

Comments on *Proposed CEPA Export and Import of Hazard Wastes and Hazardous Recyclable Materials Regulations – Discussion Paper.*

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April 2002

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Introduction

This commentary, prepared for the Toxics Caucus of the Canadian Environment Network, reviews Environment Canada's January 2002 discussion paper on the proposed CEPA Export and Import of Hazardous Waste and Hazardous Recyclable Materials Regulations. The proposed regulations would implement and operationalize provisions added to the waste import and export provisions of CEPA through CEPA 1999,¹ particularly with respect to ensuring the environmentally sound management of wastes imported into Canada, and the establishment of waste reduction planning requirements for Canadian hazardous waste exporters.

In addition, the proposed regulations are intended to address the dramatic increase in hazardous waste imports into Canada from the United for disposal, rising from 95,806 tonnes in 1993 to 392,205 tonnes in 1999.² The regulations also have important implications for the fulfillment of Canada's international obligations under the Basel Convention on the Transboundary Movement of Hazardous Wastes and the Stockholm Convention on Persistent Organic Pollutants.

In this context, the reduction of the transboundary traffic in hazardous wastes, especially for purpose of avoiding more stringent disposal and liability standards, and the promotion of the reduction of waste generation at source, need to be the central goals of the regulations.

The proposed regulations would introduce a number of positive changes the federal hazardous waste regime, including the introduction of standards for the environmentally sound management of wastes. However, a number of significant gaps and sources of concern exist within Environment Canada's January 2002 proposals. In particular, the Department's proposals continue in the direction of "de-coupling" the definitions of hazardous wastes and hazardous recyclable materials, and the adoption of less stringent requirements with respect to the

¹ CEPA 1999, Part 7, Division 8.

² See M.Jacott, C.Reed, and M.Winfield, The Transboundary Movement of Hazardous Wastes in Canada the United States and Mexico, 1990-2000 (Austin: Texas Centre for Policy Studies, April 2001), Table 39, pg.49.

handling of the latter. This is despite a long history of problems associated with hazardous waste “recycling” facilities. The department also proposes to introduce provisions for allowing exemptions from the requirements of the regulations on the basis of the provision of “equivalent levels of safety.” The Department has yet to provide a clear and compelling rationale for such provisions.

In addition, the Department places an excessive emphasis on management processes, such as the establishment of environmental management systems, in its approach to the definition of environmentally sound management. At the same time, it fails to address gaps in Canada’s environmental protection requirements relative to the United States that have been identified as key factors in the growth of US waste imports into Canada since the early 1990s, such as restrictions on the land disposal of untreated wastes.

The Department’s proposals also fail to address important aspects of Canada’s obligations under the Stockholm Convention on Persistent Organic Pollutants (POPs). In particular, the proposed regulations need to reflect the Convention’s prohibition of transboundary movements of POPs for recycling, reuse or recovery, or for disposal through methods, such as incineration, which will result in the generation of POPs themselves.

In addition, the amendments to the Basel Convention banning exports of wastes to non-Organization for Economic Cooperation and Development countries for final disposal, recycling or recovery also remain unaddressed. This is despite repeated decisions by the Parties to the Convention urging all Parties that had not already done so to ratify the Basel Ban Amendment.

A brief commentary on Environment Canada’s regulatory proposals regarding hazardous waste management by federal institutions and on federal and aboriginal lands is included in Appendix 1 of this document.

Parts I and 2: Definitions and Scope of Coverage

The Department’s proposals with respect to definitions and the scope of coverage of the regulations reflect continuing debates regarding the definitions of “waste,” “recyclable materials” and “products.” The difficulties associated with resolving these debates reinforce the consideration that in the longer term, the focus of these types of regulations needs to shift from regulating hazardous wastes and recyclables to regulating the handling and disposal of hazardous materials. This would facilitate the development of regulatory system that covers all aspects of the life cycle of materials that pose risks to human health and safety, and the environment.

In this context, serious concerns exist regarding the Department’s continuing movement towards the “decoupling” of the definitions of hazardous wastes and hazardous recyclable materials, with the implication of reduced regulatory

requirements for recyclable materials. This is reflected in the Department's proposals regarding insurance requirements in the handling of recyclables (7.2), and increased low-quantity exemption thresholds for hazardous recyclable materials (3.2).

Many of the most serious problems involving the handling and disposal of hazardous wastes in Canada and the United States have involved "recycling" rather than disposal facilities. In some cases, these situations have resulted in significant risks to public health and safety and the environment, and major site contamination situations that have had to be remediated at taxpayers' expense.³ Indeed, it has been estimated, on the basis of survey research, that in the United States 11% of Superfund hazardous waste sites requiring clean-up derived from recycling operations.⁴

Hazardous waste "recycling" operations need to be subject regulatory oversight which is at least as stringent as that applied to storage, treatment and disposal activities. In fact, in some cases, more stringent requirements may be appropriate, given that recycling operations may store significant quantities of materials on site, and may handle and process wastes more extensively than disposal sites. In general efforts to promote hazardous materials recycling should not occur at the expense of increased risk to public health and safety and the environment, or deflect efforts from the primary goal of waste reduction at source.

