CONSULTATIONS ON PCB WASTE EXPORT AND IMPORT REGULATIONS

– Discussion Paper –

Submitted to:

Environment Canada

Submitted by:

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1. INTRODUCTION

The control of imports and exports of hazardous wastes is one of Canada's environmental ministries' important responsibilities to ensure protection of the environment and human health and meet Canada's international obligations. Because of their nature and high public profile, polychlorinated biphenyls ("PCB's") are a special case when it comes to the management, export, and import of hazardous wastes. Canada's policy is to ensure the management of PCB wastes within a strictly controlled regulatory system until they can be eliminated through removal from service, proper destruction and isolation from the environment. In Canada, Environment Canada has the responsibility for the control of imports and exports.

Although there has been no such shipment to date in accordance with the *Export and Import of Hazardous Wastes Regulations (EIHWR)*, PCB waste imports are permitted in Canada. Recently, there has been more interest in potential imports of such waste, mainly from countries without the capacity to dispose of PCB wastes. It is important to note that the United States prohibits the export of PCB wastes and, since a 1997 Court ruling overturning its PCB Import Rule, also prohibits the import of PCB wastes.

In order to strengthen the existing rules and to ensure that the import controls for PCB wastes are as stringent as those for export as set out in the *PCB Waste Export Regulations (PCBWER)*, Environment Canada is proposing to amend the regulations governing PCB waste export to include imports. Proposed amendments to these regulations will be improved by the advice gathered through multistakeholder consultations. Your views are sought on the proposed amendments to Canada's regulations respecting PCB waste imports.

The purpose of this brief paper is to prepare the reader for the upcoming multistakeholder workshops and to be the foundation for initiating discussions both prior to and at the meetings. These meetings are scheduled for Montréal on 30 January 2001, Toronto on 2 February 2001, and Edmonton on 5 February 2001. The document describes the context for the proposed changes to the *PCBWER* and outlines the relevant legislation and the history of events leading to the development of the proposed amendments. Proposed specific changes to the regulations are identified and the rationale for those changes is provided.

2. THE PROCESS

Canada is in the process of updating its regulations to promote more efficient controls on transboundary movements and management of hazardous wastes and hazardous recyclable materials. This course is guided by the new *Canadian Environmental Protection Act, 1999* (*"CEPA, 1999"*), which

strengthens the provisions concerning control and management of hazardous waste by incorporating new authorities into the legislation. These additional requirements include environmentally sound management, equivalent levels of safety and waste reduction plans for exports for final disposal.

A review of the *Export and Import of Hazardous Wastes Regulations (EIHWR*) has been initiated, with plans for new regulations to improve regulatory efficiency and enforcement, to implement changes to applicable international obligations and to implement these new CEPA authorities by 2003. It is anticipated that the controls on the export and import of PCB wastes may eventually be integrated into these amended regulations as part of this 2003 EIHWR amendment. Development of the amended *EIHWR* is in its early stages and will also involve significant stakeholder consultation processes over the next two years.

Given the increasing interest in importing PCB wastes, rather than wait until EIHWR is amended, it was decided to amend the current *PCBWER* in 2001 to include imports. These regulations will become the *PCB Waste Import and Export Regulations (PCBWEIR)* and this is the subject of this discussion paper.

Concurrent with these changes, the revised *Chlorobiphenyls Regulations* (which will be called the *PCB Regulations)*, which require among other things an accelerated phase-out and destruction of in-use and stored PCB products, are being developed under the new CEPA. These regulations only allow import of PCBs for treatment and destruction, where the PCBs will be destroyed in the process. While the revised *PCB Regulations* are not part of this consultation process, they will be an important element in conjunction with the stipulations in the new *PCBWEIR* in Canada's overall PCB waste management regime.

This present consultation process is designed to elicit your views on the proposed inclusion of import requirements to the *PCBWER* and other proposed amendments, including possible controls on materials contaminated with PCBs in concentrations between 2 and 50 ppm. Once the workshops are complete, Environment Canada will consider all suggestions and recommendations and draft the regulations accordingly. The draft *PCBWEIR* will then be submitted for legal drafting. A socio-economic study is also underway and will form the basis for the Regulatory Impact Assessment Statement that must accompany the regulations.

The *Statutory Instruments Act* (R.S., 1985, C. S-22) establishes the basic legal process the federal government must follow when developing regulations. The process is summarized as follows:[1]

[1] Government of Canada, *CEPA* Environmental Registry™ URL http://www.ec.gc.ca/CEPARegistry/Regulations

1. A copy of the regulations proposed to be made by the Minister or the Governor in Council under *CEPA* is published by the Minister in Part I of the *Canada Gazette*, Canada's official parliamentary journal. This publication is a statement that indicates the manner in which the Ministers (of the Environment and Health) intend to develop a proposed regulation.

