

RESILOG

ISSN 0-255-5804 June 1997, Volume 10, No. 2

Canada

"An exchange of views and information on Hazardous Waste across Canada"

HAZARDOUS WASTE DEFINITION AND CRITERIA WORKSHOP

The Hazardous Waste Task Group (HWTG) of the Canadian Council of Ministers of the Environment (CCME) held a workshop December 10 and 11, 1996 in Toronto to discuss topics regarding the harmonization of the definitions and criteria for hazardous waste and hazardous recyclable material in Canada. The main topics covered were:

- redefining the terms "waste" and "recyclable material";
- combining Classes 9.2 and 9.3 of the Hazardous Waste Classification and associated test procedure; and
- a protocol for delisting or conditionally excluding hazardous waste and hazardous recyclable materials.

A total of 71 individuals participated in the workshop including stakeholders from industry, environmental organizations, First Nations, and other government departments. Presentations were made by members of the HWTG on each of the key topics, followed by discussions in break-out groups and a plenary session.

Under the proposed new definitions, a waste would include any material destined for disposal or requiring disposal. A recyclable material would include any material destined for recycling or requiring recycling. The proposed definitions would result in a decoupling of the definitions of waste and recyclable materials. Development of a guidance document to distinguish between materials that are waste or recyclable materials and those that are non-waste was also proposed.

At the workshop, the HWTG proposed adopting the United States Environmental Protection Agency's

Toxicity Characteristic Leaching Procedure (TCLP) as a Canadian equivalent test to replace the provisional Canadian General Standards Board (CGSB) Leachate Extraction Procedure test. The proposed Canadian TCLP extraction test would be used for determining the mobility and availability of hazardous contaminants found in waste / recyclable materials. This test characterizes waste / recyclable materials that contain quantities of toxic contaminants that could be available to the environment and compares them with the associated maximum allowable concentration, which is based on the Canadian Drinking Water Quality Guidelines values. Furthermore, the extraction procedure would continue to apply to all waste, regardless of whether it is destined for recycling or disposal.

A second feature of this proposal was to combine Class 9.2 (Environmentally Hazardous Waste) with Class 9.3 (Leachable Toxic Waste) into one list of hazardous contaminants. Any mixed or diluted wastes that do not meet the hazard criteria of the *Transportation of Dangerous Goods Regulations* (TDGR) Classes 2-8 would be subject to the extraction test for the contaminant(s) found on the proposed hazardous contaminants list. The intent of combining the 9.2/9.3 hazard classes was to solve problems such as:

- ♦ a number of contaminants were listed in both Class 9.2 and 9.3 lists with different concentration limits:
- some substances currently on the Class 9.2 list may no longer meet the criteria for environmental hazards, while other substances need to be added;
- ◆ Canadian Drinking Water Quality Guidelines had been revised several times since 1987 and these guidelines formed the basis of the concentration limits for Class 9.3 contaminants:
- ♦ the current limit of 100 ppm used for Class 9.2 wastes was based on total mass and did not take into account the differences in the availability and





- mobility of the actual contaminants to migrate from the waste matrix into the environment; and
- there was difficulty in identifying individual compounds or oxidation states of some of the substances in complex mixtures.

The HWTG is working to develop a harmonized national listing/delisting protocol for hazardous wastes and hazardous recyclable materials. The objective of this protocol would be to provide regulators sufficient information to exclude hazardous waste or hazardous recyclable material totally or conditionally from certain regulatory controls on a case-by-case basis. At the same time, the regulatory jurisdictions would be satisfied that the exclusion would provide as much or greater environmental protection as would be afforded through regulation.

The following are some of the highlights of the proposed new delisting mechanism:

- ◆ The material proposed for delisting would require comprehensive sampling, testing and reviewing to clearly demonstrate that the material does not meet any of the criteria for which it was originally listed as a hazardous waste.
- ◆ Delisted materials (excluded from regulatory control) would no longer have to be managed in a facility for hazardous wastes.
- Even if a waste or recyclable material isdelisted, the generator would remain obliged to determine whether the material continues to be nonhazardous.
- ◆ The delisting or conditional exclusion would apply only to the material that was the subject of the initial delisting.
- ◆ Conditional exclusions would be granted based on the management options presented for a hazardous waste or hazardous recyclable.

The HWTG has also recommended the addition of two new waste types to the lists found in the TDGR:

- waste oils from a number of sources (automotive engines, transmission systems, transformers); and
- spent fluids and glycols used in the cooling of automotive engines or heating of buildings.

It has been proposed that a special provision be established for domestic shipments that would exempt these waste types, plus waste batteries, from manifesting requirements for quantities less than 500 L or 500 kg when destined for recycling in Canada.

The HWTG has reviewed the proposals and is in the process of preparing recommendations on the issues, taking into account the feedback received from workshop participants. These recommendations, once endorsed by the senior-level CCME committee, will be forwarded to the federal government for appropriate regulatory action. As with any regulations, additional consultation with stakeholders will take place through the regulatory process.