Recommendations

1. *Materials covered by the regulations should be defined on the basis of their intrinsic hazardous characteristics rather than their proposed fate (i.e. disposal or recycling).*
2. *Hazardous waste 'recycling' operations should be subject to regulatory requirements that are at least as stringent as those applicable to disposal facilities. In some cases more stringent requirements may be appropriate.*

2.1.2. Hazard Definition

Hazard Characteristics – Class 9 Environmentally Hazardous Wastes

The department proposes to define Class 9 wastes in two ways: a leachate test on an expanded list of hazard constituents, based on the 1996 *Canadian*

³ See, for example, *Offences Against the Environment: Environmental Convictions 1992* (Toronto: Ontario Ministry of the Environment, 1993) pg.7-8 Re: Varnicolor Chemical Ltd. See also Silicon Valley Toxics Coalition et.al. *Exporting Harm: The High-Tech Trashing of Asia*" (February 2002) at www.ban.org

⁴ Survey conducted by the Basel Action Network, contact Jim Puckett (206) 652-5555.

Drinking Water Guidelines or a listing with 100 parts per million. Consistent with the federal government's Toxic Substances Management Policy (TSMP) and recent changes to NPRI reporting, cut-off level of the limit of quantification should be employed from TSMP Track 1 substances, such as dioxins and furans. Similar levels should be considered for CEPA toxic heavy metals such as mercury, lead and cadmium.

Recommendation

3. *Waste should be defined in a manner consistent with the Basel Convention. Consistent with the federal government's Toxic Substances Management Policy (TSMP) and recent changes to NPRI reporting, cut-off level of the limit of quantification should be employed from TSMP Track 1 substances, such as dioxins and furans. Similar levels should be considered for CEPA toxic heavy metals such as mercury, lead and cadmium.*

"Derived From" Rule and "Mixing" Rule (2.3, pg.9)

Department proposes not to introduce a "derived from" rule or a "mixing" rule within the regulations. This approach would be inconsistent with the approach taken in the United States Environmental Protection Agency's (USEPA) rules under the *Resource Conservation and Recovery Act (RCRA)*, and amendments to Regulation 347 adopted by the Ontario Ministry of the Environment in November 2000.⁵

Ontario's decision to adopt "derived from" and "mixing" rules reflected serious concerns related to the handling and disposal of imported wastes in the province.⁶ In addition, permitting exemptions of "derived-from" wastes from waste the import requirements would undermine the goals of the "derived-from" rule in the United States, which is to prevent the disposal of treated wastes in non-hazardous waste landfills.

Recommendation

4. *The proposed regulations should include provisions that materials 'derived from' or resulting from the 'mixing' of hazardous wastes or recyclables continue to be considered hazardous wastes or recyclables for the purposes of the regulations.*

⁵ See EBR Registry Number RA00E0002.

⁶ See EBR Registry Number RA00E0002 and Investigations and Enforcement Branch "Taro East Quarry Waste Disposal Site: Report on Alleged Receipt of Hazardous Waste Generated by Cyanokem Inc of Detroit Michigan" (Toronto: Ontario Ministry of the Environment, September 1999).

Part 3: Exemptions

The Department proposes to exempt from the regulations transboundary movements of wastes and recyclable materials below 5kg or 5 litres, and “samples” of recyclable materials that are less than 25kg or 25 litres, with an “override” provision for certain high risk substances.

Provision needs to be made to ensure that importers and exporters do not evade import/export requirements by dividing shipments into small batches. An annual cumulative total cap should be placed on small shipments to address this issue. In addition facilities undertaking a series of small shipments should be required to report annually on the total amounts imported or exported and their fates.

The “override” provision should apply to all CEPA toxic substances and substances proposed by the Ministers of Environment and Health for addition to the List of Toxic Substances. In the case of Track One substances under the TSMP, the regulations should be applied on the basis of presence at or above the limit of quantification, and similar rules applied with respect to CEPA toxic heavy metals.

The proposal for exemptions of “samples” of recyclable materials cannot be supported in the absence of a definition of “samples” or requirements regarding the disposal of waste and/or spent samples. More generally, in light of the concerns noted earlier regarding the operation of hazardous waste “recycling” operations, the differential exemptions for wastes and recyclable materials cannot be supported.

