

RESILOG

ISSN 0-255-5804 December 1995, Volume 9, No.1 Canada Canada

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

RESI-WRITE

We invite you to send your questions regarding any hazardous waste issue to "RESI-WRITE". Your questions will be answered in writing or by telephone. Questions which arise most frequently, will be published in the next issue.

Question:

I plan on importing CFCs (chlorofluorocarbons) from the U.S. that have been removed from various refrigerant units and will be cleaned up so they can be used as refrigerants once again. Are CFCs subject to the *Export and Import of Hazardous Wastes Regulations?*

Answer:

For the purposes of the Export and Import of Hazardous Wastes Regulations (EIHWR), ozone-depleting substances (ODSs), such as the CFCs used as refrigerants or halons that are destined for any recycling/recovery operations listed in Part II of Schedule I and which exhibit a hazard according to the hazard characteristic criteria set out under the *Transportation of Dangerous Goods Regulations* (TDGR), are considered hazardous waste. Many CFCs are gases for which criteria exist in the TDGR.

The operations listed in Part II, Schedule I include among others, cleanup or regeneration processes to remove impurities.

However, once ODSs have undergone such a recycling process to make them usable again, they would no longer be considered a hazardous waste, particularly if the recovered material meets international purity standards.

Please note that all exports or imports of ODSs are also subject to the *Ozone Depleting Substances Regulations* (ODSR). The ODSR control both products and wastes and require a permit for the export or import of ODSs. Therefore, for CFCs and halons that are hazardous wastes, both a permit and a written confirmation are required, under the ODSR and the EIHWR respectively, to be in compliance with Canadian legislation.

For more information on the ODSR, contact: Scott Howarth at (819) 953-1665.

Direct your questions or comments regarding transboundary movements of hazardous wastes to:

Chief, Transboundary Movement Division
Hazardous Waste Branch
Environment Canada
Place Vincent Massey, 12th Floor
351 St. Joseph Blvd.
Hull, Quebec
K1A 0H3

Phone: (819) 997-3377 Fax: (819) 997-3068

Antigua & Barbuda	Costa Rica	Greece	Latvia	Norway	Saint Lucia	Turkey
Argentina	Cote D'Ivoire	Guatemala	Lebanon	Oman	Saudi Arabia	United Arab Emirates
Australia	Croatia	Guinea	Liechtenstein	Pakistan	Senegal	United Kingdom
Austria	Cuba	Hungary	Luxembourg	Panama	Seychelles	Uruguay
Bahamas	Cyprus	Iceland	Malawi	Papua New Guinea	Slovak Republic	Vietnam
Bahrain	Czech Republic	India	Malaysia	Peru	Slovenia	Zaire
Bangladesh	Denmark	Indonesia	Maldives	Philippines	South Africa	Zambia
Barbados	Ecuador	Iran	Mauritius	Poland	Spain	European Economic
Belgium	Egypt	Ireland	Mexico	Portugal	Sri Lanka	Community
Brazil	El Salvador	Israel	Monaco	Qatar	Sweden	
Canada	Estonia	Italy	Namibia	Republic of Korea	Switzerland	
Chile	Finland	Japan	Netherlands	Romania	Syria	
China	France	Jordan	New Zealand	Russian Federation	Tanzania	
Comoros	Germany	Kuwait	Nigeria	St. Kitts & Nevis	Trinidad & Tobago	

Used Lead-acid Batteries Fact Sheet

Used lead-acid batteries represent a significant waste stream. Estimates indicate that there are 6 million used lead-acid batteries taken out of service every year in Canada. This amounts to 100 000 tonnes of batteries, which contain about 50 000 tonnes of lead. Approximately 40% of these batteries were manufactured in Canada.

Types of Batteries

There are two main types of batteries:

- Starting, Lighting and Ignition (SLI) batteries.
 Most of these batteries are used in automobiles.
 There are also heavy-duty SLI batteries used in tractors, trucks, and construction equipment and light-duty SLI batteries used in motorcycles and other recreational vehicles such as snowmobiles, all terrain vehicles, and boats. These batteries weigh less than 20 kg with an average weight of 17 kg.
- 2) Direct Motive and Stationary Cells. There are three types of batteries in this group:
 - Large Cells (120 kg) that are found in railroad and heavy industrial equipment such as forklifts;
 - Light Industrial (80 kg), used in golf carts, wheelchairs, and other electrical equipment;
 - Stationary Cells (40 kg) used in emergency power backup units, communications, and lighting.