For more information on the Hazardous Waste Definition and Criteria Workshop, please contact Joe Wittwer at (819) 997-2171 or e-mail at Joe.Wittwer@ec.gc.ca.

INTEGRATED VOICE RESPONSE (IVR)

In an effort to better serve the public, the *Transboundary Movement Division* (TMD) has developed an automated system for the verification of notice status called the *Integrated Voice Response* (IVR) system. The system allowsnotifiers under the *Export and Import of Hazardous Wastes Regulations* to determine the status of their notice(s) by connecting directly to the TMD computer database using a touch tone phone.

To use the IVR system, you will need to have:

- a touch tone phone;
- the TMD contact number (819) 997-0848 available 24 hours/day, 7 days/week;
- the notice number from the top right of the notice form:
- the waste stream number, from the notice form (in the hazardous waste information section), as entered by the notifier (i.e. if it is the first waste stream entered on the notice, the waste stream number would be 1.) Each notice form can accommodate a maximum of three waste streams in Box 10.

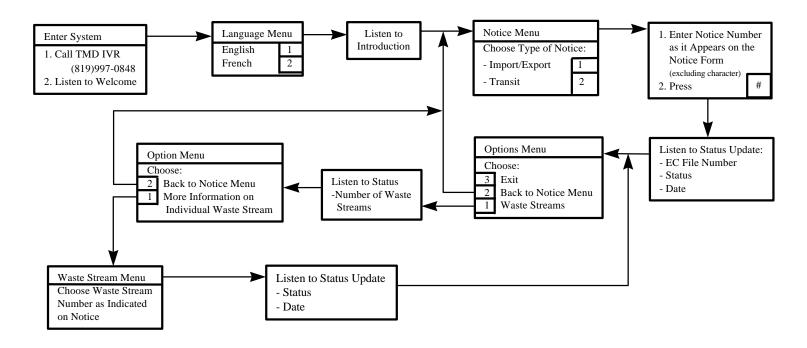
The system is very easy to use. Prompts will help you through the process. You can exit the system at any time by hanging up.

In order to maintain the confidentiality of notice information, the IVR provides only the status (consented, in review, objected) of the notice or

waste stream. The IVR does not identify notice information such as the exporter, importer, carrier or types of wastes.

Try it out and let us know what you think. If you want additional information, contact Allan Adair at (819) 953-1142.

INTEGRATED VOICE RESPONSE (IVR) AT A GLANCE



"RESI-WRITE"

Please send your questions on hazardous waste to "RESI-WRITE". We will get back to you in writing or by telephone. Frequently asked questions will be published in the next issue.

Question:

I plan to export hazardous waste using two different carriers to get hazardous wastes from my facility to the recycler in one trip. Do I need to use two manifests?

Answer:

A manifest, as specified in Part IV of the *Transportation of Dangerous Goods Regulations* (TDGR) or in accordance with the *Export and Import of Hazardous Waste Regulations* (EIHWR), must be used for all exports and imports of hazardous waste, including transits through Canada.

For transboundary shipments under the EIHWR, where there is more than one carrier on a given continuous shipment, the following procedures could be used when a hazardous waste is being transferred from the initial carrier to consequent carriers without any changes to the initial quantity or packaging. Any changes to the quantity or packaging could result in modification of the original consignment and the information on the manifest copy.

Option 1. One manifest form is required for each carrier, although up to two rail-cars may be entered as one carrier.

Option 2. An acceptable alternative would be to attach a second page to the manifest (copy shown on page 5), showing four copies of the information block in Part B of the manifest. The use of this additional manifest page will allow each of the successive carriers involved to sign and date Part B of the manifest, as required by the TDGR and the EIHWR.

In order to save time, the consignor (exporter) may want to fill out some of the information in Part B for each of the carriers prior to the departure of the shipment. However, each carrier must ensure that

the information is correct and then sign and date Part B when taking charge of the consignment.

In the case of Option 2, this additional page would be an integral part of the manifest and must be attached to the manifest photocopies that are required to be submitted to Revenue Canada customs at border crossings and Environment Canada at the time of departure and arrival of the hazardous waste shipment.

For further information on how to fill out the manifest form, please see the *User's Guide to Hazardous Waste Manifest* or the article in *Resilog* Vol. 10, No. 1, December 1996, entitled 'Manifest Compliance Blitz'.

If you have further questions about the manifest, please call Antoine Dionne at (819) 997-3378.