2. Within 60 days after the publication of a proposed regulation, any person, including a representative of the government of any country that would be affected by or benefit from it, may file with the Minister written comments on the proposed regulation.

Once a proposed regulation has been finalized, taking into account the comments received during the 60-day public consultation period, the final official regulation is published in Part II of the *Canada Gazette*. It is expected that the new *PCBWEIR* will be ready for Gazetting in (PART I) the Spring of 2001.

3. CONTEXT

3.1 PCB USE AND PCB WASTE MANAGEMENT IN CANADA

While never manufactured in Canada, PCBs were imported from the United States since the 1930's and were in wide use in electrical equipment and numerous other products until the late 1970's. At that time research linked PCBs to cancer, reproductive failure, birth deformities and other health problems in many animals and was generally thought, though not conclusively proven, that when not properly managed, could have significant effects on human health including cancer and immune system dysfunction.[2]

Commercial, manufacturing and processing uses of PCBs were restricted in Canada in 1977 with the introduction of the *Chlorobiphenyls Regulations*. The effect of these regulations was to bring an end to the manufacture and import of new PCB equipment and the refilling of existing equipment with fluids containing PCBs. By the late 1980s, legislation and formal agreements controlling the management of PCBs were in place. Under this regime, materials containing PCB wastes were subject to control if they contained concentrations of 50 mg or more of PCBs per kilogram (i.e. 50 parts per million or ppm). These initiatives included the *Transportation of Dangerous Goods Act* and *Regulations*, *Canada-U.S.A. Agreement on the Transboundary Movement of Hazardous Waste*, the *PCB Waste Storage Regulations* under the *Canadian Environmental Protection Act*, and several *CCME Guidelines* on PCB waste management.

[2] Government of Canada, *Economic Impact Analysis of Proposed Amendments to the CEPA Chlorobiphenyls Regulations and Storage of PCB Material Regulations*, draft summary report by Headwater Environmental Services Corporation (Environment Canada, Environmental Protection, August 2000) at p.1.

Considerable volumes of PCB's have been taken out of service and the resulting PCB wastes have been disposed. There remains in Canada and elsewhere, sizable volumes of PCBs still in equipment in service prior to the date of the legislation and substantial quantities of PCB-contaminated wastes in storage waiting to be treated. These materials must be treated in an environmentally sound and expeditious manner.

Domestically, the federal government and the provinces share jurisdiction for the management of wastes and recyclable materials. The federal government authority for PCB waste is to control the import, export, release to the environment, storage and transboundary movement as stipulated by the *Canadian Environment Protection Act* and the *Transportation of Dangerous Goods Act*. The provincial and territorial governments regulate intraprovincial movements of PCB waste. They are also responsible for establishing controls for licensing of PCB waste carriers and treatment facilities within their jurisdictions.

The federal and provincial governments cooperate through the Canadian Council of Ministers of the Environment (CCME) to developed substance and technology specific guidelines that have specific application to PCB management. These guidelines are then used in drafting legislation, reviewing environmental assessment and in issuing permits and certificates of approval. The relevant CCME guidelines are as follows:

- Codes of Practice for Used Oil Management (1989)
- Guidelines for PCB Waste Management (1989)
- Guidelines for Chemical PCB Treatment (1990)
- Guidelines for PCB Destruction (Incineration) (1990)
- Hazardous Waste Landfill Guidelines (1991)
- Hazardous Waste Incinerator Guidelines (1992)
- PCB Transformer Decontamination Protocols (1995)
- National Guidelines for the Use of Hazardous and Non-hazardous Waste as Supplementary Fuels in Cement Kilns (1996)

Given the complexity of the regulatory regime, co-operation and co-ordination of the federal, provincial, territorial governments and aboriginal peoples is essential for Canada to be successful in developing and implementing a suitable PCB management system.

In Canada, there are currently nine major facilities approved for PCB waste management: two in Alberta;[3] two in Quebec; and five in Ontario. A number of other companies are involved in the transportation, storage, transfer and pretreatment of PCB waste.

3.2 PCB EXPORT AND IMPORT IN CANADA

Canada permitted the export of Canadian PCB wastes only to the United States and only for destruction in the 1990 *PCB Waste Export Regulations* created under CEPA, 1988. At the time, the United States border had been closed to PCB imports since 1980. The only exports of PCB wastes from Canada allowed into the United States in the early 1990s were United States government-owned PCB wastes to be returned to that country for disposal.

In 1995, the U.S. moved to open the border for a broader range of PCB waste from Canada. In order to have time to assess whether the PCBs being exported would be subject to environmentally sound management, Canada obtained an Interim Order temporarily banning the export of Canadian PCB waste to the United States in 1995.

