Comments on Proposed Revisions to the Export and Import of Hazardous Waste Regulations

Discussion Paper for Winter 2003 National Consultations and Background Paper for Drafting Instructions for the Proposed Regulations

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Introduction

1.1 Background and Rationale

This commentary reviews Environmental Canada's December 2003 discussion paper on the proposed *Canadian Environmental Protection Act* (CEPA) Export and Import of Hazardous Waste and Hazardous Recyclable Materials Regulations and proposed drafting instructions for these 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. The regulations also deal with the implementation of Canada's international obligations, particularly under the Basel Convention on the Transboundary Movement of Hazardous Wastes and the Stockholm Convention on Persistent Organic Pollutants (POPs).

The regulations also represent the federal government's most significant opportunity to respond to the major increases of imports of US wastes into Canada for disposal in the 1990s. Although imports into Ontario have fallen somewhat since their peak in 1999, imports for disposal remain well above levels of the early 1990s, and imports to Quebec remain particularly high.

The Pembina Institute strongly supports the revision and strengthening of the CEPA hazardous waste import/export regulations to operationalize the provisions of CEPA 1999 and address the waste import situation. In reviewing the discussion paper and proposed drafting instructions, four key areas of concern were identified.

1.2 Areas of Concern

1.2.1 The approach to environmentally sound management is inadequate

Environment Canada's proposals include a number of provisions intended to establish standards for "environmentally sound management" of hazardous wastes and hazardous recyclable materials. These provisions are required to operationalize the minister's powers under CEPA to refuse waste imports and exports on the basis that they will not be managed in a way that will protect the environment and human health, [2] and to fulfil Canada's obligations under the Basel Convention to ensure the environmentally sound management of imported[3] and exported wastes.[4] The lack of standards for environmentally sound management in Canada has been identified as a key factor in the 400 per cent growth in US waste exports to Canada that occurred during the 1990s.[5]

Unfortunately, the proposed regulations do not address the gap between Canadian and US handling and disposal standards that were the major driver of the increase in US waste exports to Canada. The

[1] *Canadian Environmental Protection Act, 1999*, Part 7, Division 8.
[2] CEPA 1999, s.185(2).
[3] *Basel Convention on Transboundary Movement of Hazardous Wastes and their Disposal*, Art.2(g).
[4] *Basel Convention*, Art.8.
[5] Free Trade and the Environment: The Picture Becomes Clearer (Montreal: Commission for Environmental Cooperation, January 2003), pg.3.

department's proposals fail to establish meaningful and substantive standards for environmentally sound management (ESM) that are directly protective of human health and the environment, such as emission and operating standards for incinerators or other combustion process or design, operating and pre-treatment standards for the landfilling of wastes, as exist in the US. Rather, the focus of the department's proposals is on management processes. Even there, the proposed management process standards are very general in nature, and do not specify compliance with any specific recognized environmental management standards or systems.

1.2.2 The proposed regulations will not bring Canada into full compliance with its international obligations

The proposed regulations include a number of provisions related to the fulfillment of Canada's international obligations with respect to hazardous wastes. These include a ban on exports of waste from Canada for final disposal to non-Organization for Economic Cooperation and Development (OECD) countries, as per the 1994 and 1995 decisions of the Conference of the Parties to Basel Convention,[6] and a ban on transboundary movement of POPs for the purposes of recycling, reuse, alternative uses, or recovery, as per the provisions of the Stockholm Convention.[7]

However, the proposed regulations fail to address a number of Canada's other important international obligations regarding the transboundary movement of hazardous wastes. These include the ban on exports of hazardous wastes for recovery or recycling to non-OECD countries as per the 1994 and 1995 decisions of the second and third Conference of the Parties to the Basel Convention, and the provisions of the Stockholm Convention requiring that POPs be disposed of in a manner that ensures their destruction or irreversible transformation so they do not exhibit the characteristics of POPs.[8]

1.2.3 Public access to information and decision making regarding hazardous waste movements in and out of Canada needs to be strengthened

Environment Canada's current approach to public access to information regarding hazardous waste movements only provides access to aggregate summaries of the information contained in waste import and export notices, and usually does not even provide this information until waste movements have been approved and begun to take place. In this context, the department's proposals to strengthen public access to hazardous waste information, including the provision of the names and addresses of exporters and importers, waste PIN numbers and codes, final destinations, quantities and border crossings, and to provide this information through an on-line search tool would be important positive steps.

However, as provided for in CEPA,[9] the department also needs to establish a system to publish notice information, and provide opportunities for public comment, before permits are granted for waste movements. The permits themselves should be published in the CEPA registry when they are granted. The strengthening of public access to waste information is particularly important given the extensive provisions proposed by Environment Canada to "streamline" the notice, permit and movement document process for industry. If such "streamlining" provisions are incorporated into the regulations, then they need to be balanced by strengthened public access to information and decision making.

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[6] Basel Convention COP-3, Decision II/12.
[7] *The Stockholm Convention on Persistent Organic Pollutants*, Art.6(1)(d)(iii).
[8] *Stockholm Convention*, Art.6(1)(d)(ii).
[9] CEPA 1999, s.187.

