

# Waste Shipments

between the





# Table of Contents

<b>1</b>	<b>Waste Shipments Between the U.S. and Canada</b>	<b>3</b>
<b>2</b>	<b>Shared Responsibility and the Bilateral Agreement</b>	<b>4</b>
<b>3</b>	<b>What Do I Need to Do if I Want to Export a Hazardous Waste to Canada?</b>	<b>10</b>
<b>4</b>	<b>What Do I Need to Do if I Want to Import a Hazardous Waste from Canada?</b>	<b>12</b>
<b>5</b>	<b>Where Can I Find More Information?</b>	<b>14</b>



# Waste Shipments

## *Between the U.S. and Canada*

**F**or nearly 20 years, the United States and Canada have worked together to ensure that transboundary waste shipments are managed safely. Through binational cooperation, waste shipments are allowed to move across the border and be managed in an environmentally safe way.

Understanding the procedures governing waste flows between the U.S. and Canada is important to potential waste importers, exporters, and concerned citizens alike. For example, hazardous waste importers and exporters must comply with several federal regulations. Citizens living in states receiving Canadian waste may also want to learn about the U.S.-Canadian waste flows in order to appreciate how they and their surrounding environments are protected.

This brochure provides a basic understanding of current waste shipments between the two countries, the U.S.-Canadian Bilateral Agreement, and the major federal regulations controlling hazardous waste imports and exports. It is not meant to cover every aspect of the regulatory requirements concerning waste imports, exports and management within the U.S. For comprehensive guidance on the regulatory requirements that apply to a specific situation, please consult the Code of Federal Regulations (CFR) sections referred to throughout this brochure, your State environmental agency, or the appropriate U.S. Environmental Protection Agency (EPA) Regional Office.



# Shared Responsibility *and The Bilateral Agreement*

## WHY DO SOME WASTE SHIPMENTS CROSS THE BORDER?

Given the strong relationship between the two countries, a shared 5,500-mile border, and the presence of a number of waste management facilities in the border region, it is not surprising that waste shipments cross the U.S.-Canadian border.

When considering waste management options, generators weigh a combination of factors, including environmental, economic, social, and regulatory. For any number of reasons, they may choose to ship waste off-site and across international lines for proper management. Some reasons to do so include: (1) a cross-border facility might be able to recover a certain type of waste and then use it for industrial or manufacturing processes, (2) a foreign facility specializes in treating, disposing, or recycling a particular type of waste, (3) the nearest waste management facility that is capable of handling a particular type of waste is just over the border from the generator, or (4) the least expensive management facility is across the border.

## WHAT IS THE CURRENT STATE OF U.S.-CANADIAN WASTE SHIPMENTS?

The United States and Canada have agreed to work together to ensure the safe management of two of the most prevalent waste streams: (1) municipal solid waste (MSW) and the ash resulting from its incineration, and (2) hazardous waste. MSW, which is more commonly referred to as trash, is generally exported for disposal in specially designed and permitted landfills that must operate in accordance with specific federal and state or provincial requirements.