Numbers of Batteries

It is difficult to estimate the proportion of used lead acid-batteries that become available for recycling and those that are actually recycled. One reason is that large numbers of lead-acid batteries, both new and used, are both imported from and exported to the United States. It is estimated that Canada's recycling rate for used lead-acid batteries has been over 90% and higher for the last several years. In some years the recycling rate has exceeded 100% as stockpiled batteries are recycled.

Components of Used Lead-acid Batteries

The major components of a lead-acid battery are the electrodes, the electrolyte, and the casing. The positive electrode (cathode) typically consists of pure lead dioxide, whereas the negative electrode (anode)

consists of a grid of metallic lead containing various elemental additives including antimony, arsenic, cadmium, copper, and tin.

The average lead battery consists of:

- 17% metallic lead,
- 50% lead sulphate/oxide,
- 24% acid,
- 5% plastics, and
- 4% residuals.

General Guidelines

The goal for the management of used lead-acid batteries should be 100% recycling. As general guidelines:

- 1. Management of used lead-acid batteries should follow the established hierarchy of waste management. Options for Reduction, Re-use and Recycling should be maximized.
- 2. Interim storage of used lead-acid batteries should take place at:
 - areas that are authorized by the responsible authority, and
 - areas that are operated or supported by municipalities, retailers, or private collectors of recyclables.
- 3. Collection points should use leak-proof, corrosion-resistant, non-conductive containers for individuals to place returned batteries in, and for the storage of returned batteries.
- 4. All parties involved with transportation of used lead-acid batteries must comply with all federal and provincial legislation related to the transportation of dangerous or hazardous goods. Drivers must be specifically trained in handling spill containment and neutralization of corrosives.

Manufactures and Importers

Manufacturers and importers have a responsibility to develop a product stewardship approach, which includes a collection or exchange system with retailers or dealers in recyclables. The goal of this system should be 100% recycling of used batteries.

Remember!

Only you can start the recycling loop by placing your used batteries in it!

Retailers

- 1. All retailers should accept at least one used battery, if offered by the purchaser, for each new battery that is sold.
- 2. All retailers should be prepared to test batteries to ensure that only unusable batteries are replaced.
- 3. All batteries returned should be recycled.
- Retailers should publicize the location and hours of operation for drop off depots and dealers in recyclables where used batteries can be returned for recycling.

Consumers

- 1. The battery consumer should ensure that their battery is maintained to the extent that is practical, in order to extend the life of that battery.
- 2. Before replacing a battery, the consumer should ensure that the battery has been tested and cannot be recharged.
- 3. All used batteries should be returned to a retailer, an approved collection depot or an approved dealer in recyclables.

Dealers in Recyclables

Dealers in recyclables should ensure that their facilities are operated in an environmentally secure manner, including provision for spill containment, storage, and effluent management.

Recycling Facilities

Recycling facilities include battery breakers, lead smelters, and integrated secondary lead smelters.

- 1. All recycling facilities should be registered with the appropriate provincial government.
- 2. The recycling facilities should adhere to applicable environmental regulations for processing, transportation, and storage of used lead-acid batteries.
- 3. All recycling facilities should attempt to recycle or recover and use 100% of the components of the batteries received.

Management in Remote and Isolated Areas

Special requirements may be necessary to allow for the management of batteries in isolated or remote areas. Manufactures, importers, retailers, and consumers all need to take an active role in developing and maintaining management programs for these areas. Unique product stewardship solutions may have to be developed to address the conditions faced in Canada's North.

For more information, please contact: Dave Campbell at (819) 953-1119.

The Third Conference of the Parties to the Basel Convention

The Third Conference of the Parties to the Basel Convention was held on September 18-22, 1995 in Geneva. The meeting was attended by representatives of over 100 states, including the 91 parties and many non-governmental organizations such as Greeenpeace International, the International Chamber of Commerce, and the International Council on Metals in the Environment.

At the meeting, the parties adopted an amendment to the Convention that immediately prohibits all transboundary movements of hazardous wastes destined for final disposal from developed to developing countries. The amendment also calls for a phaseout by December 31, 1997, and a ban as of that date, on all transboundary movements of hazardous wastes destined for recycling from developed to developing countries.