In February 1997, following a review of the 1996 US PCB Waste Import Rule, the revised *PCBWER* were adopted in Canada and the Canadian border reopened to the export of PCB wastes. These regulations allow the export of PCB waste only to the United States but only for disposal at an authorized facility other than a landfill. This landfill prohibition is consistent with the Technical Guidelines under *Basel Convention on the Transboundary Movement of Hazardous Wastes*.

The *PCBWER* contain additional conditions for exporting PCB wastes. However, because the importation of wastes containing PCBs above 2 ppm into the United States was effectively banned by a court ruling on a Sierra Legal Defense Fund challenge to the U.S. EPA PCB Rule under the *Toxic Substances Control Act* (*TSCA*) in July 1997, all these provisions are presently moot.

As stated in Section 2 above, the present authority to control the export and import of hazardous wastes, including PCB wastes is found *CEPA, 1999*. As described above, the *PCBWER* were established under *CEPA, 1988* and rolled over under *CEPA, 1999* to control the export of PCB wastes above 50 ppm from Canada. The import of PCB wastes are regulated under the general provisions of *EIHWR* which have been in effect since 1992.

Together the *PCBWER* and *EIHWR* establish the conditions for the export and import of PCB wastes above 50 ppm shipped across the Canadian border. These regulations ensure that transboundary PCB

[3] The Alberta government recently announced an interim arrangement for continued operation of the Swan Hills Treatment Centre, following the decision by the private contractor that had been operating the facility to stop operations at the end of December 2000.

wastes have been consented to by the receiving country or province before shipment, thereby respecting the sovereign right of states to determine what enters and leaves their jurisdiction. They also ensure that shipments of PCB wastes entering into, leaving or passing through Canada can be tracked and controlled by Environment Canada with the assistance of various other government agencies and jurisdictions. Tracking shipments is an important part of assuring that the PCB wastes reach their final intended destination and are properly managed.

The *PCBWER* and the *EIHWR* are founded on Canada's commitment to protecting the Canadian environment and implement Canada's international obligations under the *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal* and the *Canada – U.S.A. Agreement on the Transboundary Movement of Hazardous Waste.*[4]

Ensuring the environmentally sound management of all hazardous wastes and hazardous recyclable materials, both domestic and imported, is one obligation common to both commitments. The development of new PCB regulations for export and import will contribute to meeting that obligation and strengthen current controls on imports of PCBs.

To date there has been no import of PCB wastes under the *EIHWR*. However, in the last year there has been increased interest in the area. In December 1999, the province of Alberta began to allow imports from outside Canada to the Swan Hills Treatment Centre. Other Canadian companies are increasingly interested in the possibility of importing PCB wastes from other countries, especially from developing countries with no capacity to manage their wastes in an environmentally sound manner.

At the same time, there have been concerns expressed over the increasing imports of hazardous waste into Ontario and Québec, especially for landfill without treatment. However, as shown above, PCB waste disposal is highly regulated in Canada. It is also important to note that the landfilling or recycling of any PCB waste imports is prohibited in Canada. Any imported PCB waste must be destroyed. (Controls on the environmentally sound management of PCB waste imports will be further discussed in section 4.3.)

The chronological history of PCBs and the Canadian border is summarized in Appendix A.

[4] Canada's controls on imports and exports of hazardous recyclable materials are also based on OECD Council Decision C(92)39 on wastes destined for recovery operations. However, since PCB wastes are only allowed to be shipped for disposal, this international agreement does not directly impact transboundary movements of PCBs.

4. PROPOSED AMENDMENTS TO THE PCB WASTE EXPORT AND IMPORT REGULATIONS

4.1 *CEPA, 1999*

CEPA, 1999 strengthens the provisions concerning control and management of hazardous waste. The existing regulations governing PCB waste export and import will be amended accordingly, first through the amendment to the current *PCBWER* and, it is expected, subsequently through amendments to the *EIHWR* to integrate the controls import and export of PCB wastes into those regulations.

Among other authorities, *CEPA, 1999* includes the authority for Environment Canada to:

- require exporters of hazardous waste destined for final disposal to submit waste reduction plans;
- develop and implement more stringent criteria to assess the environmentally sound management of transboundary hazardous waste; and
- refuse to issue permits for export or import if these criteria are not met.

As explained earlier in this paper, the requirements for waste reduction plans, new environmentally sound management criteria, and equivalent level of environmental safety permits will require some time to develop since they will apply to all hazardous wastes and hazardous recyclable materials. In the interim, Environment Canada is moving forward to strengthen the existing regulations on the import and export of PCB wastes.