1.2.4 The proposed regulations emphasize hazardous waste recycling, rather than pollution prevention and waste reduction

The overall approach to the drafting of the proposed regulations taken by the department reflects strong emphasis on facilitating hazardous waste "recycling" rather than waste reduction at source. This is reflected, in particular, in the introduction of "differential" controls on imports and exports of hazardous recyclable materials. This approach is inconsistent with the overall direction of CEPA 1999 with its focus on pollution prevention,[10] and the Basel Convention's focus on waste reduction[11] and minimizing transboundary waste traffic.[12]

More generally, this approach is based on a false premise that hazardous waste "recycling" is a low risk activity. Extensive operational experience in Canada and the US has clearly demonstrated that this is not the case. Many of the most serious problems involving the handling and disposal of hazardous wastes in Canada and the US have involved "recycling" rather than disposal facilities.[13] The "recycling" hazardous wastes may involve greater handling and processing of materials than disposal operations, and the generation of by-products and residuals that may themselves be extremely hazardous. With recycling operations materials are also more likely to be stored for extended periods, pending the establishment of recycling capacities or markets for secondary materials, than is the case with disposal operations. There are risks, as well, that materials intended to be recycled may end up being abandoned and disposed of at taxpayers' expense, either as a result of deliberate "sham" recycling operations, or the economic failure of "recycling" operations due to adverse business conditions and low material prices. The emphases of both CEPA and the Basel Convention on source reduction rather than recycling reflect these considerations.

Given these considerations, the proposed regulations need to provide for strong controls on the handling and disposal of hazardous recyclables. The establishment of a differential control regime on hazardous recyclable materials is not supported for these reasons. Furthermore, the combination of an extremely broad definition of recyclable materials and absence of a "derived from" rule regarding the handling of the outputs and by-products of hazardous waste treatment or recycling operations in the proposed regulations opens an extremely large potential loophole in Canada's framework for regulating transboundary waste movements.

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[10] CEPA 1999, Declaration and Preamble.
[11] *Basel Convention*, Preamble and Art.2(a).
[12] *Basel Convention*, Art.(2)(d).
[13] See, for example, M. Winfield, Hazardous Waste Management in Ontario (Toronto: Canadian Institute for Environmental Law and Policy, 1998).

2 Scope and Definitions

2.1 General Comments

In the context of the history of problems related to hazardous waste "recycling" operations, Canadian environmental organizations have consistently opposed de-coupling the definitions and regulatory controls for hazardous wastes and hazardous recyclable materials.[14] The de-coupling of the definitions of hazardous wastes and recyclable materials opens the door to complex, and virtually irresolvable, debates over whether materials should be considered "products," "wastes" or "recyclable materials" and how "products" and residuals from recycling operations should be regulated. Canadian and international environmental organizations have consistently argued for an approach focussed on the application of regulatory controls on the basis of the hazardous characteristics of materials, not their proposed fate, for these reasons.[15]

As reflected in CEPA and the Basel, Stockholm and other international conventions, the environmental, health and safety risks associated with hazardous waste recycling operations are a major consideration in the need to focus on waste reduction at source, rather than trying to deal with wastes once they have been generated,. The overall approach of the proposed regulations in this regard is extremely weak, and places a much greater emphasis on facilitating hazardous waste "recycling," than waste reduction at source.

2.2 Specific Definitions (s.2)[16]

"recyclable material" (s.2)

The drafting instructions propose to define "recyclable material" as "any substance that is collected pending recycling, stored pending recycling, destined to be recycled, required to be recycled and does not include waste or any material used for its original purpose."

This definition is inadequate, particularly given its centrality to the overall direction of the proposed regulations towards differential controls on hazardous wastes and hazardous recyclable materials. The definition is extremely open-ended, as claims that materials are "pending recycling," "stored pending recycling" or "destined to be recycled" could be made in relation to virtually any hazardous waste.

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[14] See M. Winfield, Comments on Proposed CEPA Export and Import of Hazardous Wastes and Hazardous Recyclable Materials Regulations – Discussion Paper (Ottawa: Toxics Caucus: Canadian Environmental Network, April 2002).

[15] See, for example, M. Winfield, Comments on Proposed CEPA Export and Import of Hazardous Wastes and Hazardous Recyclable Materials Regulations – Discussion Paper (Ottawa: Toxics Caucus: Canadian Environmental Network, April 2002), Recommendation 1.

[16] All section numbers in this brief refer to sections of the regulations contained in the Background Paper for Drafting Instructions for the Proposed CEPA Export and Import of Hazardous Waste and Hazardous Recyclable Materials Regulations, Transboundary Movement Division, Environment Canada, December 2002. (2003 Drafting Instructions).

The proposed definition incorporates no specific provisions or tests to demonstrate that materials are actually going to be recycled. There are no requirements, for example, regarding the portion of the waste that must actually be recycled in order to qualify. In contrast, for example, Ontario's definition of "recyclable material," with the except for certain specific materials,[17] requires that a material be "wholly used" at the site in an ongoing commercial, manufacturing or industrial process or operation or be promptly packaged or offered for sale to meet "a realistic market demand."[18] The proposed definition also imposes no time limits on how long a substance can be stored, beyond a general one-year rule for final recycling or disposal contained in the regulations, before it is considered to be disposed of rather than recycled.

Recommendation

1. *Environment Canada should incorporate into the regulations a definition of recyclable material consistent with that employed by the Ontario Ministry of the Environment, namely that materials be required to be "wholly used" in further industrial or commercial processes, or that there be a "realistic market demand" as demonstrated by a positive market price for materials.*

2.3 Application and Exemptions

2.3.1 Small Quantity Exemptions (s.6)

The overall approach proposed by the department of providing general small quantity exemptions with additional thresholds for specific high priority waste types is supported in principle. However, the applicability of minimum amounts for priority substance types in all circumstances (e.g., disposal or recycling) should be clarified. In addition, the list of high priority waste types to which alternative thresholds apply should be expanded to include other substances identified as priorities through CEPA and Canada's international commitments.

The department's proposal for a general exemption of the return of empty containers that have a residue of hazardous waste or recyclable materials is not supported. An limited exemption might be provided for the return of containers to the original manufacturer or supplier of their contents.