Following the adoption of the amendment, Canada stated that it will not implement this decision until the work to clarify the definition of hazardous waste under the Convention is completed. The statement was made to ensure that the trade in nonhazardous recyclables will not be jeopardized.

For more information, please contact: John Myslicki at (819) 997-3377.

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 1994 and the first six months of 1995.

Definitions for Tables 1, 2, and 3:

Battery wastes: waste whole or crushed batteries and battery acid

Biomedical wastes: as defined in the CCME Guidelines for the Management of Biomedical Wastes in Canada, plus infectious waste (TDGR Class 6.2)

Corrosive liquids: waste acidic or basic liquids and solutions (TDGR Class 8)

Corrosive solids: waste acids and bases in solid form (TDGR Class 8)

Environmental hazards: liquid and solid wastes that could pose a danger to the environment (TDGR Class 9.2)

Flammable liquids: waste liquids that are ignitable (TDGR Class 3)

Flammable solids: waste ignitable, pyrophoric or water reactive solids (TDGR Class 4)

Gases: waste aerosols, compressed and liquified gases (TDGR Class 2)

Halogenated organic wastes: waste halogenated organic solvents, liquids and solids

Inorganic wastes: waste inorganic substances and solutions

Leachable toxic wastes: wastes that come within TDGR Class 9.3

Metal and mineral wastes: metal/mineral bearing wastes, metal treatment and processing wastes

Non-halogenated organic wastes: waste non-halogenated organic solvents, liquids, and solids

Oils/fuels: waste gasoline, diesel, petroleum processing wastes, anti-knock mixtures

Oxidizers: oxidizing wastes and organic peroxide wastes (TDGR Class 5)

Paint related wastes: waste paints, resins, lacquers, inks, paint thinners, adhesives

Pesticide wastes: waste biocides and wastes contaminated with pesticides

Poisonous liquids: waste liquids and solutions that are toxic/poisonous (TDGR Class 6.1)

Poisonous solids: wastes in a solid form that are toxic/poisonous (TDGR Class 6.1)

Polychlorinated biphenyls: wastes that contain more than 50 mg/kg of PCBs

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

Quantity consented: quantity notified for which all of the competent authorities have granted consent to the proposed movement of hazardous wastes

Quantity objected: quantity notified for which any of the competent authorities has refused to grant consent to the proposed movement of hazardous wastes

TDGR: *Transportation of Dangerous Goods Regulations*, 1985, as amended

For more information on the publication of notice information as required by the CEPA, contact:

Charles Cormier at (819) 953-2172.

Reminder: How to read Tables 1, 2 and 3

The name of the notifier is arranged alphabetically on the left of the table and the types of wastes 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 table in the row corresponding to name of the notifier in the column for that waste. The legend of country codes is given at the bottom of each table. For transit, the actual movement is described for each notifier and an "X" is entered in the column for the appropriate waste types.

 Table 1
 Notices Received for Proposed Exports of Hazardous Wastes

(3rd and 4th quarters 1994, 1st and 2nd quarters 1995)