INTERESTING INTERNET SITES RELATED TO HAZARDOUS WASTES

Environment Canada - Green Lane http://www.doe.ca

Resilog

United Nations Environment Programme - LINEP

http://www.unep.ch

• Basel Convention and related documents

Transport Canada http://www.tc.gc.ca

- Draft of Clear Language TDG Regulations
- Opportunity to Comment

Organization for Economic Cooperation and Development - OECD http://www.oecd.org

• List of OECD Countries

OPTION 2:

B Carrier

A SAMPLE OF AN ACCEPTABLE ATTACHMENT FORM FOR SUCCESSIVE CARRIERS

B Carrier

SUCCESSIVE CARRIERS TRANSPORTEURS ADDITIONNELS

Carrier/Transporteur #2
Provincial ID No. - N° d'id. Provincial

Manifest Reference # N° de référence du manifeste ______

Carrier/Transporteur #3

Provincial ID No. - N° d'id. provincial

Transporteur					Transporteur				
Company Name - Nom de l'entrept	rise				Company Name - Nom de	l'entreprise			
Address - Adresse					Address - Adresse				
City - Ville	Prov.		Postal Code Code Postal		City - Ville	Prov		Postal Code Code Postal	
		Registra No d'imi	tion No. matriculation	Prov.		,		ration No. mmatriculation	Prov.
Vehicle - Véhicule					Vehicle - Véhicule				
Trailer/Rail Car No. 1 - 1 ^{er} remorque					Trailer/Rail Car No. 1 - 1et				
Trailer/Rail Car No. 2 - 2 ^e remorque	e - wagon				Trailer/Rail Car No. 2 - 2 ^e	remorque - wago	on		
Point of Entry		Point of			Point of Entry		Point o		
Point d'entrée		Point de			Point d'entrée			de sortie	
Carrier Certification: I declare that A for delivery to the intended consi complete and correct. Déclaration de transporteur: J'attes partie A en vue de leur livraison au partie B sont exacts et complets.	gnee and thate avoir reçudestinataire	nat the info u les déche e choisi et d	mation contained in Part B ets offerts par l'expéditeur d que les renseignements in	is lans la	Carrier Certification: I dec A for delivery to the intend complete and correct. Déclaration de transporter partie A en vue de leur liv- partie B sont exacts et cor	ded consignee and ur: J'atteste avoit raison au destina mplets.	nd that the inf reçu les déc taire choisi e	ormation contained in Pa hets offerts par l'expédite t que les renseignements	rt B is eur dans la
Yr - An Mo - Mois D	ay - Jour		authorized person l'agent autorisé		Yr - An Mo - Mo	is Day - Joi		of authorized person e l'agent autorisé	
Signature		Tel	. No - N ^o de tél.		Signature		Т	el. No - Nº de tél.	
		() —				() —	
	er/Trans				B Carrier	Carrie	r/Transpo o N° d'id. pi		
Transporteur					Transporteur				
Company Name - Nom de l'entrept	rise				Company Name - Nom de	l'entreprise			
Address - Adresse					Address - Adresse				
City - Ville	Prov.		Postal Code Code Postal		City - Ville	Prov	-	Postal Code Code Postal	
		Registra No d'imi	tion No. matriculation	Prov.		•	U	ration No. mmatriculation	Prov.
Vehicle - Véhicule					Vehicle - Véhicule				
Trailer/Rail Car No. 1 - 1 ^{er} remorque	e - wagon				Trailer/Rail Car No. 1 - 1er	remorque - wag	on		
Trailer/Rail Car No. 2 - 2 ^e remorque	- wagon				Trailer/Rail Car No. 2 - 2 ^e	remorque - wago			
Point of Entry Point d'entrée		Point of Point de			Point of Entry Point d'entrée		Point of	of Exit de sortie	
Carrier Certification: I declare that A for delivery to the intended consi complete and correct. Déclaration de transporteur: J'attes partie A en vue de leur livraison au partie B sont exacts et complets.	gnee and th	ived waste nat the infor u les déche	s as offered by the consign- mation contained in Part B ets offerts par l'expéditeur d	is lans la	Carrier Certification: I dec A for delivery to the intend complete and correct. Déclaration de transporte partie A en vue de leur liv partie B sont exacts et co	ded consignee au ur: J'atteste avoi raison au destina	received was nd that the inf	tes as offered by the consormation contained in Pa	rt B is eur dans la
	ay - Jour	Name of	authorized person		Yr - An Mo - Mo		ır Name	of authorized person	
		Nom de	l'agent autorisé				Nom de	e l'agent autorisé	
Signature		Tel	No - N ^o de tél.		Signature		Т	el. No - Nº de tél.	
		1 () —				1 () —	

CANADA LIFTS PCB WASTE EXPORT BAN TO UNITED STATES

On February 7, 1997, Environment MinisterSergio Marchi announced that Canadian PCB wastes may be exported to the United States for destruction under strict environmental controls. The new federal regulations ensure that Canadian PCB wastes exported to the United States will not belandfilled but rather will be destroyed through thermal, chemical or other form of technologies that destroy PCBs in an environmentally sound manner.