Recommendations

2. *The list of substances with "no-exemption" status (i.e., maximum exempted amount of "none") should be expanded to include all substances listed in Annexes A, B, and C of the Stockholm Convention.*

3. *The exemption thresholds for non-CEPA Track 1 toxic substances should be reviewed and established on a case-by-case basis.*

[17] EBR Registry Notice RA7E0012, July 23, 1998.
[18] Ontario Regulation 347 as amended by Regulation 105/94.

2.3.2. Other Specific Exemptions

Chromium trimmings from the leather industry (s.8(a))

The drafting instructions include a proposal for an exemption from the requirements of the regulations for certain chromium-based wastes generated by the leather tanning and finishing industry. No rationale is provided in the drafting instructions or accompanying materials for this exemption. During the consultation meetings the only justification for the exemption was being provided in response to a request from the leather industry.

The proposed exemption makes a series of assumptions about the level of control that can be exercised over the fate of these wastes, and that they will always be landfilled. The basis for these assumptions is not explained.

Recommendation

4. *The exemption for chrome wastes from the leather tanning and finishing industry should be removed from the proposed regulations.*

Treated wood (s.8(b))

The drafting instructions include a proposal for an exemption for waste treated wood not destined to be burned or disposed of in a way that would result in the release of CEPA toxic substances.

Recommendation

5. *Given the wide range of CEPA toxic substances associated with treated wood products, and the potential for these products to leach these substances in situ, this exemption should not be implemented. Treated wood should be disposed of in a lined landfill with a leachate collection system.*

2.3.3. Electronic Waste

Environment Canada proposes to regulate electronic waste on the basis of presence of hazardous constituents versus the presence of only metal alloys destined for direct reuse, rather than on the current basis of whole versus shredded equipment.[19]

This overall approach is supported. However, it is important to consider the full range of hazardous materials likely to be contained in electronic scrap. This may include a wide range of heavy metals,

[19] Stratos Inc., Proposed Revisions to the Export and Import of Hazardous Waste Regulations: Discussion Paper for Winter 2003 National Consultations, December 2002 (Winter 2003 Discussion Paper) and Environment Canada, January 29, 2003, Toronto Consultation Meeting Presentation.

brominated flame retardants, PCBs, solvents, adhesives and other highly toxic materials.[20] It is also important to consider that it may be difficult, if not impossible, to control the contents of individual loads of electronic scrap, particularly where the materials have been collected from multiple sources, and may contain equipment of many different types, designs and ages. This implies that all electronic scrap should be treated as hazardous materials. Shredded electronic scrap may also present particular problems in terms of the availability of material contained in electronic components for leaching once the components have been broken up though the shredding process.

Consideration also needs to be given to the presence of materials that, if treated or disposed of in particular ways, would result in the generation of pollutants of concern. The incineration or smelting of polyvinyl chloride (PVC) based plastics in electronic materials, for example, would likely result in the generation of large quantities of dioxins.

Recommendation

6. *All electronic scrap should be listed as hazardous waste or hazardous recyclable material for the purposes of the regulations.*

2.3.4. RCRA Listed Wastes

U and P Listed Wastes

The department is considering the inclusion of specific industrial chemicals that are listed in US RCRA regulations as U and P listed wastes (lists of acutely hazardous or toxic commercial chemicals). Addition of these substances would permit further harmonization with the US and Ontario hazardous waste lists.

Recommendation

7. *The RCRA U and P listed wastes should be included in lists of hazardous wastes and recyclable materials given their hazard characteristics, and the relevance of such listing to harmonization with the US and Ontario lists.*

Pre-Treatment Required Wastes

The department is also considering listing within the regulations all substances that are subject to pre-treatment requirements prior to landfill under the RCRA lists.

[20] Envirosris, Information Technology and Telecommunication Waste in Canada (Ottawa: October 2000) Prepared for Environment Canada NOPP.

Recommendation

8. *Given the goal of harmonization with US lists and overall goals of North American standards harmonization, all substances on the US pre-treatment requirement lists should be included in the regulations unless it can be demonstrated that they are not in Canadian commerce and not being generated in or imported into Canada as hazardous wastes.*

2.3.5. Leachate Tests

Environment Canada proposes continued application of the leachate test to recyclable materials. The reasons for this approach include consideration that recyclable materials may come into contact with the environment in various circumstances. Consideration also has to be given to the fact that, if markets are not found for "recyclable materials," they may be subject to long-term storage and ultimate disposal in landfills.

Recommendation

9. *The leachate test should continue to be applied to all non-listed wastes and recyclable materials.*

2.3.6. "Derived from" Rule

Environment Canada proposes not to include a "derived from" rule in the regulations,[21] except in relation to wastes destined for landfill.[22] Such a rule would require that, once a material has been listed as hazardous, it retains this classification after treatment or processing. The lack of a "derived from" rule is a serious gap in the proposed regulations for a number of reasons.

Both the US and the province of Ontario have incorporated "derived from" rules in their hazardous waste regulations. In addition to the harmonization gap flowing from the lack of such a rule in Canada's federal regulations, it is important to consider that "derived from" rules have been adopted specifically to deal with situations where "treated" hazardous wastes have been disposed of as non-hazardous wastes following some form of "treatment." Ontario's incorporation of a "derived from" rule into Regulation 347 in November 2000 was in response to a specific case of such activities involving the disposal of "treated" metal cyanide solutions in a non-hazardous waste landfill in Hamilton.[23]

The department has indicated its intention to apply a "derived from" rule in relation to wastes that are disposed of in hazardous waste landfills. However, this assumes that any wastes from treatment or recycling operations would be disposed of in such landfills. In the absence of a "derived from" rule, however this is unlikely to be the case. If "treated" or "recycled" materials are no longer considered hazardous, then it is unlikely that they would be disposed of in a hazardous waste landfill. Rather, the absence of such a rule would provide powerful incentives for the types of behaviour that Ontario

[21] Winter 2003 Discussion Paper, pg.6.
[22] 2003 Drafting Instructions, s.15(5).
[23] See EBR Registry Posting RA00E0002, November 8, 2000.

specifically sought to prohibit though its adoption of a "derived from" rule in its hazardous waste regulations.