Waste Group

										astc		F								
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
A-1 Sewage Services											A									
ACRE					A															
Aimco Solrec Ltd.						A	A													
AKZO Chemicals Inc.							A													
Alcan											Α	A								
Aluminerie Alouette Inc.												A								
Aluminerie de Becancour												A								
Aluminerie Lauralco												A								
American Iron & Metal Co. Inc.	A										A	A								
Amoco Fabrics & Fibers Ltd.							Α													
Anachemia Ltd.						A														
ARGO-TECH Productions Inc.	A											A								
Arthurs Distributing Inc.						A					A									
B.C. Childrens' Hospital B.C. Ministry of Environment		A			۸						۸									
B.C. Ministry of Environment					A						A									—
Batteries Unlimited	A																			
BFI Medical Waste Biomed Inc.		A					A											A A		
Blenheim Lodge		A A																A		
Bolton Steel Tube Co. Ltd.		А			A															
Brock Telecom Ltd.					А		A													—
Canadian Reynolds Metals							А			A		A								
Canadian Turbo (1993) Inc.					Α					А		А								
CCL Custom Mfg.			A		11	Α	Α						A							
CEDA Reactor Ltd.						A	• •		Α				•							
Chedoke-McMaster Hospitals		A																		_
Chem-King Inc.		11	A			Α	Α				Α					A				
Chemcycle Environment Inc.			A					A	Α			Α			Α		Α	Α	Α	
Chemetco											A									
Chemrec						A														
Chisick Metal Ltd.	Α																			
Chrysler Canada												A	Α							
Circo Craft			A																	
Circuit Graphics			A																	
Corbec Corp.												A								
Corundol Environmental Ltd.			A			Α	A				A					A				
Criterion Catalyst Canada Ltd.							A													
Custom Env. Services			A	A		A	A	A	A						A	A	A	A	A	
Da-Lee Waste Oil Services											A									
Diamond Welding				A																
Dominion Metal & Refining	A																			
Dow Chemical Canada Inc.					A	A				A	A									
DRMS Operations																				
Dupont Canada Inc.								A												
E.I.L. Environmental Inc.						A														
Electropac Ltd.			A																	
Enviro Resources Inc						A														
Enviro Systech Inc.						A		A											A	
Equipement d'Incendie Globe Inc.			Α					A												
Ethyl Canada Inc.			A		,															
F.M.C. of Canada					A															
Falcon Environmental Inc.			A								A								A	
Fleet Industries			A			A					A									
Flint Inks Ford Motor Co. of Canada						A A					Δ	A				A				
1 ord Willion Co. or Canada						А					Λ	Л				Л				

 Table 1
 Notices Received for Proposed Exports of Hazardous Wastes

(3rd and 4th quarters 1994, 1st and 2nd quarters 1995) - (Continued)

Waste Group

										4510		P								
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.E. Lighting, Canada												Α								
G.M. Pearson Biomedical		A																		
Galvan Metal												Α								
Galvcast Mfg. Inc.												Α								
General Chemical Canada Ltd.			Α																	
General Scrap & Car Shredder	Α																			_
Greater Victoria Hospital Society	7 1	A																		
Hazco Environmental Services		11			Α		Α													
Honey Bee Sanitation				A	11		11				Α	A								
Hotz Environmental Services Inc			A	11		A					11	11			Α	Α	Α	Α		
ICI Explosives Canada Inc.			A																	_
Imperial Oil			А									A						A		
Indalex - Div of Indal			A									А						А		
Interprovincial Pipeline Inc.			11				Α													
John Ross & Sons Ltd	Α						11													
	A																			_
K.C. Recycling Ltd.	А		٨							Α	٨		۸							
Kodak Canada Inc. Laidlaw Environmental Services	Α		A	٨	۸		۸	٨	۸		A	۸	A		۸	A	٨	٨	٨	
Laidlaw Medical Services	А	Α	A	А	A	А	A	A	A	A	A	A	А	А	A	A	A	Α	A	
Lakehead Scrap Metal	A	А																		
	А											_								
Lauralco Inc.												A								
Laurel Steel Products												A								
Lightning Circuits			A																	
Liquid Carbonic				A																
Long Manufacturing Inc.	_		A		_		_				A						_			
Lynx Environmental Services Ltd.			A										A							
MacDermid Chemicals			A																	
Manitoba Haz Waste Management Corp			A		A	A			A		A		A	A		A				
Matrix Electronics Ltd.			A																	
Metro General Hospital		Α																		
Matsqui-Sumas-Abbotsford Gen. Hosp.		A																		
Metallurgie Noranda Inc.											A								В	
National Refrigerants of Can.								A												
Navistar Int'l Corp. Canada													A							
New Brunswick Power Corp.					A					A										
Northern Telecom Canada Ltd.					A															
Northwest Smelting & Ref.	A																			
Novacor			A	A	A	A	A													
Nu-Life Industries Inc.	A																			
OxyChem Durez Canada			A																	
Pacific Metals Ltd.												Α								
Peace Arch Hospital		Α																		
Petro Canada			A	A		Α	A				A									
Philip Environmental Services	A		A	A	A	Α	A	Α	A	A	A	A	A		A	A	A	A	A	
PPG Canada Inc.											A					A			A	
Prism Systems Ltd.																		A		
Produits Non-Ferreux Gauthier											Α									
Protocol Resource Management Inc.								A												
Prototype Circuits Inc			A																	
Pure Metal Galvanizing			A									A								
Rainy River Forest Products														Α		A				
Raw Materials Corp.	Α		A							A		A		Ī						
Republic Environmental			Α			A	A													
RexCan Circuits			Α																	
Reynold Extrusion Co. Ltd.			Α																	