Similar to the Export and Import of Hazardous Wastes Regulations, the PCB Waste Export Regulations, 1996, require prior notification and consent, the use of waste manifests and certificates of disposal of the waste, including any residues from decontamination of these wastes that still meet the definition of PCB waste. There is also a requirement to make alternative arrangements if it should prove impossible to destroy a shipment as set out in the approved notice.

For more information about *PCB Waste Export Regulations*, *1996*, please contact Antoine Dionne at (819) 997-3378.

CONFERENCE OF THE PARTIES

The 4th Conference of the Parties (COP) of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal is scheduled to take place October 6-10, 1997 in Kuala Lumpur, Malaysia. The main topics to be discussed include:

- the decision to ban the export of hazardous waste destined for recycling by OECD (Organization for Economic Co-operation and Development) countries to non-OECD countries as of December 31, 1997;
- in relation to the ban, the list of hazardous wastes (including recyclable materials) subject to the Convention, which was developed by the Technical Working Group;
- 3. liability and compensation measures;
- 4. Regional Training Centres; and
- 5. financial issues regarding funding of Basel Convention activities.

For more information on the 4th Conference of the Parties, please contact Charles Cormier at (819) 953-2172.

PARTIES TO THE BASEL CONVENTION (MAY 1997)

Antigua & Barbuda	Côte D'Ivoire	India	Mexico	Poland	Sweden
Argentina	Croatia	Indonesia	Micronesia	Portugal	Switzerland
Australia	Cuba	Iran	Monaco	Qatar	Syrian Arab Republic
Austria	Cyprus	Ireland	Mongolia	Republic of Korea	Tanzania
Bahamas	Czech Republic	Israel	Morocco	Republic of Yemen	Trinidad & Tobago
Bahrain	Denmark	Italy	Mozambique	Romania	Tunisia
Bangladesh	Ecuador	Japan	Namibia	Russian Federation	Turkey
Barbados	Egypt	Jordan	Nepal	St. Kitts & Nevis	Turkmenistan
Belgium	El Salvador	Kuwait	Netherlands	St. Lucia	United Arab Emirates
Bolivia	Estonia	Kyrgyzstan	New Zealand	St. Vincent & Grenadines	United Kingdom
Brazil	Finland	Latvia	Nigeria	Saudi Arabia	Uruguay
Bulgaria	France	Lebanon	Norway	Senegal	Uzbekistan
Burundi	Germany	Liechtenstein	Oman	Seychelles	Vietnam
Canada	Greece	Luxembourg	Pakistan	Singapore	Zaire
Chile	Guatemala	Malawi	Panama	Slovak Republic	Zambia
China	Guinea	Malaysia	Papua New Guinea	Slovenia	European Economic
Colombia	Honduras	Maldives	Paraguay	South Africa	Community
Comoros	Hungary	Mauritania	Peru	Spain	A total of 110
Costa Rica	Iceland	Mauritius	Philippines	Sri Lanka	countries + the EEC

19TH CANADIAN WASTE MANAGEMENT CONFERENCE

September 15-18, 1997 St. John's, Newfoundland

The Changing World of Waste Management: Taking Stock from Sea to Sea

As the principal forum for the exchange of social, economic and technical views on waste issues, the Canadian Waste Management Conference (CWMC) presents leading-edge and credible research results, policy directions and project successes to waste management professionals. In particular, the 19th CWMC will include presentations on Canadian industry and government progress in meeting Canada's national objective of 50 per cent waste reduction by the year 2000. Also, and in keeping with Newfoundland's concurrent Cabot 500 Anniversary, "Summit of the Sea", two sessions will focus on marine waste management. Conference session topics range from off- and in-shore marine waste management to waste issues ineco-efficiency to product stewardship.

The CWMC is run as a partnership between Environment Canada and the Canadian Environment Industry Association, and takes place in a different province every year.

For more information on the 19th CWMC, you may browse the Conference home page at: www.webpage.ca/neia/cwmc.htm, or contact Susan Young at the Canadian Environment Industry Association, tel. (613) 236-6222, ext. 3; fax (613) 236-6850; e-mail:ceia@capitalnet.com.

Please note the new address and contact numbers for the CWMC:

350 Sparks St., Suite 208, Ottawa, Ontario K1R 7S8 Tel. (613) 236-6222 Fax (613) 236-6850

E-mail: ceia@capitalnet.com

FINES AND CONVICTIONS

T&N Enterprises of Brampton and Sokari International Ltd. of Mississauga were each fined \$12,000 for illegally exporting hazardous waste (zinc ash) to India during 1993-94.

Dhar Trading Company of Toronto was fined \$2,500 for exporting hazardous waste (zinc ash and zinc dross) to India during 1994-95.

PUBLICATION OF NOTICE INFORMATION

As required under Section 45 of the *Canadian Environmental Protection Act* (CEPA), Tables 1, 2 and 3 describe notices for proposed exports, imports and transits of hazardous waste, received by Environment Canada in the last six months of 1996.