4.2 COMPARISON OF CONDITIONS ON EXPORTS AND IMPORTS

One of the main goals of this amendment is to ensure that the controls on the import of PCB wastes are as stringent as those for exports. The following table (Table 1) provides a brief comparison of the current requirements for export and import of PCB wastes under the *PCBWER* and the *EIHWR*.

4.3 PCB WASTE EXPORT AND IMPORT REGULATIONS - PROPOSED AMENDMENTS

New regulations on the export and import of PCB wastes will be implemented under Section 185 of *CEPA, 1999*. These new regulations will carry over the provisions of the *PCBWER* while adding provisions for the import of PCB waste for disposal in Canada.

The main objective of changing the *PCBWER* to the *PCBWEIR* is to strengthen the controls on imports of PCB wastes and harmonize the requirements between imports and exports. This will be done, firstly, by ensuring that the regulatory requirements on imports are fully consistent with those set out for exports in the *PCBWER*. This will require creating a new section in the current *PCBWER* to add parallel controls on imports. Given the similarity of the two regulations, it is proposed that a number of the current import controls for PCB wastes under *EIHWR* will remain the same under the new regulations.

The consideration of possible additional control for both imports and exports of PCB contaminated wastes in concentrations between 2 and 50 ppm, consistent with new controls being established under the *PCB Regulations*, will also be part of the consultation process on the *PCBWEIR*. This proposal is discussed in greater detail below.

Table 1 - COMPARISON OF CONDITIONS ON EXPORTS AND IMPORTS

SUBJECT	PCB WASTE EXPORTS	PCB WASTE IMPORTS	DIFFERENCE TO BE ADDRESSED
Applicability	PCB liquids, PCB solids, PCB mixtures, PCB equipment, PCB-contaminated solid or electrical equipment, packaging, at a concentration of 50 mg/kg or more. Provides a more specific list of waste types and disposal activities applicable to PCB wastes.	Wastes that contain or consist of polychlorinated biphenyls (PCBs) at a concentration of 50 mg/kg or more.	Imports less specific in describing PCB wastes.
Countries of export/import and operation	Export to U.S. only for disposal at authorized disposal facility not landfilling.	Exporting country party to Basel Convention, Canada-USA Agreement.	Imports less prescriptive on other country involved.
Canadian Exporters/ Importers	Exporter is person whose activity generated the waste, is removing waste from site owned by someone else, acting on behalf of government, or collects or receives wastes and then processes it for disposal at that person's facility in a manner that changes the physical and chemical characteristics.	Importer is disposer in Canada.	No change required.
Notice	Exporter required to provide the Chief[5] with completed PCB Waste Notice Form, with proof of insurance and contract attached. On request of Chief, copy of written authorization issued by USEPA to the importer must also be provided.	Importer completes notice as per Regulations and send to Environment Canada; copy of contract, proof of insurance attached to notice.	PCB Waste exports and imports use different notice forms; export notice has additional information.
Authorization	The carriers and disposal facility must be authorized; written authorization under TSCA allowing import and disposal.	Authorized carrier and disposal facility. Province must consent to the import.	No change required.
Insurance	Exporter and carriers insured against third party damages and costs imposed by laws; Exporters need $5 million coverage for each shipment; Carriers need sufficient amount as required by law in countries in which PCB waste transported; liability extends from time waste shipped until	Importer and carrier insured against third party damages and costs imposed by laws; importers need $5 million coverage of each shipment; Carriers need amount specified by law of country through which waste is transported or by international convention; liability extends from time waste enters Canada until	No change required.

[5] As defined in the regulations, refers to the Chief of the Transboundary Movement Division of Environment Canada.

SUBJECT	PCB WASTE EXPORTS	PCB WASTE IMPORTS	DIFFERENCE TO BE ADDRESSED
	accepted at an authorized facility	accepted at facility or until the waste leaves Canada if returned	
Contracts	Signed, written contract between exporter and foreign importer, including: - type of disposal operation, including information on any activity to destroy residues for decontamination processes. - statement that export is for disposal only - importer to provide copy of manifest 5 days after delivery and a certificate 30 days after disposal, including the disposal of any residue - importer to take all practicable measures to help exporter to fulfill undertaking and arrange for proper storage and disposal if disposal cannot occur as notified - identification of a temporary storage facility where the waste can be stored for up to 90 days if the importer cannot accept the waste	Signed, written contract between importer and foreign exporter containing: -code for disposal operation; - importer to return manifest within 3 days after delivery and written confirmation 30 days after disposal - importer to take all practicable measures to help exporter comply with Basel Agreement if disposal cannot occur.	Export contract has additional requirements, especially on temporary storage facility.
Consent	Exporter receives written confirmation from Chief that EPA has consented to import or not objected within 45 days after written acknowledgment of receipt of PCB Waste Notice Form. Written confirmation that transit countries do not object.	Importer received written confirmation from the Chief that the province of import has provided a written statement that disposal permissible under provincial law. Written confirmation that countries of transit do not object.	Written confirmation required from all provinces involved since facilities regulated at provincial level.
Manifest	Exporter and importer complete relevant portions and is included with the shipment; reference number of PCB Waste Notice Form included. Copies of manifest, notice and confirmation of consent stored during transit and deposited at identified customs office.	Exporter and importer complete relevant portions and is included with the shipment; reference number import notice included. Copies of manifest, notice and confirmation of consent stored during transit and deposited at identified customs office.	Should refer to PCB notice if it is to be used for imports as well.
Safety in transport	Proper packaging, labeling and placarding as per the Transportation of Dangerous Goods Regulations.	Proper packaging, labeling and placarding as per the Transportation of Dangerous Goods Regulations.	No changes required.
Alternate arrangements	Where waste cannot be disposed of as intended the exporter must inform the Chief and USEPA and make alternate arrangement for temporary storage and disposal within specific time frames.	As per contract obligations.	Imports have less specific requirements than exports.