Table 1 Notices Received for the Proposed Exports of Hazardous Wastes

(3rd and 4th quarters 1994, 1st and 2nd quarters 1995) - (Continued)

Waste Group

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
Safety Kleen Corp.			A	A	Α	A	A		Α		A		A	A		A		A	Α	
Shred-a-can Recyclers Ltd.	A																			
Sorci Industries Inc.	A																			
Stablex Inc.															A			A		
Stelco Steel												A								
Stelfil			A									A								
Stelpipe												A								
Stelwire												Α								
Sunoco							A													
The Battery Broker	A						Α													
Timberwest Forest Ltd.					A															
Tree Island Industries Ltd.			A								C	C								
Triwaste Treatment Services					A	A	A				A			Α						
Ultramar Canada Inc.					A															
Unifirst Canada Inc.														A						
Uniroyal Chemical Ltd.			A		A												A			
Vancouver Hosp. & Health Sciences Ctr.		A																		
Wel-Chem Environmental Services			Α	A		A	Α	A			Α	Α					Α	A	Α	

(Country of destination) A = U.S. B = U.K. C = India

(Waste Group)

1. Battery wastes

2. Biomedical wastes

3. Corrosive liquids

4. Corrosive solids

6. Flammable liquids

7. Flammable solids

8. Gases

9. Halogenated organic wastes

5. Environmental hazards 10. Inorganic wastes

11. Leachable toxic wastes

12. Metal and mineral wastes

13. Non-halogenated organic wastes

14. Oils/fuels

15. Oxidizers

16. Paint related wastes

17. Pesticide wastes

18. Poisonous liquids

19. Poisonous solids

20. Polychlorinated biphenyls

Summary of Notice Status and Quantity Notified for Proposed Exports (3rd and 4th quarters 1994)

Number of duly completed notices received		1 109
Number of waste streams involved		1 753
Total quantity notified	(tonnes)	838 773
Quantity consented	(tonnes)	837 273
Quantity objected	(tonnes)	1 500
Quantity pending	(tonnes)	0

Summary of Notice Status and Quantity Notified for Proposed Exports (1st and 2nd quarters 1995)

Number of duly completed notices received		552
Number of waste streams involved		1 152
Total quantity notified	(tonnes)	288 832
Quantity consented	(tonnes)	260 427
Quantity objected	(tonnes)	650
Quantity pending	(tonnes)	27 755

 Table 2
 Notices Received for Proposed Imports of Hazardous Wastes

(3rd and 4th quarters 1994, 1st and 2nd quarters 1995)

									W	aste	Gr	oup							
Name of Canadian Importer	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19 20
Anachemia Solvents						A													
Browning-Ferris Industries		A																	
Brunswick Mining & Smelting											A								A
Catalyst Recovery Canada Ltd.					Α		D												
Centre de Recyclage Intermediaire Inc.	A		A	A	A	A	A			Α					A	A	A	Α	A
Chem-King Inc.			A			A	A		A		A					Α		Α	
Chemcycle Environment Inc.			A	A	A	A		A								Α	A	A	A
Chemrec Inc.									A				A						
Cominco Ltd	A				A		A			A		A							A
Corundol Environmental Ltd			A			A					A					A			
Deak Resources											A								
Eaglebrook Inc. of Canada			A																
Ethyl Canada Inc.																		Α	
Falconbridge Limited				A	A		A				A								В
Fanchem Ltd.			A																
Halozone Recycling Inc.							A												
I.W. & S. Ferrous Limited			A																
Inco Limited										Α									
K C Recycling Ltd.	A																		
L'Environnement Eaglebrook Que. Ltee.			A																
Laidlaw Environmental Services	A		Α	A	Α	A	C		Α	Α	Α	Α	Α	Α	Α	C	Α	Α	A
Laidlaw Medical Services Inc.		Α																	
Mohawk Lubricants											A								
Newalta Corp.Sask.Service Center														Α					
Noranda				A	A						Е	A							
Nova Pb Inc.	A										A								
Nu-Life Industries Inc.	A																		
Philip Environmental Services					A				A		A	A				A			
Produits Non-Ferreux Gauthier											A								
Raw Materials Corp.	A																		
Republic Environmental Systems			Α	A	Α					Α	A	A			A			A	A
St. Lawrence Cement						A													
Stablex Inc.			A	A	A			A		Α	A	A	A	A	A			A	A
Tonolli Canada Ltd.	A																		
Toxco Canada	A						A												

(Country of origin)

Waxman Resources Inc.