Recommendations

5. *The regulations should employ the same low quantity cut-off levels for wastes and recyclables. Cut-off levels should include a quantitative annual cap, and facilities operating under the low quantity cut-off should be required to report a least annually on wastes generated or received.*
6. *Lower low quantity cut-off levels should be employed for priority substances, including a level of the limit of quantification for TSMP Track 1 CEPA toxic substances.*

Part 4: Prohibitions

Environment Canada proposes a number of prohibitions of transboundary movements of hazardous wastes and recyclables to be included in the regulations. These include exports to Antarctica, countries that have prohibited

imports of some or all types of hazardous wastes and recyclable materials, and other countries that are not eligible to export wastes to or receive wastes from Canada under the Basel Convention, such as those who are not Parties to the Convention, OECD Decision C(29)39 re: hazardous recyclable materials or a bilateral, multilateral or regional agreement to which Canada is a party. These prohibitions are necessary to fulfil Canada's obligations under the Basel Convention, and are appropriate for this reason.

In addition, the Department proposes to prohibit transboundary waste movements containing substances whose transboundary movement is banned by other international agreements to which Canada is Party, or by other provisions of Canada law. With respect to this intent, the regulations should include a prohibition on imports or exports of Persistent Organic Pollutants (POPs) for recovery, recycling, reclamation direct reuse or alternatives uses, as per the provisions of the Stockholm POPs convention.⁷ Nor should exports of POPs be permitted for final disposal be permitted unless they are submitted to processes that destroy or irreversibly transforms the POPs so they no longer exhibit the characteristics of POPs.⁸ This means that they cannot be subject to incineration or other combustion processes that are known to produce dioxins and furans which are themselves POPs.

The regulations should include prohibitions on the export of wastes to non-OECD countries for final disposal, recycling or recovery as per the 1994⁹ and 1995¹⁰ amendments to the Basel Convention.

Finally, with respect to domestic Canadian law, provision should be made to ensure that waste importers are only permitted to import wastes from the service areas defined in their provincial certificates of approval.

Recommendations

7. *The import and export of POPs for recovery, reuse or recycling should be prohibited through the regulations, as per the provisions of the Stockholm Convention. Imports and exports of POPs for disposal through methods that will result in the generation of POPs themselves, such as incineration, should be similarly prohibited.*
8. *The regulations should prohibit exports of hazardous wastes and recyclables from Canada to non-OECD countries for recycling or final disposal, as per the provisions of the amendments to the Basel Convention.*

⁷ Stockholm Convention on Persistent Organic Pollutants, Art.6(1)(d)(iii). This prohibition applies to substances listed in Annexes A, B, or C of the Convention

⁸ Stockholm Convention, Art.6(1)(d)(ii).

⁹ COP -2 Decision II/12

¹⁰ COP - 3 Decision III/1.

9. *The regulations should limit waste imports into Canada to sources within the defined service areas contained in the approvals of receiving facilities.*

Part 5: Transboundary Movement Control Regimes

Waste Constituent Identification

In light of the findings of recent research regarding the feasibility of tracking transboundary movements and disposal of priority substances within hazardous waste streams, notices and manifests should be required to include information on the specific quantities of all CEPA toxic substances, and substances proposed by the Ministers of Environment and Health for addition to the List of Toxic Substances contained in proposed or manifested waste shipments, in addition to information on the presence of TSMP Track 1 substances as proposed by the Department.

Public Notice and Comments on Notices

The transboundary movement regime should include provisions for the posting of notices on the CEPA registry, and the provision of public comment periods of not less than 60 days prior to the granting of approvals for waste movements. Permits should also be posted on the CEPA Registry when they are granted. In the case of proposed imports for disposal or recycling notices of applications should be required to be published in a newspaper circulating in the vicinity of the receiving facilities and in any other publication specified by the Minister, along with information on how to comment on the application.¹¹

Notice Query Capacity

The system for posting notices on the CEPA registry should be designed in a manner that permits user designed queries of the notice information by location or identity of the generator or receiver, importer or exporter, and waste PIN number, IWIC code, or specific substances or waste classes. Among other things, this would facilitate analysis of notice information by the Department, provincial authorities and members of the public.

In general the CEPA Registry should follow the model of the Ontario Environmental Bill of Rights Registry with respect to the posting of approval proposals and instruments, with unique identification numbers associated with each notice. In this way all of the documents and decisions related to a notice can be accessed easily

¹¹ This proposal parallels the current provisions of CEPA 1999 regarding public notice of proposed loading of waste for disposal or disposal of waste at sea. CEPA 1999 s. 127 (1)(d).

In the longer term, provision should be made for the posting of individual manifests on the registry, in a manner that allows them to be associated with specific notices.

Requirements for Final Disposal or Recycling

Environment Canada proposes a requirement that final disposal or recycling occur within one year of receipt of wastes. This is an excessive period of time and would permit the extended storage of significant quantities of waste on-site at disposal/recycling facilities.