Given these objectives, it is proposed that the changes not be wide sweeping because they are primarily intended to ensure uniform interpretation of the controls applicable to import and export of PCB waste. Environmentally sound management, waste reduction plans, and equivalent levels of safety are not incorporated in the proposed regulations because they are planned to be dealt with through other mechanisms, such as the new *EIHWR*.

A copy of the current PCBWER and EIHWR are available at the following internet site:

http://www.ec.gc.ca/CEPARegistry/regulations

The following subsections describe in more detail the proposed changes to these regulations to make them cover both imports and exports.

4.4 PROPOSED CHANGES TO EXPORT CONTROLS

Several consequential changes will be proposed to the current *PCBWER* sections for definitions, notice, alternate arrangement and insurance sections to ensure the terms apply to both imports and exports and to ensure consistency with *CEPA, 1999*. Except for these small consequential changes, it is not intended to make any changes to the current controls for the export of PCB wastes at this time. Broader changes to both the export and import requirements for PCB wastes will be reexamined as follow-up to the amendments to the *EIHWR*, expected to be in place in 2003.

4.5 NEW SECTION ON CONDITIONS ON IMPORT

Several changes will be proposed to ensure consistency of the import and export controls. These will be further discussed below. A new section is proposed to include the list of conditions for imports of PCB wastes, similar to those in EIHWR with some key additions:

1. **Criteria on the country of export**

   Canada does not want to be seen as the country of choice for the disposal of PCB wastes for the world. Several countries in Europe have a history of PCB waste imports. However, Canada has not imported any PCB wastes in accordance with the *EIHWR* to date and Environment Canada does not anticipate that these proposed regulations, intended to strengthen Canada's import controls, will result in large quantities of PCB wastes being imported into Canada for the reasons outlined below.

   The small number of PCB disposal facilities in Canada, the current US ban on export of PCB wastes and the proposed new CEPA *PCB Regulations*, which will establish phase out and

destruction deadlines for PCBs in use and storage in Canada, will create market conditions which are unlikely to favor large volumes of imports. In addition, the certificate of approval of some facilities includes conditions on service areas that establish the places from which wastes may be received.

At the same time, there are a very limited number of facilities throughout the world capable of disposing of various types of PCB wastes. Due to their stable chemical nature, the destruction of PCB wastes in an environmentally sound manner requires sophisticated technology, which few if any developing countries possess.

Although one of the goals of the Basel Convention is to promote the disposal of hazardous wastes to the extent possible within the country of generation, Article 4.9 specifically allows transboundary movements where the country of export does not have the technical capacity and the necessary facilities, capacity or suitable disposal sites in order to dispose of the waste in question in an environmentally sound and efficient manner.

As such, the import condition in the proposed PCBWEIR, plans to include a specific requirement that any import be in accordance with Canada's obligations under the Canada-USA Agreement or the Basel Convention. Where an import notice is provided for countries other than the United States (which has a long-standing ban on the export of PCB wastes). It is proposed that Canada will require the country of export provide written confirmation that it does not have the technical capacity and the necessary facilities, capacity or suitable disposal sites in order to dispose of the waste in question in an environmentally sound and efficient manner.

In this way, Canada can provide assistance to those countries lacking the necessary capacity, while ensuring proper transboundary movement controls. In doing so, this will not only protect the environment of those countries but because there is scientific evidence that air deposition, including from distance sources is a significant factor in PCB loading in the Great Lakes. With its fragile ecosystem, PCB airborne deposition in the Canadian Arctic would be of particular concern. As such, providing environmentally sound disposal of PCB wastes for countries lacking the necessary capacity may also benefit Canadian environment.