Triwaste/Technisol Incorporated

A = U.S., B = U.S., Germany, Finland C = U.S., Egypt D = U.S., New Zealand

E = U.S., Germany, U.K., France, Netherlands, Mexico, Sweden, Spain, Republic of Korea

(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 wastes 18. Poisonous liquids 4. Corrosive solids 9. Halogenated organic wastes 14. Oils/fuels 19. Poisonous solids 5. Environmental hazards 10. Inorganic wastes 15. Oxidizers 20. Polychlorinated biphenyls

A

A

A

A

Summary of Notice Status and Quantity Notified for Proposed Imports (3rd and 4th quarters 1994)

Number of duly completed notices received		1 510
Number of waste streams involved		2 045
Total quantity notified	(tonnes)	2 971 299
Quantity consented	(tonnes)	2 970 999
Quantity objected	(tonnes)	300
Quantity pending	(tonnes)	0

Summary of Notice Status and Quantity Notified for Proposed Imports (1st and 2nd quarters 1995)

Number of duly completed notices received		1 485
Number of waste streams involved		2 219
Total quantity notified	(tonnes)	2 496 329
Quantity consented	(tonnes)	2 316 376
Quantity objected	(tonnes)	5 488
Quantity pending	(tonnes)	174 464

NOTE:

In the case of export and import notices, the quantity consented is <u>not</u> 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 wastes that will be shipped over a period of one year. Actual movements will be tracked through a manifest database. This database may also be used to verify that importing facilities do not receive shipments in excess of the operating license issued by the province.

 Table 3
 Notices Received for Proposed Transits of Hazardous Wastes

(3rd and 4th quarters 1994, 1st and 2nd quarters 1995)

Waste Group

Name of the Notifier	Movement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
A.G. Simpson Metals System	US → FI					X															
ABR GmbH	$DE \rightarrow US$										X										
Advance Plating & Finishing Inc.	$US \rightarrow FI$					X															
Alascom Inc.	$US \rightarrow US$	X		X	X	X	X						X				X				
Alaska Airlines Inc.	US → US					X															
Alaska Dept. of Transportation	$US \rightarrow US$					\mathbf{X}															
Alaska Electric Light & Power Co.	$US \rightarrow US$																				X
Alaska Gold Co.	$US \rightarrow US$					X															
Alaska Power Administration	$US \rightarrow US$																				X
Alaska Pulp Corp.	US → US																				X
Alaska Railroad Corp.	$US \rightarrow US$	\mathbf{X}		\mathbf{X}		\mathbf{X}											X				X
Alaska Sales & Services	$US \rightarrow US$																X				
Alaska Ship and Dry Dock	$US \rightarrow US$																X				
Alaska Teamster	$US \rightarrow US$																				X
Alcan Electric Co., Inc.	US → US						X														
All American Auto Repair	$US \rightarrow US$						X														
Allied Finishing, Inc.	$US \rightarrow FI$					X															
Alyeska Pipeline Service	$US \rightarrow US$																				X
Alyeska-Valdez Marine Terminal	$US \rightarrow US$					X															
Anadrill Schlumberger	US → US					X															
Anchorage Dredge & Dock	$US \rightarrow US$						X														
Anchorage School District	$US \rightarrow US$																				X
ARCO Alaska Inc.	$US \rightarrow US$	\mathbf{X}				\mathbf{X}	X			\mathbf{X}				X			X		X		
Automatic Die Casting Specialties, Inc.	$US \rightarrow FI$					X															
Baker Hughes Inteq.	US → US			X		X				X											

Table 3 Notices Received for Proposed Transits of Hazardous Wastes
(3rd and 4th quarters 1994, 1st and 2nd quarters 1995) (Continued)
Waste Group