Extended on-site storage of wastes or recyclables should be avoided, given the risks associated with such activities. Therefore waste movements should only be permitted when facilities are prepared to dispose of or recycle materials in a timely manner. Final disposal or recycling should be required to occur within 20 days of the receipt of wastes or recyclables.

In the longer term notices of final disposal and recycling should also be posted on the CEPA registry in a manner which permits them to be linked to the relevant notices and manifests.

Annual Reports

Environment Canada should publish annual reports summarizing hazardous waste and recyclable imports and exports, including amounts permitted via notices vs. amounts actually imported and exported, types of wastes imported and exported and quantities of each type, and the types and fates of wastes imported and exported by jurisdiction, exporter, importer and site of final disposal or recycling.

In the longer term, Environment Canada should employ its general information gathering powers under sections 46, 47 and 48 of CEPA 1999 to develop and publish an annual report on total hazardous waste generation and disposal in Canada. The lack of information on total waste generation has been highlighted as a significant gap by the Organization for Economic Cooperation and Development (OECD) and others.¹²

Recommendations

10. *Waste Manifests should include information on the presence and quantity of CEPA toxic substances and substances proposed by the*

¹² See Country Report: Canada (Paris: OECD, 1995). See also Jacott, Reed and Winfield, The Generation and Management of Hazardous Wastes and Transboundary Hazardous Waste Shipments between Mexico, Canada and the United States, pg.47.

Ministers of Health and the Environment for addition to the CEPA list of toxic substances.

11. *A public notice and comment process should be established with respect to the approval of shipments of hazardous wastes and recyclables to and from Canada, based on the Ontario Environmental Bill of Rights Registry Model.*
12. *Information related to notices and manifests should be posted on the CEPA website in a manner which permits user-designed searches and analyses of the data and information, in a manner similar to the NPRI Query site.*
13. *The regulations should require that final disposal or recycling occur within 20 days of the receipt of materials by a facility.*
14. *Environment Canada should publish a detailed annual report on hazardous waste and recyclable materials imports and exports.*
15. *Environment Canada should use its authorities under sections 46-48 of CEPA to require that Canadian hazardous waste generators report annually on their total waste generation, and the types and fates of wastes and recyclables generated.*

Part 7: Liability and Insurance

Differential Insurance Requirements for Wastes and Recyclable Materials

The Department proposes that exporters and importers have insurance in respect of each waste movement of at least \$5 million for wastes and \$1 million for recyclables.

As noted earlier, significant problems have been associated with transboundary waste movements for recycling as well as disposal. Indeed some of the most serious incidents in Canada and the United States have involved hazardous waste “recycling” operations. Furthermore, the risks associated with transportation are similar whether the waste is destined for disposal or recycling. The adoption of differential insurance requirements for imports and exports for recycling and disposal cannot be supported for these reasons. An insurance requirement of not less than \$5million should be applied for all shipments.

CERCLA Liability Status of Canadian Facilities Disposing of US Generated Wastes

The ability of Canadian disposal facilities to offer protection from liability for US waste generators under the *Comprehensive Environmental Response, Compensation, and Liability Act* has been identified by Environment Canada and others as a significant factor in the growth in US waste exports to Canada for disposal over the past decade. Indeed, in the summer of 2001 it was revealed in the media that a Quebec disposal facility was advertising its services in the US on this basis.¹³

In light of these considerations, Canada should initiate discussions with the United States to develop a protocol under the 1986 Canada-US Agreement on the Transboundary Movement of Hazardous Wastes to provide for the transboundary liability of waste generators and handlers where wastes generated in one country are disposed or recycled in the other. Given the evidence of the immediacy of this factor in terms of waste imports into Canada, Environment Canada should seek to conclude these discussions within one year.

Recommendations

16. *The same levels of insurance should be required with respect to the transportation of hazardous wastes and recyclable materials. An insurance requirement of not less than \$5million should be applied to all shipments.*
17. *Canada should initiate negotiations with the United States regarding the extension of the liability of waste generators across the border in situations where the generator is in one country and the site of final disposal or recycling in the other.*

Part 8: Permits of Equivalent Level of Environmental Safety (PELES)

The environmental community has consistently expressed concerns regarding the PELES provisions of CEPA 1999. As a general principle, the design of regulatory regimes needs to be sufficiently robust to accommodate a broad range of situations and circumstances, and not require special arrangements for specific actors.

In the event that PELES provisions are adopted within the regulations, in addition to the public process proposed by the Department with respect to the development of specific PELES, provision must be made to ensure that there is no adverse effect on the protection of human health and safety and the environment, information gathering by the department through notices and manifests, public notice and comment opportunities regarding proposed imports

¹³ See M.Mittelsteadt, "Canada permits U.S. waste to flood in," Globe and Mail, June 25, 2001.

and exports, and public access to import and export information contained in notices and manifests.