2. **Environmentally sound management**

Under the Basel Convention, it is the obligation of the country of import to prohibit the import of hazardous wastes unless they can be managed in an environmentally sound manner (ESM). Although several waste stream and operation-specific technical guidelines have been developed under the Convention, until the last Conference of the Parties in 1999 where a ten year ESM work

plan and vision statement were adopted, little had been done internationally to work at further defining ESM.

PCB and PCB wastes are highly regulated substances in Canada, with controls on their use, waste storage, handling, transportation, release to the environment and disposal. The *PCBWER* currently permit the export for disposal only, except export for landfilling of PCBs, consistent with the Basel Convention Technical Guidelines on the management of PCB wastes. Although the *EIHWR* does not include a specific statement to that effect, because of the prohibition in the *Chlorobiphenyls Regulations* on imports other than for disposal and the corresponding CCME policy, the effect is the same. However, for further clarity, it is proposed that the prohibition on import for landfilling and the requirement that any imports of PCB wastes be destined for destruction be specifically included for imports in the new *PCBWEIR*.

In part, in response to concerns about increasing imports of other types of hazardous wastes, especially those for landfilling from the United States, Environment Canada has initiated a new program to develop a national regime for ESM of hazardous wastes. As this work progresses over the next three to five years, the current stringent controls on PCB waste management will be re-examined. This review will take into account the evolving work on ESM for all hazardous wastes under the Basel Convention and any new controls specific to PCB wastes resulting from work related to the recently finalized draft convention to reduce and eliminate Persistent Organic Pollutants (the so-called POPs Convention). This work will also be used in the development of ESM criteria for the new *EIHWR*.

Until such time as the full set of ESM criteria is developed under *CEPA, 1999* for all hazardous wastes and hazardous recyclable materials, it is proposed that further definition of what is considered environmentally sound management be added to the import controls under the new *PCBWEIR* through reference to the current PCB waste management guidelines under the CCME and the Basel Convention.

3. **Changes to contract requirements**

To ensure consistency with the export controls, some changes will be proposed to the current contract requirements for the import of PCB wastes, specifically that the contract between the importer and the export as follows:

- specify the type of disposal operation, including information on any activity to destroy residues for decontamination processes, as per the same list of operations in the *PCBWER;*
- include a statement that import is for disposal only;

- in addition to the requirement for returning manifest copies and a certificate of disposal by the importer, a requirement for submission of a certificate of disposal 30 days following the disposal of any residues from the decontamination of transformers;
- a statement that requires the importer to take all practicable measures to help exporter to fulfill undertaking and arrange for proper storage and disposal if disposal cannot occur; and,
- identification of a temporary storage facility where the waste can be stored for up to 90 days if the importer cannot immediately accept the waste.

This last statement is considered by Environment Canada to be essential to ensuring that the proper contingency plan is in place should, for unforeseen reasons, alternate disposal arrangements be required for a particular import. Because there are a limited number of facilities in Canada capable of managing PCB wastes and export to the United States is not allowed under US law, Environment Canada considers that it is important to have such contingency plans in place prior to shipment.

4. **Authorized facilities and additional requirements for provincial consent.**

Prior to consenting to any import of PCB wastes, it is imperative to ensure that the PCB waste and any residue from its production can be treated at an authorized facility. As set out in the contract requirements above, contingency planning will be required before any import occurs. It is important to ensure that these contingency plans are consistent with environmentally sound management and that all facilities included in these plans are authorized to receive and dispose of the type of PCB waste in question.

Under the current import controls for PCB and other hazardous wastes, consent to an import notice is only required from the province where the waste will be first imported. Two new requirements for obtaining written consent before permitting the import will be added:

- Written consent will be required from the province where any temporary storage facility required to be identified in the contract is located to ensure that this facility is authorized to store such PCB wastes.
- Written consent will be required from the province or provinces where any residues from the disposal operation that still meet the definition of PCB waste will be sent for final disposal.

Take the following case, for example. An import notice is submitted by a transformer decontamination facility in Quebec. Through the decontamination process, transformers are cleaned to a PCB surface contamination level of less than 10 μ/100 cm^2 and PCB contaminated residue is created, which contains more than 50 ppm of PCBs. The cleaned transformer parts are destined for metal recovery in Manitoba and the residues from decontamination are destined for incineration in Alberta. As required under the regulations, the contract attached to the notice named a facility in

Ontario where the waste imported could be stored for up to 90 days, pending alternate arrangement should the importer be unable to process the waste as notified. In this case, consent for the import and decontamination would be required from the province of Quebec; consent for the incineration of the residues would be required from Alberta; and, consent to any temporary storage at the facility in Ontario would also be required. Since in this particular example, the cleaned transformer parts no longer meet the definition of PCB waste, consent from Manitoba is not required.