DEFINITIONS FOR TABLES 1, 2 AND 3:

- **1. Battery Wastes**: waste whole or crushed batteries and battery acid
- **2. Biomedical Wastes:** as defined in the CCME *Guidelines for the Management of Biomedical Wastes in Canada*, plus infectious waste (TDGR Class 6.2)
- **3. Corrosive Liquids** waste acidic or basic liquids and solutions (TDGR Class 8)
- **4.** Corrosive Solids: waste acids and bases in solid form (TDGR Class 8)
- **5. Environmental Hazards** liquid and solid wastes that could pose a danger to the environment (TDGR Class 9.2)
- **6. Flammable Liquids** waste liquids that are ignitable (TDGR Class 3)
- **7. Flammable Solids** waste ignitable, pyrophoric or water reactive solids (TDGR Class4)
- **8. Gases**: waste aerosols, compressed and liquefied gases (TDGR Class 2)
- **9. Halogenated Organic Wastes** waste halogenated organic solvents, liquids and solids
- **10. Inorganic Wastes**: waste inorganic substances and solutions
- **11. Leachable Toxic Wastes** wastes that come within TDGR Class 9.3
- **12. Metal and Mineral Wastes** metal/mineral bearing wastes, metal treatment and processing wastes
- **13. Non-halogenated Organic Wastes** waste non-halogenated organic solvents, liquids and solids
- **14. Oils/Fuels**: waste gasoline, diesel, petroleum processing wastes, anti-knock mixtures
- **15. Oxidizers**: oxidizing wastes and organic peroxide wastes (TDGR Class 5)
- **16. Paint-Related Wastes** waste paints, resins, lacquers, inks, paint thinners, adhesives
- **17. Pesticide Wastes**: waste biocides and wastes contaminated with pesticides

- **18. Poisonous Liquids** waste liquids and solutions that are toxic/poisonous (TDGR Class 6.1)
- **19. Poisonous Solids**: wastes in a solid form that are toxic/poisonous (TDGR Class 6.1)
- **20. Polychlorinated Biphenyls**: wastes that contain more than 50 mg/kg of PCBs
- **21. Quantity Pending** quantity notified for which the notice has been sent for approval to the competent authorities and for which no reply has been received
- **22. Quantity Consented** quantity notified for which all of the competent authorities have granted consent to the proposed movement of hazardous wastes
- 23. Quantity Objected quantity notified for which any of the competent authorities has refused to grant consent to the proposed movement of hazardous wastes
- **24. TDGR**: *Transportation of Dangerous Goods Regulations*, 1985, as amended

For more information on the publication of notice information as required by CEPA, contact Charles Cormier at (819) 953-2172.

Reminder: How to read Tables 1, 2 and 3

The name of the notifier is listed alphabetically on the left and the waste group across the top. For exports and imports, a letter code representing the name of the country of origin (imports) or destination (exports) is entered in the row corresponding to the name of the notifier and in the column for that waste type. The legend of country codes is given at the bottom of each table. For transits, the actual movement is described as an "X" entered in the appropriate column for that waste group and row for each notifier.

Notices Received for Proposed Exports of Hazardous Wastes

(3rd and 4th Quarters 1996)

Waste Group

										vv as	oic v	JIU	սբ							
Name of the Canadian Exporter	1	2	3	4	5			8	9	10	11	12	13	14	15	16	17	18	19	20
Aimco Solrec Ltd.						Χ	Χ													
Akzo Nobel Chemical Ltd.							Χ													
Alcan											Χ	Χ								
Aluminerie Alouette Inc.												X X								
American Iron & Metal Co. Inc.											Χ	Χ								
Amoco Fabrics and Fibers, Ltd.							Χ													
Anachemia Ltd.						X X X														
Anachemia Solvents Div. of Fielding Chem						Χ														
Aquatech Blue Ltd.			Χ			Χ														
B.W.A. Treatment Technologies			Χ			Χ					Χ	Χ						Χ		
Battery Boy	Χ																			
Browning-Ferris Industries		Χ																Χ		
Brunswick Mining & Smelting											Χ									
CEDA-Reactor Ltd.						X														
Century Circuits Inc.			Χ																	
Chem-King Inc.			Χ	Χ		Χ	Χ				Χ		Χ			Χ		Χ	X	
Chemcycle Environment Inc.					Χ							Χ								
Chemrec Inc.						Χ												Χ		
Circo Craft			Χ																	
Circuit Graphics			Χ																	
Cominco Ltd.																			Χ	
Cornwall Chemicals Limited									Χ											
Court Galvanizing												Χ								
Criterion Catalyst Canada Inc.					Χ															
Da-Lee Waste Oil Services											Χ									
Dow Chemical Canada Inc.					Χ															
DuPont Canada Inc.								Χ												
Dynamic & Proto Circuits Inc.			Χ																	
Enviro Oil Research Ltd.											Χ									
Enviro West Inc.						Χ					Χ									
Fleet Industries			Χ							Χ	Χ									
Ford Motor Co. of Canada												Χ								
FRC International Inc.								Χ												