Name of the Notifier	Movement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Bakers Perform. Chemicals	US → US			X			X														
Bangor Industries, Inc.	US → FI					X															
Bethel Fuel Sales	$US \rightarrow US$					X															
Burlington Environmental Inc.	$US \rightarrow US$																				X
Cal Worthington Ford	$US \rightarrow US$																X				
Chrome Craft Corporation	US → FI					X															
Chrysler Corp	US → US																				X
Chugach Electric Association	$US \rightarrow US$	\mathbf{X}						X		X	X			X			X		X		X
CIRI Construction	$US \rightarrow US$																				X
City of Anisk	$US \rightarrow US$			\mathbf{X}			X										X				
Clean Air Force Station	US → US			X	X	X	X							X			X				
Clitheroe Center	$US \rightarrow US$																				X
Commercial Testing & Engineering	$US \rightarrow US$			X		X	X														X
Cook Inlet Pipeline Co.	$US \rightarrow US$					X															
Copper River School District	$US \rightarrow US$			X	X		X	X			X					X			X	X	
Copper Valley Electric	US → US																				X
Crown City Plating Co.	US → FI					X															
Cummins Northwest Inc.	US → US					X															
Department of the Interior	US → US			X												X	X				
DFSP-Whittier Terminal	US → US					X															
Director of Public Works, AK	US → US				X	X															
Donald Peterson	US → US				21	21															X
DRMO	US → US	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Eielson Air Force Base	US → US	X			X								X				X				
Electro Chemical Finishing Co.	US → FI					X															
Environmental Products & SVC, Inc.	US → US					X							X								
Exxon Company	$US \rightarrow US$					Λ	X						Λ						X		
Fairbanks North Star Borough	$US \rightarrow US$	X		X			X												Λ.		
Fort Yukon Utilities	$US \rightarrow US$	71		Λ			Λ														X
Fuller O'Brien Paint Store	$US \rightarrow US$						X														Λ
	US → US						71														X
Garden Valley Electric Assoc. General Electric Warehouse	$US \rightarrow US$						X								X						Λ
General Super Plating Co., Inc.	$US \rightarrow FI$					X	Λ								Λ						
Homer Electric Association	$US \rightarrow US$					Λ	X														
Houston Contractors	$US \rightarrow US$						Λ										X				
															37		Λ				
Interior Fuels Co.	US → US														X		3 7				
Joe's Body, Paint & Frame	US → US												37				X				37
Juneau Federal Building	US → US					3.7							X	37			37				X
Juneau International Airport	US → US					X								X			X				v
Juneau, AK Sub-field Office	US → US																				X
Juneau, AK Trans. Dept.	US → US			X			X								X		X				
Keeler Brass/Babcock Indus. Inc.	US → FI					X															
Ketchikan Fire Station #2	US → US						•								X						
Ketchikan General Hospital	US → US						X						X								37
Ketchikan Public Utilities	US → US																				X
Ketchikan Pulp Co.	US → US	**			X	X	X	X		X				X	X	X					
Kotzebue Landfill	US → US	X		X			X										X				
Kulis ANG Base	US → US			X		X		X									X				
Lacks Enterprises	US → FI					X															
Laidlaw Environmental Services	US → US											X									
Mac Donald's Indust. Plastics, Inc.	US → FI					X															
Mark Air Inc.	$US \rightarrow US$					X	X										X				
Matanuska Electric assn.	$US \rightarrow US$																				X
Mile 21 Spur Hwy.	US → US					X					_						X				X
MOXBA B.V. Holland	NL → US										X										

Table 3 Notices Received for Proposed Transits of Hazardous Wastes

(3rd and 4th quarters 1994, 1st and 2nd quarters 1995) (Continued)