4.6 ADDITIONAL CHANGES TO CURRENT IMPORT CONTROLS

In addition to including a new section to the current *PCBWER* to set out the main conditions for imports of PCB wastes, other changes are proposed:

1. Use of new notice

A person intending to import PCB wastes would be required to notify using the same notice form as required for PCB waste exports. The notice form in the current *PCBWEIR* requires additional information than is currently required in the *EIHWR* notice form. The current PCB notice form would have to be slightly amended to make reference to imports as well as exports.

2. Use of specific waste types

EIHWR only includes one general listing for all PCB wastes, whereas the *PCBWER* identifies 6 different types of PCB wastes. Under the new *PCBWEIR*, importers of PCB wastes would have to identify their wastes under these 6 types.

3. Use of specific disposal operation code

EIHWR provides a listing of disposal operations that is generic for all types of hazardous wastes, whereas the *PCBWER* identifies 6 specific permissible disposal for PCB wastes. Under the new *PCBWEIR*, importers of PCB wastes would have to identify their operation and that of the disposer of any PCB waste residues under these 6 PCB disposal operations.

4. Alternate arrangements

The *PCBWER* includes specific obligations for the exporter to inform the relevant authorities in the countries concerned and make alternate arrangements as approved by these authorities should disposal of an imported material not be able to occur as notified. These arrangements are intended to cover exceptional circumstances. Beyond the contract requirements, *EIHWR* is not as specific

with respect to the obligations of an importer (of PCB or other hazardous waste) in such circumstances.

Consistent with the new requirements for contracts and for obtaining consent from the authorities in all of the provinces concerned, specific obligations will be included in the new *PCBWEIR* to require the importer to notify the relevant authorities and to assist the foreign exporter in making alternate arrangements for the temporary storage and disposal elsewhere in Canada, or, where such arrangements are not possible, for the return of the waste to the country of export.

4.7 WASTES CONTAINING LOW LEVELS OF PCBs FOR EXPORTS AND IMPORTS

The current definition for PCB wastes as a type of hazardous waste is generally set at 50 ppm or above in most jurisdiction in Canada and internationally. However, it has been suggested that it may be appropriate to consider some type of control on the import and export of wastes containing PCBs below this level. Without changing the definition of hazardous PCB waste, it is proposed to consider the merits of controlling imports and export of wastes containing PCBs in concentrations between 2 and 50 ppm.

There are several reasons for this proposal:

- In addition to prohibitions on imports of PCBs above 50 ppm except for disposal, the new *PCB Regulations* will prohibit, with some specific exceptions, the import of PCBs between 2 and 50 ppm for use, including recycling, where the resulting product contains more than 2 ppm of PCBs.
- Some Canadian facilities have service areas in their provincial permit which does not allow them to import wastes, whether above or below the 50 ppm regulated limit.
- Certain countries, such as the United States, prohibit the import of PCB contaminated materials to levels lower than 50 ppm.
- Although no specific concentration levels have been adopted yet, global discussions as part of the POPs negotiations, indicate a shift towards more stringent controls of wastes contaminated with lower levels of PCBs.

There are also concerns that PCB-contaminated electrical equipment may contain dioxins and furans as a result of arcing. Some commercial formulations of PCBs are also known to contain dioxins and furans. Therefore, even if a waste contains less than 50 ppm of PCBs, it is important to ensure that it is not hazardous by virtue of its dioxin and furan level. EIHWR controls wastes with more than 100 ng/kg of 2, 3, 7, 8-tetraclorodibenzo-p-dioxin equivalent.

Wastes containing lower concentrations of PCBs and without dioxin levels above the regulated limit are not considered to represent the same risk to the environment as higher levels. Therefore the controls for

the wastes containing low levels of PCBs should not be as stringent as those above the 50 ppm level which define a hazardous waste.

Specific controls under consideration for these low-level PCB containing wastes include:

1. ensuring that this waste is not exported where its import is prohibited by the country of import;
2. ensuring that this waste is not imported where Canadian legislation prohibits its import;
3. requiring exporters and importers to ensure that the receiving facility is authorized, as required by the importing jurisdiction, to receive and manage these wastes;
4. requiring exporters and importers to be able to demonstrate through the results of analytical testing that the material is below 50 ppm PCB or the regulated limits for dioxin and furans; and
5. putting onus on the exporter or importer to ensure that the shipment will be transported and managed in an environmentally sound management.

One means of implementing these controls would be to integrate some additional conditions for wastes containing low levels of PCBs into the new PCBWEIR. Any stakeholder input on other options that could meet the same environmental goals would evaluated as part of this initiative.