In addition, the absence of a "derived from" rule, in combination with the extremely open-ended definition of recyclable materials proposed in the drafting instructions, would create a major gap in the regulatory framework. Without a "derived from" rule, any residuals from processing "recyclable materials" would likely fall outside of the regime established through the regulation, even though they might constitute a large portion of the materials in question, and may have extremely hazardous characteristics. Ontario adopted an amendment to Regulation 347 in 1998 specifically designating residues from recycling operations as wastes for the purposes of the regulation.[24]

Recommendation

10. *A "derived from" rule should be incorporated into the regulations for these reasons. Exemptions should be limited to products of recycling operations that are "wholly used" in further industrial processes or for which a "realistic market demand" can be demonstrated. Other residuals of hazardous materials recycling and treatment processes should continue to be considered hazardous following these processes. A de-listing process, with clearly defined criteria for de-listing, and opportunities for public input should be established to deal with specific waste streams that proponents believe should be removed from the hazardous waste/recyclable regime.*

2.4 Prohibitions (ss.11 and 12)

The department proposes a number of prohibitions on waste imports and exports. These include exports to Antarctica, exports of waste to non-OECD countries,[25] exports to Basel Convention countries that have prohibited specific waste imports, exports and imports to countries that are not parties to bilateral, multilateral or regional agreements with Canada, exports and imports of materials whose shipment is banned under other international agreements, and exports and imports of materials whose shipment is otherwise banned under CEPA.[26] In addition, a prohibition on imports or exports where the treatment of the importer may result in the recovery, recycling, reclamation, direct reuse, or alternative uses of persistent organic pollutants (POPs) as per the Stockholm Convention has been added to the previous draft of the regulations.[27]

These proposed prohibitions are strongly supported, as they flow directly from Canada's international obligations or domestic legislation and regulations. However, two significant gaps remain in the proposed prohibitions relative to Canada's international obligations:

- The Stockholm convention includes a prohibition on the exports and imports of POPs for final disposal except where they are to be submitted to processes that destroy or irreversibly transform the POPs so they no longer exhibit the characteristics of POPs;[28] and

[24] EBR Posting RA7E0012, July 23, 1998.
[25] 2003 Drafting Instructions, s.11.
[26] 2003 Drafting Instructions, s.12.
[27] 2003 Drafting Instructions, s.12(6).
[28] *Stockholm Convention*, Art.6(1)(d)(ii).

- The 1994 and 1995 decisions of the Basel Convention of the Parties prohibiting exports of wastes to non-OECD countries for the purposes of recycling and recovery.[29]

These obligations should be incorporated into the prohibition section of the proposed regulations.

Recommendation

11. In addition to the prohibitions on waste movements proposed by Environment Canada, the proposed regulations should include prohibitions on

- *exports and imports of POPs for final disposal except where they are to be submitted to processes that destroy or irreversibly transform the POPs so they no longer exhibit the characteristics of POPs;[30] and*
- *exports of waste from Canada to non-OECD countries for the purposes of recycling and recovery.*

[29] Basel Covention COP – 3 Decision III/1.
[30] *Stockholm Convention*, Art.6(1)(d)(ii).

3. Transboundary Movement Control Regimes

3.1 Contents of Notices (s.21)

The department proposes to expand the range of information to be included in notices of proposed hazardous waste movements. The proposed addition of references to the presence of POPs subject to the Stockholm Convention is noted in particular. However, it is also noted that these provisions are currently contained only in the rationale section of the drafting instructions,[31] not in the actual text of the proposed regulations.

A number of gaps in the proposed notice information requirements remain. These include

- The need for indications as to the presence of CEPA toxic substances in addition to CEPA Track 1 substances in a proposed waste movement; and

- Information on the specific quantities or concentrations of POPS, CEPA toxic substances or other priority substances present in the waste stream. This cannot be derived from the information currently required through the regulations.[32]

The notice information requirements also do not address the need for the use of common unique identifiers for waste generation, transfer and receiving facilities in North America, to facilitate the transboundary tracking of wastes and recyclables from the "cradle" to the "grave," when the "cradle" is in one country, and the "grave" in another.[33]

Recommendations

12. *The regulations should require that notices include information on the presence of CEPA toxic substances, rather than just CEPA Track 1 substances in proposed waste movement. Information should also be required to be included on the presence of Stockholm Convention listed substances.*

13. *The regulations should require that notices include information on the specific quantities and concentrations of CEPA toxic substances and other priority substances in proposed waste shipments.*

14. *Environment Canada should work with US EPA and SEMANAT to develop a system of unique identifiers for North American waste generators, transporters, transfer facilities*

[31] 2003 Drafting Instructions, pg.A19.
[32] See M. Winfield and H. Benevides, Mechanisms for Tracking Canadian Mercury Imports and Exports for Use and Disposal (Ottawa: Pembina Institute, May 2002) for the North American Commission for Environmental Cooperation.
[33] Commission for Environmental Cooperation, Tracking and Enforcement of Transborder Hazardous Waste Shipments in North America: A Needs Assessment (Montreal, CEC, 1999).

and receiving facilities to facilitate the transborder tracking of hazardous waste movements.

3.2 Modified Controls for Movements of Hazardous Recyclable Materials to and from Other OCED Countries (ss.43–54)

The proposed regulations include a number of modified controls for imports and exports of hazardous recyclable materials to and from OCED countries.