Y - South Africa Country of Destination X - USA Z - Germany

Waste Group

- 1. Battery Wastes 2. Biomedical Wastes
- 3. Corrosive Liquids 4. Corrosive Solids
- 5. Environmental Hazards
- 6. Flammable Liquids
- 7. Flammable Solids
- 8. Gases
- 10.Inorganic Wastes
- 11.Leachable Toxic Wastes
- 12.Metal and Mineral Wastes 13. Non-halogenated Organic
- 9. Halogenated Organic Wastes 14.Oils / Fuels 15.Oxidizers
- 16.Paint-Related Wastes
- 17.Pesticide Wastes
- 18. Poisonous Liquids
- 19.Poisonous Solids
- 20.PolychlorinatedBiphenyls

Notices Received for Proposed Exports of Hazardous Wastes

(3rd and 4th Quarters 1996)

Waste Group

										vv as	<u> </u>	510	սբ							
Name of the Canadian Exporter	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
G-M Pearson Biomedical Waste Specialist		Χ																		
General Scrap & Car Shredder	X																			
Hazco Environmental Services					Χ															
Honey Bee Sanitation				Χ							X	Χ								ļ
Hotz Environmental Services Inc.	X		Χ			Χ		Χ								Χ		Χ		
Ilco Unican Inc.												Χ								
Imperial Oil																		Χ		
Inco Limited											X									
Interprovincial Pipeline Inc.							Χ													
Irving Pulp and Paper Limited			Χ																	
Kennametal Inc.											X									
Kimberly-Clark Nova Scotia			Χ																	
Kodak Canada Inc.			Χ																	
Laidlaw Environmental Services	X		X	X	X	Χ	X	Χ	X	Χ	X	Χ	X		X	Χ	Χ	Χ	X	
Laidlaw Medical Service Inc.		Χ																		
Lakehead Scrap Metal	X																			
Lang Environmental Inc.			Χ			Χ												Χ	X	
Lauralco Inc.												Χ								
Les Services Env. De l'Est Inc.											Χ									
Lighting Circuits			X																	
Lynx Environmental Services Ltd.			Χ			Χ					Χ	Χ								
MacDermid Chemical Inc.			Χ																	
Marsulex Inc.			Χ																	
Mida Metal International Inc.											Χ									
Miller Environmental Corporation					X	Χ	X		Χ		X		X	Χ		Χ	Χ	Χ		
National Archives of Canada								Χ												
National Refrigerants of Canada Ltd.								Χ												
New Brunswick Power Corporation					Υ															
Newalta Corporation						Χ	X													
North West Smelting and Refining Ltd.											Χ									
Nova Chemicals (Canada) Ltd.			X	Χ	Χ	Χ	X													
Nu-Life Industries Inc.	X																			
Oakside Chemicals Ltd.						Χ														

Country of Destination X - USA Y - South Africa Z - Germany

Waste Group

1. Battery Wastes 6. Flammable Liquids 11.Leachable Toxic Wastes 16.Paint-Related Wastes 2. Biomedical Wastes 7. Flammable Solids 12.Metal and Mineral Wastes 17.Pesticide Wastes 3. Corrosive Liquids 8. Gases 13. Non-halogenated Organic 18. Poisonous Liquids 4. Corrosive Solids 9. Halogenated Organic Wastes 14.Oils / Fuels 19. Poisonous Solids 5. Environmental Hazards 20. Polychlorinated Biphenyls10.Inorganic Wastes 15.Oxidizers

TABLE 1

Notices Received for Proposed Exports of Hazardous Wastes

(3rd and 4th Quarters 1996)

Waste Group

										vv as	ole (JIU	սբ						
Name of the Canadian Exporter	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19 20
P.C. World			Χ																
Pacific Metals Ltd.												Χ							
Petro Canada			Χ			Χ													
Philip Enterprises Inc.											Χ	Χ							
Philip Environmental	Х		Χ	Χ		Χ	Χ	Χ	X	Χ	Χ	Χ	Χ		Χ		Χ	Χ	X
PPG Canada Inc.											Χ								
Produits Chimiques Expro Inc.			Χ																
Prototype Circuits Inc.			Χ																
Pure Metal Galvanizing			Χ									Χ							
Raw Metal Corp.	Х									Χ		Χ							
Republic Environmental Systems			Χ			Χ													
RexCan Circuits			Χ																
Rhone-Polenc Canada Inc.			Χ																
Roberson White House												Χ							
Royal Canadian Mint			Χ								Z								
S.E.C.A.L. Alcan Ltd.											Χ								
Safety-Kleen Corp.			Χ	Χ	X	Χ	Χ	Χ	X		Χ		Χ	Χ		Χ		Χ	X
Samco Resources & By-Products							Χ			Χ		Χ							
Shell Canada Products Ltd.					Χ														
Stelco Steel			Χ								Χ	Χ							
Stericycle of British Columbia		Χ																	
Sterling Pulp Chemicals											Χ								
The Battery Broker	Х											Χ							
Tree Island Industries Ltd.			Χ																
Ultramar Canada Inc.			Χ		Χ														
Uniroyal Chemical Ltd.			Χ		Χ														
Western Wood Recyclers Ltd.												Χ							
White Tanning Co., Ltd.											Χ								