Waste Group

										• • • •		٠.,	oup								
Name of the Notifier	Movement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Municipality of Anchorage	US → US	\mathbf{X}		\mathbf{X}	X		X		X	X	X		X	X	X	X	X	X	X	X	
NOAA WASC FLD	$US \rightarrow US$			\mathbf{X}	X	\mathbf{X}	X									\mathbf{X}	X				X
North Star Elementary School	$US \rightarrow US$																				X
Northern Testing Labs.	$US \rightarrow US$						X														
Northwest EnviroService Inc.	$US \rightarrow US$	\mathbf{X}								\mathbf{X}											
P & J Industries, Inc.	US → FI					X															
Petersburg Shipwrights Inc.	$US \rightarrow US$																X				
Philip Environmental	$US \rightarrow US$	\mathbf{X}		X	X	X	X	\mathbf{X}	X			X	X	X		X	X		X	X	
Phillips Petroleum Co.	$US \rightarrow US$	\mathbf{X}		X		X	X		X										X		
Quality Fabrications	$US \rightarrow US$					\mathbf{X}											X				
Samson Tug & Barge Co.	US → US						X														
SEAZA	$US \rightarrow US$					\mathbf{X}															
Spruce Mobile Home Park	$US \rightarrow US$					\mathbf{X}	X														
Standard Steel	$US \rightarrow US$														X						X
State of Alaska	$US \rightarrow US$	\mathbf{X}		\mathbf{X}	X	\mathbf{X}	X			\mathbf{X}	X			X	X		X		X	\mathbf{X}	X
Stepp Brothers BMW	US → US																X				
Supreme Bumpers, Inc.	$US \rightarrow FI$					\mathbf{X}															
Texaco Refining & Marketing	$US \rightarrow US$					\mathbf{X}															
Thomas Steel Strip Corp.	$US \rightarrow FI$					\mathbf{X}															
Trident Seafood Corp.	US → US												X								
Tsero Alaska Petro. Co.	us → us			\mathbf{X}	X	\mathbf{X}	X	\mathbf{X}								X			X	X	
U.S. Air Force	$US \rightarrow US$			\mathbf{X}		X															
U.S. Army	$US \rightarrow US$	\mathbf{X}			X					X	X		X				X				X
U.S. Coast Guard	$US \rightarrow US$	\mathbf{X}		X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	
U.S. DA - FS	US → US						X								X		X				
U.S. DOT FAA	$US \rightarrow US$					\mathbf{X}	X	\mathbf{X}							X						X
U.S. Fish & Wildlife Service	$US \rightarrow US$						X							X					X		
U.S. Navy	$US \rightarrow US$	X		\mathbf{X}		\mathbf{X}	X			X		\mathbf{X}		X			X			X	
University of Alaska	$US \rightarrow US$	X		X	X			X	X		X		X	X		X	X		X	X	X
Unocal Chemicals & Minerals	US → US					X	X	X				X			X	X				X	
VRCA Environmental Services	US → US			X			X										X				
Wilder Construction	$US \rightarrow US$									X											
Willow Crest School																					

X = Notice(s) submitted for this proposed movement of that particular waste.

DE = Germany FI = Finland NL = Netherlands US = United States

(Waste Group)

Battery wastes
 Biomedical wastes

3. Corrosive liquids

4. Corrosive solids

5. Environmental hazards

6. Flammable liquids

7. Flammable solids

8. Gases

9. Halogenated organic wastes

10. Inorganic wastes

11. Leachable toxic wastes

12. Metal and mineral wastes

13. Non-halogenated organic wastes

14. Oils/fuels

15. Oxidizers

16. Paint related wastes

17. Pesticide wastes

18. Poisonous liquids

19. Poisonous solids

20. Polychlorinated biphenyls

Summary of Notice Status and Quantity Notified for Proposed Transits (3rd and 4th quarters 1994)

Number of duly completed notices received	181
Number of waste streams involved	139
Total quantity notified (tonnes)	23 636
Quantity consented (tonnes)	23 636
Quantity objected (tonnes)	0
Quantity pending (tonnes)	0

Summary of Notice Status and Quantity Notified for Proposed Transits (1st and 2nd quarters 1995)

Number of duly completed notices received		170
Number of waste streams involved		652
Total quantity notified	(tonnes)	4 531 679
Quantity consented	(tonnes)	4 529 107
Quantity objected	(tonnes)	0
Quantity pending	(tonnes)	2 573

NOTE:

Volume 8, No.2 of RESILOG, which was to have been issued in March 1995, was never published. RESILOG, Volume 8, No. 2 would have contained export/import/transit information for the 3rd and 4th quarters of 1994. This information has been incorporated into this issue of RESILOG.

RESILOG is published on a semi-annual basis by the Transboundary Movement Division of Environment Canada. We invite your comments and questions. 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.