The key element of these elements of the regulations is provision for presumed, as opposed to explicit, consent by receiving jurisdictions for waste movements. For "pre-authorized facilities" consent is presumed within seven days, while for "non-pre-authorized" facilities the time period is 30 days.[34] Permits for pre-authorized facilities are to be valid for three years, while those for non-pre-authorized facilities are valid for up to one year.[35] Permits for pre-authorized facilities may be renewed within five days.[36] The timeframe for the completion of recycling operations is normally one year, but can be extended to three years by the minister.[37]

The department is also proposing to allow single notices for multiple shipments of materials, and single notices for shipments of the same material from multiple sources.[38]

There are a number of aspects of these provisions that give rise to serious concern:

- The requirements for the pre-authorization of receiving facilities have yet to be defined. It is not possible to evaluate the proposal for pre-authorization without this information. Pre-authorization requirements would need to include provisions to ensure the safe storage of materials. These would include

    a. Provisions to control air emissions, leaching, and run-off
    b. Emergency prevention, planning and response as per the recommendations of the Ontario Fire Marshal following the Plastimet fire[39]
    c. Regular reporting on the amounts of materials on-site
    d. Plans for the disposal of materials if they are not ultimately recycled
    e. Plans for the disposal of residuals from recycling operations

    Similar requirements would need to be established for non-pre-authorized facilities.

- The three-year time period for permits for "pre-authorized" facilities is excessive. Serious problems could emerge at facilities over such a period, particularly the accumulation and storage of large quantities of materials for "recycling," which if not properly managed could

[34] 2003 Drafting Instructions, s.47.
[35] 2003 Drafting Instructions, s.48.
[36] 2003 Drafting Instructions, s.50.
[37] 2003 Drafting Instructions, s.54.
[38] Winter 2003 Discussion Paper, pg.14.
[39] 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).

pose threats to public health and safety and the environment, and require clean-up at taxpayers' expense in the event of business failure.

- There are no provisions regarding the confirmation of the capacity of receiving jurisdictions to review notices within the proposed timeframes, which are, in some cases, extremely short. Nor do the proposals appear to contemplate situations where provinces do not require specific approvals for the operation of "recycling" operations.

- There are no provisions permitting receiving jurisdictions to request additional time to review notices that may be of concern.

- The proposed timeframes would not permit opportunities for public comment in response to notices, and more generally would not allow for the publication of notices prior to the granting of tacit approvals of imports.

- The proposed timeframes for the renewal of permits make no provision for reports on facility performance and activity prior to permit renewal, and do not provide adequate time for the review of facility operations and performance prior to renewal.

The provisions permitting storage of hazardous recyclable materials on-site for up to three years implies that provision needs to be made in the standards for ESM that address concerns arising from long-term storage facilities, such as safety, security, reporting on amounts on-site and the need to monitor for leaching, leakage, and airborne releases.

The rationale for the proposals for authorization of shipments of the same material from multiple sources through a single notice is weak, as it is highly unlikely that materials would be collected from individual retailers or other small-scale generators and then subject to transboundary movement prior to being consolidated into larger loads.

The overall approach of applying relatively lax controls on "recycling" operations highlights the need for a more rigourous approach to the definition of "recycling" activities and to the control of residuals and by-products from "recycling" operations.

Recommendations

15. *Environment Canada should articulate the requirements for pre-authorization as soon as possible.*

16. *Permits for pre-authorized facilities should only be granted initially for one year. At the end of the first year, facilities should be permitted to apply for renewal for a period of up to three years, conditional on performance during the initial permit period.*

17. *Provision should be made for confirmation of the capacity of receiving jurisdictions to review notices within the proposed timeframes where tacit approval would apply. Tacit consent should not be permitted where this capacity is not confirmed. The capacity of receiving jurisdictions should be reconfirmed at regular intervals.*

18. *Provision should be made for receiving jurisdictions to request additional time to review notices that may be of concern.*

19. *Permits allowing extended storage should be required to include regular reporting requirements regarding the amounts and types of wastes on-site, and the fates of received materials and residuals.*

20. *Facilities seeking the renewal of permits should be required to provide reports on their activities during the previous permit period, including the amounts and types of materials received during the previous permit period, and their fates, prior to the renewal of permits.*

21. *Facilities should be required to report any changes in their approval status (e.g., withdrawal of approval, changes in terms and conditions), and any investigations or laying of charges against the facility by federal, provincial or local authorities during the permit period.*

22. *Permits permitting the collection of materials from multiple sources should identify the sources in question, and set specific limits on the amounts of wastes that can be dealt with in this way.*

3.2.1 Controls for "Low-Risk" Hazardous Recyclable Materials[40]

Environment Canada indicates that it has received requests for further modified controls on "low-risk hazardous recyclable materials," including electronic scrap. For the reasons outlined above, electronic scrap would not be a good candidate for classification as a "low-risk" material, as it can contain a wide range of extremely hazardous materials, and the quality and consistency of such scrap is difficult, if not impossible, to control.

More generally, such a proposal cannot be considered without a clear statement by Environment Canada of the types of criteria that would be taken into consideration in determining whether a material would be considered "low-risk." Any process for further modifications of controls would also need to provide for public input on each individual application.

3.3 Control Regime for Hazardous Waste to and from all Countries and Hazardous Recyclables to and from Non-OECD Countries (ss.55–64)

These provisions reflect the general provisions of the Basel Convention. However, consistent with the 1994 and 1995 amendments to the Basel Convention, exports of hazardous wastes and recyclable materials to non-OECD countries should be prohibited.

The draft regulations include a time limit of one year within which final disposal or recycling must occur.[41] This provision strengthens the enforceability of the regulations in an important manner.

