility systems incorporates any comments received from this conceptual section of the EBR Registry notice and results from the development of a detailed proposal – including case studies, scenarios and any proposed regulatory changes with supporting rationale.