Recommendation

18. *Environment Canada should not proceed with the implementation of PELES. In the event that the department proceeds with this mechanism, provision should be made to ensure that PELES arrangements do not compromise environmental protection, public health and safety, opportunities for public notice and comment on exports and imports, and the generation and access to information regarding imports and exports of hazardous wastes and recyclable materials.*

Part 9: Environmentally Sound Management

Gaps in the Canadian regulatory regime regarding the disposal of hazardous wastes relative to the United States has been identified as the key factor in the growth in hazardous waste imports for disposal into Canada since 1994/95. The completion of a system of land disposal restrictions by the USEPA under the *Resource Conservation and Recovery Act (RCRA)* in the early 1990s appears to have been a particularly important development in this regard.¹⁴

Until the adoption of restrictions on the land disposal of contaminated soils by the province of Quebec in July 2001,¹⁵ no comparable requirements existed in Canada.¹⁶ Although the flow of wastes into Canada from the United States for disposal has been concentrated in Ontario and Quebec, there have been reports of imports of wastes into other provinces for disposal in a manner that would not be permitted in the United States as well.¹⁷

The establishment of federal regulations defining the environmentally sound disposal of wastes and recyclables is necessary to operationalize the Minister's authority under section 185 of CEPA 1999 to refuse to permit waste imports and exports where he or she does not believe that the wastes will be managed in a safe manner. The operationalization of these provisions of CEPA is necessary to permit Canada to fulfil its obligations under the Basel Convention to ensure the

¹⁴ See M.Jacott, C.Reed, and M.Winfield, The Transboundary Movement of Hazardous Wastes in Canada the United States and Mexico, 1990-2000 (Austin: Texas Centre for Policy Studies, April 2001).

¹⁵ *Regulation respecting the burial of contaminated soils* O.C .843-2001, June 27, 2001, *Gazette Officielle du Quebec* July 11, 2001 Vol. 133, No.28.

¹⁶ The Ontario Ministry of the Environment's recent discussion paper on the adoption of land disposal restrictions highlights the province's reliance on landfill design standards, which also are in place in the US under RCRA, rather than a combination of landfill design standards and pre-treatment standards as the case in the US. EBR Registry No.PA01E0027, December 18, 2001.

¹⁷ M.Mittelstaedt, "B.C. agrees to take tonnes of dioxin-laced U.S. waste," The Globe and Mail, January 24, 2002.

“environmentally sound management” of hazardous wastes imported into Canada for disposal or recycling.¹⁸

In addition, the federal government needs to be in a position to be able exercise regulatory authority to assess proposed waste imports and exports on their substantive merits, where the government of the jurisdiction of export or import declines to do so, as was done by the province of Ontario between February 1997 and September 1999.

On basis of past experience in such areas as the control of discharges from the pulp and paper sector, it is highly unlikely that all provinces will adopt regulations and standards regarding the environmentally sound disposal of wastes, beyond existing requirements for the design of disposal facilities, in the absence of enforceable federal standards.¹⁹

Environment Canada’s proposals regarding environmentally sound management place a very strong emphasis on the establishment of management processes by disposal and recycling facilities, such as ISO 14000 or similar certification of environmental management systems.

Given the identification of gaps in Canada’s substantive environmental protection standards for hazardous waste disposal, as opposed the lack of requirements for environmental management systems, relative to the United States as the key factors in the growth of waste imports into Canada for disposal, such an approach is unlikely to have a significant impact on the increased flow of hazardous wastes into Canada. Nor does such an approach address the underlying lack of standards in key areas, such as prohibitions on the land disposal of untreated wastes, which are needed to ensure the protection of human health and the environment.

In this context, Environment Canada needs to focus on the gaps in Canadian standards for the protection the environment and human health from adverse effects in the handling and disposal of hazardous wastes as its first priority in the establishment of criteria for the environmentally sound management of hazardous wastes and recyclables in Canada. The establishment of criteria related to management systems should be considered a secondary goal.

For the purposes of the implementation of the hazardous waste and recyclables provisions of CEPA, 1999, federal regulations establishing criteria for environmentally sound management should include the following requirements regarding the eligibility of a facility to receive international or interprovincial waste movements for disposal or recycling:

¹⁸ Basel Convention, Art.4(g).

¹⁹ See, for example, K.Harrison, Passing the Buck: Federalism and Canadian Environmental Policy (Vancouver: UBC Press, 1996).