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[40] Winter 2003 Discussion Paper, pp.14–15.
[41] 2003 Drafting Instructions, s.64(1).

However, it should be noted that the length of these time limits imply that ESM standards for disposal and recycling facilities need to include provisions to address the long-term storage of materials.

3.4 Liability and Insurance (s.68)

The department proposes requirements for insurance of at least $5 million for hazardous waste exports and imports, and $1 million for hazardous recyclable materials exports and imports.[42] No rationale for this differential is provided. Consideration must be given to the fact that recyclable materials may actually be subject to greater handling, processing, storage and transportation than wastes, and that therefore the risks of releases to the environment are at least as great as the risks with movements for the purpose of disposal.

Recommendation

23. *Insurance requirements for importers and exporters of hazardous wastes and hazardous recyclables should be set at the same level of $5 million.*

[42] 2003 Drafting Instructions, s.68.

4. Permits of Equivalent Levels of Environmental Safety (PELES) (ss.71–75)

Permits of Equivalent Levels of Environmental Safetey (PELES) have been a source of consistent concern regarding the proposed revisions to the regulations.[43] In addition to the potential weakening of regulatory controls over waste movements, there is a concern over the degree to which Environment Canada's resources will be diverted from core regulatory tasks by the need to negotiate PELES, and to deal with data that are provided in non-standard formats as a result of PELES. PELES will also complicate inspection and enforcement efforts as a result of the diversity of requirements for importers and exporters that will result from their application.

The department has yet to articulate what "equivalent levels of public safety" are to mean, or to establish criteria against which PELES applications will be evaluated. It is difficult to envision how safety can be ensured in the absence of such criteria. Criteria would also strengthen the fairness and predictability of the PELES process from the perspective of applicants.

Under the department's current proposals, PELES would be granted for up to three years, with the possibility of renewal.[44] Only summaries of applications for PELES, as provided by proponents, would be made available to the public through the CEPA registry.[45] There is no formal review process for PELES prior to renewal, and no requirement that renewal applications be published in the CEPA registry prior to renewal.

Recommendations

24. *All components of applications for PELES should be made available to the public through the CEPA registry, and opportunities provided for public comment prior to the granting of PELES. The department should explain how all public comments received are addressed where a PELES is issued.*

25. *PELES should only be granted initially for one year, subject to possibility of renewal for up to three years at the end of that year.*

26. *Applications for renewals of PELES should be posted on the CEPA registry with opportunities for public comment prior to renewal.*

27. *Criteria for the establishment of "equivalent levels of safety" should be articulated by the department. These should address such issues as*
    - *Demonstrating how environmental protection, public health and safety will be ensured including consideration of what provincial approval requirements are in place in relation to the activities to be covered by the PELES*

[43] See M. Winfield, Comments on Proposed CEPA Export and Import of Hazardous Wastes and Hazardous Recyclable Materials Regulations – Discussion Paper, (Ottawa: Pembina Institute and Canadian Environmental Network, April 2002).
[44] 2003 Drafting Instructions, s.73(1).
[45] 2003 Drafting Instructions, s.72.

- *Ensuring that there are no losses of opportunities for public notice and comment on exports and imports*
- *Ensuring that there is no loss of information regarding imports and exports of hazardous wastes and recyclable materials.*

PELES applications should be required to specifically address these criteria.

5. Environmentally Sound Management (ESM) (ss.76–81)

The question of Environmentally Sound Management (ESM) is central to the revision of the regulations. As noted earlier, the Basel Convention requires that Canada ensure that any wastes imported into or exported from Canada will be managed in an environmentally sound manner.[46] In addition, criteria for ESM are required to be articulated through the regulations in order to operationalize the minister's powers under CEPA to deny permits for waste imports and exports where the minister is of the opinion that the wastes will not be managed in a manner that will protect the environment and human health from adverse effects.[47]

Gaps in existing federal and provincial regulatory standards regarding hazardous waste disposal have been identified as a major factor in the dramatic increase of US hazardous waste exports to Canada that took place in the 1990s, following the adoption of federal land disposal restrictions, and other new standards for hazardous waste management in the US.[48]

Environment Canada's proposals are focused on three aspects of ESM:[49]

- The existence of an environmental management system at the receiving facility
- That the receiving facility is authorized to receive and manage the hazardous wastes or recyclable materials in question by the jurisdiction where the facility is located
- That the facility has "taken into account" the objectives of international and domestic guidelines and standards to be specified in the regulations.

The department proposes that importers be required to "self-certify" their compliance with these requirements when they apply for permits for waste imports.[50]

The department's proposals fall far short of what has been recommended as necessary to deal with the growth of US waste exports to Canada as a result of lower disposal standards. A stronger approach is also needed to ensure that the federal Minister of the Environment is in a position to undertake substantive evaluations of the merits of proposed waste imports and exports where the jurisdiction of import declines to do so, as was the case with the province of Ontario between 1997 and 1999 and is currently the situation in Saskatchewan.[51]

The proposed requirement for compliance with provincial approvals adds little to the existing system, which relies on provincial governments to establish the substantive standards for hazardous waste handling and disposal, and to review the substantive merits of import proposals. This system proved inadequate during the 1990s, when provincial governments failed to update their standards to match standards in the US, and in some cases weakened or removed their regulatory requirements related to hazardous waste management. In addition, as reflected in CEPA 1999, under international law it is

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[46] *Basel Convention*, Art.2(g) and 8.
[47] CEPA 1999, s.185(2)
[48] C. Reed, M. Jacott and M. Winfield, The Transboundary Movement of Hazardous Wastes in Canada, the United States and Mexico 1990–2000 (Austin, TX: Texas Center for Policy Studies, April 2001).
[49] 2003 Drafting Instructions, s.77(2).
[50] 2003 Drafting Instructions, s.77(2) and (3).
[51] A. Lindgren, "Mexico North," The Ottawa Citizen, August 1, 1999.

ultimately up to the Government of Canada to ensure Canada's compliance with the provisions of the Basel and Stockholm Conventions.