Country of Destination X - USA Y - South Africa Z - Germany

Waste Group

1. Battery Wastes 11.Leachable Toxic Wastes 16.Paint-Related Wastes 6. Flammable Liquids 2. Biomedical Wastes 7. Flammable Solids 12.Metal and Mineral Wastes 17.Pesticide Wastes 3. Corrosive Liquids 13. Non-halogenated Organic 18.Poisonous Liquids 8. Gases 4. Corrosive Solids 9. Halogenated Organic Wastes 14.Oils / Fuels 19.Poisonous Solids 5. Environmental Hazards 10.Inorganic Wastes 15.Oxidizers 20.PolychlorinatedBiphenyls

TABLE 2 **Notices Received for Proposed Imports of Hazardous Wastes**

(3rd and 4th Quarters 1996)

Waste Group

									vv a	ste	Gľ	ou]	<u> Ի</u>						
Name of Canadian Importer	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19 20
ATC F											Α								
ATC Environmental Group Inc. Alcan Recycling										Α		Δ							
Chem						Α													
B.W.A. Treatment Technologies			Α			Ä					Α							Α	
Brunswick Mining & Smelting																			Α
Catalyst Recovery Canada Ltd.					Α		Α				Α								
Centre de Recyclage Intermédiaire Inc.			Α	Α	A	Α	A	Α	Α	Α		Α	Α	Α	Α	Α	Α	Α	Α
			Α	Α			Α				Α	Α			Α			À	Α
Chemrec Inc. Cominco Ltd.	Α				A	A	٨		A	۸			Α					Α	۸
Commed Ltd.	$\overline{}$									A		Α							
Eaglebrook Inc. of Canada			Α							, ,									
Falconbridge Limited					С						Α								В
Hotz Environmental Services Inc.			Α													Α			
Intermurk Environmental Inc.									G							, ,			
			Α								Α								
Inco Limited Laidlaw Environmental Services	D		D	D	D	D	D	ח	D	Α	Δ	П	D	ח	ח	ח	ח	ח	D
Horne			ט		A	ט	F	U				A		ט		ט	ט	ט	
Metallurgie du Cuivre Noranda											Ā								
Miller Environmental Corporation	_															Α			
O E MacDougall	Α				Α						Α								
Philip Environmental Services	Α		Α	Α	, ,	Α					Α	Α						Α	Α
Gauthier											F								
Raw Materials Corp. Recyclage Lampes Fluorescentes	Α									Α	٨								۸
Recyclage Lampes Pholescentes			Α	Α			Α		Α		A	Α	Α					Α	A
Royal Canadian Mint											Ä	, ,							, .
Safety-Kleen Corp.			Α	Δ.	Δ.			Δ.		Δ.		Δ.			^			Λ	^
Thermonic Inc.			A	Α	A			Α		Α	Α	A			Α			Α	А
Tonolli Canada Ltd.	Α		/ ر		<i>,</i> ,							, ·							
Toxco Canada	Α																		

Country of Origin

- A USA
- B Finland, Germany, USA
- C France, USA
- D Bahrain, Egypt, Kuwait, Saudi Arabia, United Arab Emirates, USA
- E Germany, Italy, Spain, United Kingdom, USA
- F United Kingdom G - South Africa

Waste Group

- 1. Battery Wastes 2. Biomedical Wastes
- 3. Corrosive Liquids
- 4. Corrosive Solids
- 5. Environmental Hazards
- 6. Flammable Liquids
- 7. Flammable Solids
- 8. Gases
- 10.Inorganic Wastes
- 11.Leachable Toxic Wastes
- 12.Metal and Mineral Wastes 13. Non-halogenated Organic
- 9. Halogenated Organic Wastes 14.0ils / Fuels 15.Oxidizers
- 16.Paint-Related Wastes
- 17.Pesticide Wastes
- 18. Poisonous Liquids
- 19.Poisonous Solids
- 20.PolychlorinatedBiphenyls

TABLE 3

Notices Received for Proposed Transits of Hazardous Wastes

(3rd and 4th Quarters 1996)