5. CONCLUSION AND NEXT STEPS

The main objective of this regulatory initiative is to strengthen the current regulatory controls on the imports of PCB wastes. This is proposed to be accomplished through the inclusion of specific controls on the import of PCB wastes consistent with those set out for exports in the *PCBWER*. Pending future work on ESM domestically and internationally, it is proposed that the *PCBWEIR* will also further define environmentally sound management through reference to the current CCME and Basel Guidelines. In addition, new proposed controls are outlined in the paper for the import and export of wastes containing between 2 and 50 ppm PCBs. Further changes to these regulations to fully implement the authorities under the new CEPA will be contemplated as part of the amendment to the *EIHWR*, anticipated to be in place by 2003.

Following the stakeholder consultation sessions and any written comments submitted in February 2001, a summary of the comments received will be compiled and circulated to interested stakeholders. Taking these comments into account, the proposed regulatory controls will then be converted to draft regulations. A Regulatory Impact Analysis Statement will be developed based on a socio-economic study that is also underway. It is anticipated that these draft regulations will be published in Canada Gazette, Part I, for formal consultation in the Spring of 2001 for implementation in the Summer of 2001.

Stakeholder views on these proposals are an important element of the regulation development process. Your views are greatly appreciated.

APPENDIX A

A Brief History of PCB Waste Export and Import

Appendix A: A Brief History of PCB Waste Export and Import

Date	Event	Result
1977	Canadian (*Chlorobiphenyls Regulations)* and U.S. borders closed to PCBs	Canada and U.S. both pass legislation making it illegal to import PCBs (except for the importing to Canada for the purpose of destruction).
1980	U.S. PCB waste export/import ban imposed	
1985	*Transportation of Dangerous Goods Regulations (TDGR)* introduced	Regulates transport of hazardous materials, including PCB wastes
1986	*Canada-US Agreement on the Trans-boundary Movement of Hazardous Waste*	Administrative conditions for export, import and transportation of hazardous waste
1988	*Canadian Environmental Protection Act* (*CEPA*) introduced	Designates PCBs as "Toxic Substance", provides for regulations respecting PCBs
Late 1980s	PCB shipments from Canada to France and Ireland approved.	Shipments successfully transported but enormous public concern in both Canada and country of receipt.
1989	Failed attempt to export PCB wastes to the United Kingdom.	Canada ultimately accepted return of the ships
1989	*The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal* signed by Canada	Canada agrees to work to implement the *Convention*
1990	*PCB Waste Export Regulations* introduced	Prohibits export to all countries except US
1992	Canada ratifies *Basel Convention*	Canadian legislation to apply *Convention* rules
1992	*Export and Import of Hazardous Wastes Regulations* introduced	Instituted to satisfy the requirements of the Basel Convention. PCBs regulated as a hazardous waste.
1994	*North American Agreement on Environmental Cooperation* (*NAAEC*) Side Agreement to *NAFTA*	Permits restrictions of transboundary movement and use of potentially harmful chemicals and treatment processes that do not meet the standards of a host country
Nov. 15 1995	One US company granted "enforcement discretion" to import into US PCB wastes from Canada	Several U.S. companies eager to begin importing Canadian PCBs for destruction; have contracts in place waiting for border opening
Nov. 20 1995	Interim Order under *CEPA* amends 1990 *PCB Waste Export Regulations*	PCB exports to the US cease.
1996	CCME Guidelines on PCBs clarified	Clarifies prohibition landfilling of PCBs greater than 50 ppm
1996	U.S. Import Rule on PCB waste imports	Allows import of PCB waste into the U.S.
Feb. 7 1997	Canadian *PCB Waste Export Regulations, 1996* in force	Replaced Interim Order and permitted export of PCBs to the U.S. for destruction but not for landfilling
July 8 1997	U.S. Court of Appeals rules that the EPA did not have the statutory authority to allow the import of PCBs to the U.S.	U.S. border closed to all imports of PCBs. Some shipments had taken place between Feb. and July 1997, Canadian notifiers informed of US prohibition.
1999	Several PCB waste management companies express interest in importing PCBs from outside Canada	Environment Canada begins to consider adding import provisions to the *PCB Waste Export Regulations*
1999	Alberta government has approved to import of hazardous waste, including PCBs, at the Swan Hills Treatment Centre.	No notices for import of PCBs into Alberta received to date.
1999	*CEPA, 1999*	Builds on federal authority to regulate movements of wastes and recyclable materials.
March 2000	Attempt to import PCB contaminated transformers from US military base in Japan to facility in Northern Ontario.	Shipment returned when Ontario determined that the facility was not authorized to receive the waste even if it was below the 50 ppm level.
Oct. 2000	Swan Hills operator provided Province of Alberta with written notice of its intention to	Subsequent announcement from the Province that an interim operator has been selected.

	cease operations at facility on Dec. 31, 2000	