The regulations propose "core" elements of environmental management systems that are to be required. These include requirements for staff training, facility approvals, occupational health and safety programs, monitoring, recording and reporting programs, information sharing on waste reduction, a comprehensive emergency/contingency plan, and a closure and after-care plan.[52] However, no specific requirements regarding these elements are to be included in the regulations, and the proposed regulations do not specify compliance with any specific Environmental Management System (EMS) such as ISO 14000 or EMAS. In the absence of any specific standards or requirements it is unclear what the substantive content or impact of the EMS requirements will be.

Compliance with international or domestic guidelines and standards for hazardous waste management will not be required through the regulations. Rather, facilities will simply have to "consider" these standards. The result is that there will be no requirements in the regulations for compliance with substantive standards related to the protection of the environment and human health. This will be in stark contrast to the situation in the US, where hazardous waste management facilities are required to comply with a range of specific operating, performance and emission standards under the RCRA and *Clean Air Act*. The focus of the department's proposed approach is exclusively on management processes, and even there no specific enforceable standards are to be established. Given the gaps in substantive standards in existing provincial regimes, requirements for management processes will not fill these gaps.

The resulting approach is wholly inadequate, and will not ensure the protection of human health and the environment, address the flow of US wastes into Canada as a result of lower disposal standards, or enable Canada to fulfill its international obligations related to hazardous wastes and hazardous recyclable materials.

Recommendation

28. 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:

- *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:*
    - *Facilities should be required to report any changes in their approval status (e.g., withdrawal of approval; changes in terms and conditions), and any investigations or laying of charges against the facility by federal, provincial or local authorities during the permit period.*

- *Conformance, confirmed through an independent third party audit, with one of a number of specified environmental management systems including*
    - *ISO 14000*
    - *EMAS*

[52] 2003 Drafting Instructions, s.79.

- *another specific system specified in the regulations.*

- *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, and pre-treatment requirements as prescribed in*
    - *the US Resource Conservation and Recovery Act and rules and regulations made under that legislation*
    - *the relevant CCME guidelines.*

  - *For incineration or other facilities combusting, or smelting hazardous wastes and recyclable materials emission standards as per*
    - *the relevant CCME Canada-Wide Standards for dioxins and furans*[53] *and mercury*[54]
    - *emission and operating standards as per the July 1999 US RCRA and Clean Air Act standards for other pollutants*[55]
  - *Consistent with the provisions of the Stockholm Convention*[56] *incineration should be not considered as an environmentally sound disposal option for substances listed in the Stockholm POPs convention, or for Track 1 CEPA toxic substances.*

  - *For recycling facilities this would include appropriate requirements regarding the storage and handling of materials such as those outlined in the report of the Ontario Fire Marshal regarding the July 1997 Plastimet fire,*[57] *and the February 1998 report of the Canadian Institute for Environmental Law and Policy on hazardous waste management in Ontario.*[58]

- *Monitoring and public reporting requirements regarding point, non-point and fugitive releases from the facility*

- *Public involvement arrangements, including the existence of facility community advisory committees*

- *Emergency planning and response provisions where minimum federally articulated requirements are not addressed through provincial/territorial approvals*

- *Financial assurance and insurance provisions, where minimum federally articulated requirements are not addressed through provincial/territorial approvals*

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[53] Canadian Council of Ministers of the Environment, *Canada Wide Standards for Dioxins and Furans*, (Winnipeg, CCME, May 2001).
[54] Canadian Council of Ministers of the Environment, *Canada-Wide Standard for Mercury Emissions*, (Winnipeg: CCME, June 2000).
[55] 40 CFR Part 60
[56] *Stockholm Convention*, Art.6((1)(d)(ii).
[57] 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).
[58] M. Winfield, Hazardous Waste Management in Ontario: A Report and Recommendations (Toronto: CIELAP, 1998), Recommendation IV-20.

- *Publicly available 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.

29. Environment Canada should review individual facility declarations, and have the capacity to undertake inspections of facilities to confirm compliance.

6. Waste Reduction Plans (ss.82–90)

The provisions of the regulations related to waste reduction reflect the authority of the Minister of the Environment under CEPA to require waste exporters to prepare plans to reduce or phase out the export of hazardous wastes for final disposal.[59] Waste reduction planning is the only tool included in the proposed regulations specifically related to waste reduction/pollution prevention as opposed to disposal and recycling. In that context, the waste reduction planning provisions are central to the fulfillment of Canada's waste minimization obligations under the Basel Convention, and the achievement of the overall goals of CEPA related to pollution prevention.

Unfortunately, Environment Canada's current proposals provide no indications of when waste reduction planning requirements will be applied, other than where "it perceives an opportunity to promote pollution prevention."[60] This is inadequate given the centrality of pollution prevention as a goal of CEPA 1999.

Planning requirements should be triggered by meeting a set threshold for the generation of waste for exports and disposal, with lower thresholds for priority waste streams, such as those including CEPA toxic substances, rather than being applied only where opportunities present themselves, 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.

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

[59] CEPA, s.188.
[60] Winter 2003 Discussion Paper, pg.20.

7. Public Access to Information and Decision Making

Public access to information under the regulations is currently limited to semi-annual compilations of the information received in notices published in the departmental hazardous waste newsletter.