- Approval under relevant provincial/territorial or federal legislation to receive the wastes in question in terms of waste types, approved disposal or recycling operations, eligible service areas and community acceptance;
- Conformance with design and operating standards appropriate to the type of facility.
 - For landfills and treatment facilities this would include facility design and operation standards as prescribed through the US. *Resource Conservation and Recovery Act* and the relevant CCME guidelines.
 - For incineration or other facilities combusting hazardous wastes emission standards as per the relevant CCME Canada-Wide Standards for dioxin²⁰ and mercury²¹ and emission and operating standards as per the July 1999 US RCRA and *Clean Air Act* standards for other pollutants (40 CFR Part 60). Consistent with the provisions of the Stockholm Convention,²² incineration should be not considered as an environmentally sound disposal option for substances listed through the Stockholm POPs convention or for TSMP Track 1 CEPA toxic substances.
 - For recycling facilities this would include appropriate requirements regarding the storage and handling materials, such as those outlined in the report of the Ontario Fire Marshal regarding the July 1997 Plastimet fire,²³ and February 1998 report of the Canadian Institute for Environmental Law and Policy on hazardous waste management in Ontario.²⁴ Consistent with the provisions of the Stockholm Convention, operations involving the recovery, recycling, reclamation, direct reuse or alternative uses of POPs should not be considered to be providing environmentally sound management.²⁵
- Where land disposal is proposed, that wastes be pre-treated to the standard of the RCRA land disposal restrictions or better;²⁶
- Monitoring and reporting requirements regarding point, non-point and fugitive releases from facility.
- Emergency planning and response provisions where minimum federally articulated requirements are not addressed through provincial/territorial approvals.

²⁰ Canada Wide Standards for Dioxins and Furans, Canadian Council of Ministers of the Environment, May 2001.

²¹ Canada-Wide Standard for Mercury Emissions, Canadian Council of Ministers of the Environment, June 2000.

²² Stockholm Convention, Art.6((1)(d)(ii).

²³ Office of the Fire Marshal, Protecting the Public and the Environment by Improving Fire Safety at Ontario's Recycling and Waste Handling Facilities (Toronto: Ministry of the Solicitor General and Correctional Services, 1997).

²⁴ M.Winfield, Hazardous Waste Management in Ontario: A Report and Recommendations (Toronto: CIELAP, 1998), Recommendation IV-20.

²⁵ Stockholm Convention, Art.6(1)(d)(iii).

²⁶ E.g. 40 CFR 268 regarding best demonstrated available treatment technology standards regarding the land disposal of wastes.

- Financial assurance and insurance provisions, where minimum federally articulated requirements are not addressed through provincial/territorial approvals.
- Annual reports to the federal government on the sources (jurisdiction and facility), amounts and types of transboundary wastes and recyclables received and their fates.

Waste movements should not be permitted under CEPA where receiving facilities do not meet these criteria, regardless of authorization by the government of the receiving jurisdiction.

Implications of ESM for Exports

It is important that, consistent with the approach of the OCED, that the development standards ESM in Canada not be employed to justify exports of wastes to non-OCED countries in contradiction of Basel Ban Amendments prohibiting waste exports for disposal or recycling from OCED to non-OCED countries. The application of ESM standards with respect to exports should be limited to those countries that are eligible to receive wastes for disposal or recycling under the Basel Convention as amended.

Recommendations

19 Environment Canada should focus on the development and adoption of substantive, as opposed to management process-based standards for the environmentally sound management of wastes. The standards should be based on the relevant provisions of the Stockholm Convention on POPs, the US standards made under the RCRA and Clean Air Act, and relevant CCME Canada-Wide Standards. The standards should also include monitoring, emergency planning and response, financial assurance and insurance and annual reporting requirements.

20 The use of ESM standards for the purposes of export should be limited to those countries eligible to receive wastes and recyclables under the Basel Convention as amended.

Part 10: Waste Reduction Plans

The Basel convention includes provisions requiring that Parties seek to reduce their overall generation of hazardous waste at the national level.²⁷ In this context, waste reduction planning requirements should be applied to all significant Canadian generators of hazardous wastes being exported for final

²⁷ Basel Convention, Art. 4(2)(a).

disposal. Planning requirements should be triggered by a set threshold of generation of waste for exports and disposal, with lower thresholds for priority waste streams, such as those including CEPA toxic substances, rather than on the basis of facility-specific criteria, as proposed by the Department.

A threshold-based approach will ensure predictability in the application of planning requirements and a level playing field among waste exporting facilities. It will also reduce the analytical burden on the Department in the application of planning requirements. This will permit the devotion of greater resources to the analysis of plan contents and encouragement of pollution prevention.

In general the required contents of waste reduction plans need to be articulated in more detail in the proposed regulations, and parallel the requirements for pollution prevention plans under Part 4 of CEPA 1999, particularly with respect to the assessment of pollution prevention opportunities for waste streams. The emphasis of plans should be on reducing inputs of hazardous materials into manufacturing processes and products. Waste reduction plans should be required to be implemented within specified time frames, not exceeding five years.