Waste Group

							v a	ste	Gi	vu	P_									
Name of the Notifier	Movement	1	2	3	4			7	8	9	10	11	12	13	14	15 1	6	17 1	8 19	20
3 SPTG / CEVR	US to US					Χ	Χ													
Alaska Airlines	US to US						Χ					Χ)	Χ			
Alaska Energy Recovery	US to US					Χ														
Anchorage Municipal Light & Power	US to US																			Χ
Anchorage School District	US to US																			Χ
Chugach Electric Association	US to US	Х		Χ												2	X			Χ
City of Unalaska	US to US																			Χ
Cook Inlet Pipeline Co.	US to US						Χ	Χ												
Doyon Drilling, Inc.	US to US															2	X			
Federal Aviation Administration	US to US					Χ	Χ													Χ
Gencorp Inc.	US to US																			Χ
General Electric	US to US																			X
Golden Valley Electric Association	US to US																			Χ
Ketchikan Pulp Co.	US to US	Χ		Χ																Χ
Kodiak Electric Association	US to US																			Χ
Kulis Air National Guard Base	US to US	Χ				Χ	Χ					Χ			Χ		Χ			
Mapco Alaska Petroleum	US to US)	Χ			
Mark Air, Inc.	US to US	Χ		Χ		Χ	Χ			Χ				Χ)	X			
Massachusetts Highway Department	US to US											Χ								
Matanuska Electric Assn.	US to US																			Χ
Mobil Oil Corporation	US to US					Χ														
MOXBA B.V. Holland	NL to US												Χ							
NAF Adak Environmental Department	US to US											Χ								
National Parks Services AK System	US to US											Χ	Χ							
Providence Health System of Alaska	US to US																			Χ
U.S. Army (DRMO)	US to US	Х		Χ	Χ	Χ	Χ	Χ	Χ			Χ						XX		
U.S. Coast Guard	US to US	Χ		Χ		Χ	Χ			Χ	Χ	Χ	Χ	Χ	Χ	X	X	XX		
U.S. Navy, Commanding Officer	US to US	Χ		Χ	Χ	Χ	Χ			Χ		Χ	Χ	Χ	Χ)	Χ			
Standard Steel, Inc.	US to US					Χ											X			Χ
Texaco Refining & Marketing	US to US					Χ														
Valley Lumber	US to US						Χ													

Waste Group

- 1. Battery Wastes 2. Biomedical Wastes
- 3. Corrosive Liquids 4. Corrosive Solids
- 5. Environmental Hazards
- 6. Flammable Liquids
- 7. Flammable Solids
- 8. Gases
- 9. Halogenated Organic Wastes 14.Oils / Fuels
- 10.Inorganic Wastes
- 11.Leachable Toxic Wastes
 - 12.Metal and Mineral Wastes
 - 13. Non-halogenated Organic

 - 15.Oxidizers

- 16.Paint-Related Wastes
- 17.Pesticide Wastes
- 18. Poisonous Liquids
- 19. Poisonous Solids
- 20.PolychlorinatedBiphenyls

Summary of Notices Status and Quantity Notified for Proposed Exports *

(3rd and 4th Quarters 1996)

Number of Duly Completed Notices Received		496
Number of Waste Streams Involved		887
Total Quantity Notified	(tonnes)	1,429,659
Quantity Consented	(tonnes)	1,426,420
Quantity Objected	(tonnes)	0
Quantity Pending	(tonnes)	3,239

Summary of Notices Status and Quantity Notified for Proposed Imports *

(3rd and 4th Quarters 1996)

Number of Duly Completed Notices Received		2,597
Number of Waste Streams Involved		6,417
Total Quantity Notified	(tonnes)	8,971,541
Quantity Consented	(tonnes)	8,805,920
Quantity Objected	(tonnes)	140,021
Quantity Pending	(tonnes)	25,600

Summary of Notices Status and Quantity Notified for Proposed Transits

(3rd and 4th Quarters 1996)

Number of Duly Completed Notices Received		80
Number of Waste Streams Involved		218
Total Quantity Notified	(tonnes)	145,313
Quantity Consented	(tonnes)	145,313
Quantity Objected	(tonnes)	0
Quantity Pending	(tonnes)	0

*NOTE: In the case of export and import notices, the "quantity consented" is not necessarily the same as the quantity shipped. Exporters and importers routinely overestimate waste quantities on their notices given that they must project the physical and chemical nature of hazardous waste that will be shipped over a period of one year. Actual movements are tracked through a manifest database.

RESILOG is published on a semi-annual basis by the Transboundary Movement Division of the Hazardous Waste Branch, Environment Canada. For information and changes to the distribution list, write to: Resilog, Transboundary Movement Division, Hazardous Waste Branch, Environment Canada, 12th Floor, 351 St. Joseph Blvd., Hull Quebec, K1A 0H3. Phone (819) 997-3377 or FAX (819) 997-3068