The department is proposing to increase the information available on waste movements, including

- the names and addresses of Canadian importers/exporters
- waste information (TDG PIN # and IWIC Codes)
- final destinations for waste imports and exports
- received quantity from movement documents
- the names and locations of border crossings.

The department is also proposing that this information be made available though a Web site with a capacity for user-designed queries, similar to the NPRI query site.[61]

These proposals are welcomed, and would be important steps towards addressing the current gaps in available public information regarding hazardous waste movements.
However, the department needs to clarify if the information to be made available to the public would include all of the information contained in notices, permits, and manifests/movement documents.

More broadly, processes for public access to information and decision making in relation to transboundary waste movements should be strengthened in a number of additional ways. Specifically, CEPA requires the publication of notice information regarding the name and specification of waste materials, the names of importers and exporters, and the receiving and exporting jurisdictions.[62] However, as notices are currently published semi-annually, the published information usually relates to notices in relation to which permits have already been granted, and, in some cases, under which waste movements have already taken place. This information is of marginal use to members of the public, particularly residents of potential host communities for waste imports.

Recommendation

31. *Environment Canada should publish notice information, on an individual notice, rather than aggregate, basis, in the CEPA registry prior to the granting of permits, and provide an opportunity for members of the public to comment on proposed waste movements. Permits, once granted, should be posted on the CEPA registry. Provision should be made for the publication of information on proposed waste imports in a newspaper of general circulation in the receiving community, along with information on how to make input before a decision to approve imports is made.*

[61] Winter 2003 Discussion Paper, pg.21.
[62] CEPA 1999, s.187.

8. Conclusions

Canadian environmental organizations strongly support the modernization and strengthening of the regulations governing the export and import of hazardous wastes and recyclable materials under the revised CEPA. Unfortunately, the approach proposed by the Environment Canada places an excessive focus on facilitating the "recycling" of hazardous wastes, rather than their reduction at source, as is mandated through CEPA 1999 and the Basel and Stockholm Conventions.

The department's approach to the regulations appears to be based on the assumption that the "recycling" of hazardous wastes is a safe and benign activity. This has been consistently demonstrated not to be the case through extensive experience in Canada and the US.

The recycling of hazardous wastes is an inherently high-risk activity. It may involve the extensive handling of the materials in question and entail processes that generate extremely toxic wastes and residuals themselves. In addition, there is always a risk that market conditions, business failure or fraud will result in materials "intended to be recycled" going to long-term storage or disposal instead. These considerations have always been major factors in the arguments for pollution prevention over the recycling or reuse of hazardous materials.

Given these factors, and the department's emphasis on "differential" controls for hazardous waste recycling, a number of changes to the proposed regulations need to be undertaken. Consistent with the approach taken by the province of Ontario, a much more rigorous definition of recycling, including the demonstration of the existence of realistic markets for materials, or their complete use in further industrial processes, is needed. In addition, consistent with the approach taken by Ontario, a "derived from" rule needs to be incorporated into the regulation with respect to all wastes, and all materials from recycling activities that are not "wholly used" in other industrial processes.

As currently drafted, the combination of an extremely loose definition of recycling, and the lack of a "derived from" rule constitutes a major potential loophole in the regulations, inviting imports of wastes under the guise of recycling and then disposal of residuals, which may constitute the bulk of the imported materials, in non-hazardous waste facilities.

At the same time, consistent with the overall goals of CEPA and the Basel and Stockholm Conventions, Environment Canada should adopt a much more aggressive approach to the use of the waste reduction planning provisions of CEPA, with the application of planning requirements being triggered on a threshold basis.

Much more substantive standards for ESM need to be established under the regulations. These should include requirements for compliance by receiving facilities within Canada with the applicable Environment Canada, CCMW and US standards for facility operation and performance, such as the CWS for dioxin, furans and mercury for incineration and other combustion and smelting facilities, the proposed CCME landfill guidelines, and the US rules regarding the pre-treatment of hazardous wastes prior to land disposal. The standards for ESM also need to deal directly with environment and safety issues related to the storage of materials at disposal or recycling facilities.

The regulations include a number of provisions intended to bring Canada into compliance with its international environmental commitments, including a prohibition on the transboundary movement of POPs for the purposes of recycling, reuse or recovery. However, significant gaps remain in the regulations in this regard, including the need for a prohibition of exports of hazardous recyclable

materials to non-OECD countries, as per the 1994 and 1995 amendments to the Basel Convention, and provisions to ensure that POPs are not disposed of in a manner that results in the generation of POPs themselves.

Public access to information has been an area of consistent weakness in the management of hazardous waste imports and exports under CEPA. The department's proposals to strengthen public access to information gathered under the regulations would be an important step forward. However, a number of further steps are required to provide for meaningful public participation in the decision-making process. Specifically, notices of proposed waste movements should be published in the CEPA registry prior to the granting of import or export permits, as provided for in CEPA 1999. In addition, members of the public should be provided with opportunities for comment prior to the granting of permits, and permits, and any amendments to permits, should be published in the CEPA registry when granted. Similar processes should be established with respect to the establishment of PELES, and the renewal of permits.

More generally, the information requirements under the regulations should be strengthened in a number of ways. Notices and manifests should be required to state the quantity or concentration of priority substances (e.g., POPs and CEPA toxics) in mixed waste streams. Provision should also be made to facilitate the tracking of transboundary movements of wastes in North America from cradle to grave, where the "cradle" is in one country and the "grave" in another.

Finally, there are a number of major gaps in the department's proposals that make an evaluation of their likely impact difficult. Environment Canada has yet, for example, to articulate criteria for the pre-authorization of recycling facilities, or for defining "equivalent levels of safety" for purposes of PELES. These gaps need to be addressed, and the resulting criteria circulated for public comment before the regulations are finalized.