Recommendations

21. Environment Canada should adopt a threshold-based approach to the application of waste reduction planning requirements. Lower thresholds should be employed for generators of priority waste streams, such as those containing CEPA toxic substances.

22. Waste reduction planning requirements need to emphasize reducing inputs of hazardous materials into products and manufacturing processes.

Conclusions

Environment Canada is proposing major changes to the import and export of hazardous waste regulations made under CEPA. In doing so the Department is seeking to advance important goals in the protection of the environment and human health, and the fulfillment of Canada's international environmental commitments.

However, there are a number of significant gaps exist in the Department's proposals. The environmental community has consistently opposed the Department's effort to "de-couple" the definitions of hazardous wastes and recyclable materials, and perhaps more importantly, establish less stringent requirements regarding the import and handling of recyclable materials. This approach cannot be supported given the long and continuing history of safety and environmental problems at hazardous waste "recycling" facilities in Canada

and the United States. Similarly, Environment Canada's proposals regarding PELES cannot be supported.

Environment Canada's proposals include a number of measures related to meeting Canada's international environmental obligations. Although these are important steps, provisions need to be added to the Department's proposals to ensure full compliance with the provisions of the Stockholm Convention on POPs, specifically to prohibit the import and export of POPs for recycling, reuse, and recovery, and for disposal practices, such as incineration, which result in the generation of POPs themselves.

In addition, the amendments to the Basel Convention prohibiting exports of hazardous wastes and recyclables from Canada to non-OECD countries need to be fully implemented through the regulations. This should be achieved by the adoption of prohibitions on such movements in the regulations.

The proposed transboundary movement control regime needs to include improved mechanisms for the tracking of individual waste constituents, such as CEPA toxic substances, provide for a public notice and comment around proposed waste movements, and provide full public access in a searchable electronic format to all documents and approvals associated with waste movements.

Major gaps exist in the Department's proposed approach to the establishment of criteria for the environmentally sound management of wastes. Environment Canada's proposals would fail to address the "pollution haven" effect currently being seen with respect to US waste imports into Canada as a result of weaker disposal standards in Canada. The Department should focus on the establishment of substantive rather than management process-based standards for environmentally sound management.

In the short term, the establishment of such standards could be achieved through the adoption into the federal regulations of the relevant aspects of US standards made under the RCRA and *Clean Air Act*, and the CCME Canada-Wide Standards processes, as well as the adoption of prohibitions on the recovery, reuse, recycling and incineration of POPs as per the provisions of the Stockholm Convention. Immediate action is required in this area by the federal government to protect the health, safety and environment of Canadians.

In addition, discussions would be initiated immediately with the United States regarding the establishment of a protocol under the existing Canada-US Agreement on the Transboundary Movement of Hazardous Wastes, to extend the liability of waste generators to include situations where generation occurs in one country and disposal in the other.

Finally, Environment Canada should adopt a criteria based approach to the application of hazardous waste reduction planning requirements for Canadian generators of waste exports for disposal. Planning requirements should focus initially on priority waste streams, such as those containing CEPA toxic substances, and emphasize reducing toxic inputs into products and manufacturing processes.

The revision of the CEPA hazardous waste import/export regulations by Environment Canada offers significant opportunities to improve the management of hazardous wastes and recyclables throughout Canada, and to make significant progress on advancing efforts to promote waste reduction at source. It is critical that the federal government make full use of this opportunity to address the major gaps that exist in the current Canadian regime, and to fulfil Canada's international commitments with respect to hazardous wastes.

Summary of Recommendations

- 1. Materials covered by the regulations should be defined on the basis of their intrinsic hazardous characteristics rather than their proposed fate (i.e. disposal or recycling).*
- 2. Hazardous waste 'recycling' operations should be subject to regulatory requirements that are at least as stringent as those applicable to disposal facilities. In some cases more stringent requirements may be appropriate.*
- 3. Waste should be defined in a manner consistent with the Basel Convention. Consistent with the federal government's Toxic Substances Management Policy (TSMP) and recent changes to NPRI reporting, cut-off level of the limit of quantification should be employed from TSMP Track 1 substances, such as dioxins and furans. Similar levels should be considered for CEPA toxic heavy metals such as mercury, lead and cadmium.*
- 4. The proposed regulations should include provisions that materials 'derived from' or resulting from the 'mixing' of hazardous wastes or recyclables continue to be considered hazardous wastes or recyclables for the purposes of the regulations.*
- 5. The regulations should employ the same low quantity cut-off levels for wastes and recyclables. Cut-off levels should include a quantitative annual cap, and facilities operating under the low quantity cut-off should be required to report a least annually on wastes generated or received.*

6. *Lower low quantity cut-off levels should be employed for priority substances, including a level of the limit of quantification for TSMP Track 1 CEPA toxic substances.*
7. *The import and export of POPs for recovery, reuse or recycling should be prohibited through the regulations, as per the provisions of the Stockholm Convention. Imports and exports of POPs for disposal through methods that will result in the generation of POPs themselves, such as incineration, should be similarly prohibited.*
8. *The regulations should prohibit exports of hazardous wastes and recyclables from Canada to non-OECD countries for recycling or final disposal, as per the provisions of the amendments to the Basel Convention.*
9. *The regulations should limit waste imports into Canada to sources within the defined service areas contained in the approvals of receiving facilities.*
10. *Waste Manifests should include information on the presence and quantity of CEPA toxic substances and substances proposed by the Ministers of Health and the Environment for addition to the CEPA list of toxic substances.*
11. *A public notice and comment process should be established with respect to the approval of shipments of hazardous wastes and recyclables to and from Canada, based on the Ontario Environmental Bill of Rights Registry Model.*
12. *Information related to notices and manifests should be posted on the CEPA website in a manner which permits user-designed searches and analyses of the data and information, in a manner similar to the NPRI Query site.*
13. *The regulations should require that final disposal or recycling occur within 20 days of the receipt of materials by a facility.*
14. *Environment Canada should publish a detailed annual report on hazardous waste and recyclable materials imports and exports.*
15. *Environment Canada should use its authorities under sections 46-48 of CEPA to require that Canadian hazardous waste generators report annually on their total waste generation, and the types and fates of wastes and recyclables generated.*
16. *The same levels of insurance should be required with respect to the transportation of hazardous wastes and recyclable materials. Insurance*

- requirements of not less than \$5 million should be applied to all movements.*
- 17. Canada should initiate negotiations with the United States regarding the extension of the liability of waste generators across the border in situations where the generator is in one country and the site of final disposal or recycling in the other.*
 - 18. Environment Canada should not proceed with the implementation of PELES. In the event that the department proceeds with this mechanism, provision should be made to ensure that PELES arrangements do not compromise environmental protection, public health and safety, opportunities for public notice and comment on exports and imports, and the generation and access to information regarding imports and exports of hazardous wastes and recyclable materials.*
 - 19. Environment Canada should focus on the development and adoption of substantive, as opposed to management process-based standards for the environmentally sound management of wastes. The standards should be based on the relevant provisions of the Stockholm Convention on POPs, the US standards made under the RCRA and Clean Air Act, and relevant CCME Canada-Wide Standards. The standards should also include monitoring, emergency planning and response, financial assurance and insurance and annual reporting requirements.*
 - 20. The use of ESM standards for the purposes of export should be limited to those countries eligible to receive wastes and recyclables under the Basel Convention as amended.*
 - 21. Environment Canada should adopt a threshold-based approach to the application of waste reduction planning requirements. Lower thresholds should be employed for generators of priority waste streams, such as those containing CEPA toxic substances.*
 - 22. Waste reduction planning requirements need to emphasize reducing inputs of hazardous materials into products and manufacturing processes.*

Appendix 1: Proposed Federal Hazardous Waste Regulations

These regulations deal with hazardous waste disposal sites in the ownership, possession or control of federal agencies or located on federal or aboriginal lands or undertakings.

The proposed regulations would fill a significant gap in Canada's regulatory regime for hazardous wastes. The regulations are also important in that they would establish a baseline federal regime, against which such things as environmentally sound management and emergency planning requirements in provincial regimes may be measured for the purposes of the hazardous waste import and export regulations.

Given such considerations, the federal regulations need to serve as a model for environmentally sound management.

Although the proposed regulations identify a number of key areas related to the operation of hazardous waste sites, in general they provide far too little detail in terms of requirements, and in some cases there are significant gaps in the provisions.

Specific areas needing attention include:

- The need to articulate specific standards and practices for different types of facilities, rather than universal standards for air and water releases which may be very difficult to enforce in practice, and reflect a very strong end-of-pipe rather than preventative approach;
- The emergency preparedness and planning requirements need to be spelled out in much more detail, including establishment of contact with local emergency response providers and making sure they are aware of the plan;
- There is a need to clarify the implications of the landfill ban, particularly given the ambiguity of the proposed dilution rule. It is unclear if materials "derived-from" hazardous wastes are permitted to be landfilled;
- The decommissioning provisions are inadequate. Typically hazardous waste disposal facilities, particularly landfills, require perpetual care as problems, such as groundwater contamination, may not become apparent for many years. The US rules regarding hazardous waste landfills and pre-treatment requirements are based on assumptions that containment systems will fail at some point in the future.

Although these regulations will affect a limited portion of Canada's total hazardous waste generation, they represent one of the few areas where Environment Canada has an opportunity to play a lead operational role as an

environmental regulator. The regulations should reflect best practices for these reasons, and therefore need to be strengthened and clarified in the ways noted above.