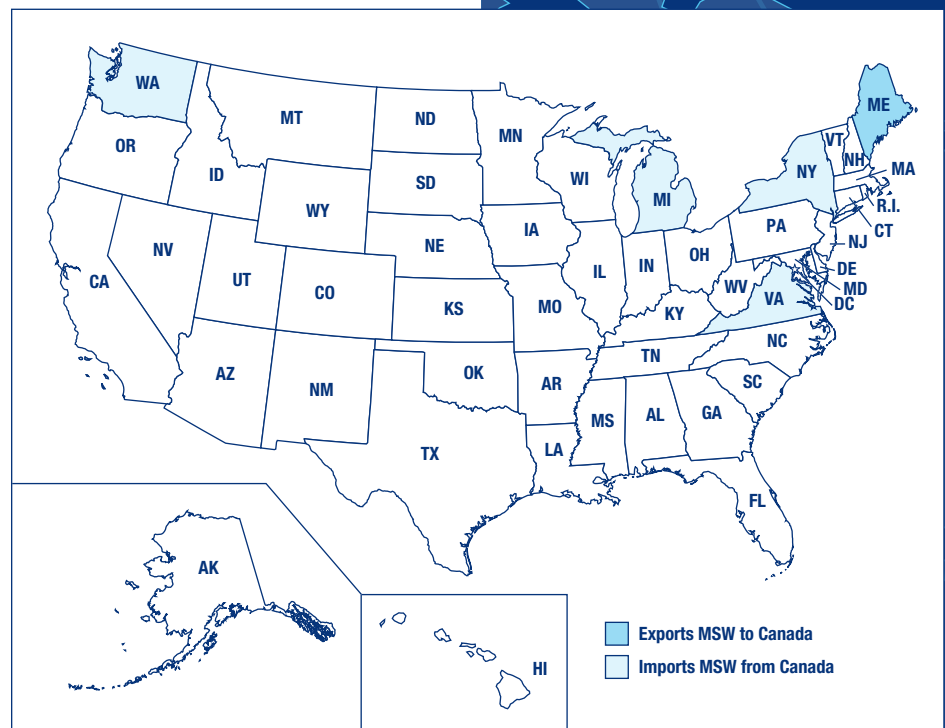
Because hazardous waste poses greater risks to human health and the environment than other types of waste, both the U.S. and Canadian governments implement comprehensive “cradle-to-grave” regulatory programs to ensure that hazardous waste is safely managed from



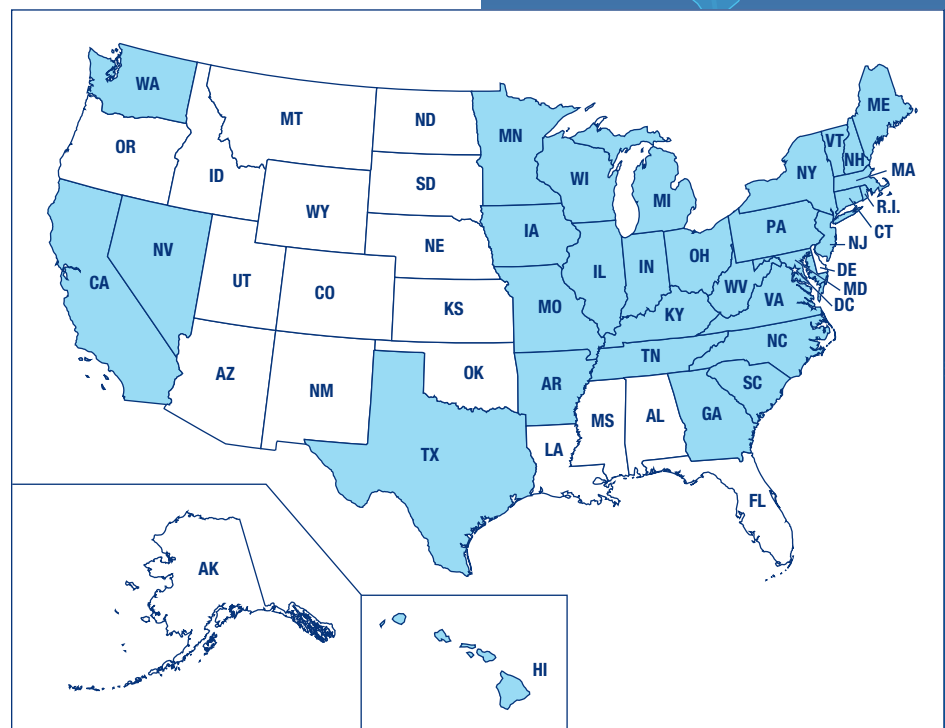
its generation to final disposal. For example, hazardous waste, regardless of where it is generated, has to be managed at a government-approved treatment, storage, or disposal facility (TSDF) in compliance with very strict regulations.

Hazardous waste management is tightly controlled in both countries, although each has its own regulatory definition of hazardous waste and reporting requirements. Canada estimates that its generators exported approximately 340,000 tons to TSDFs in the United States in 2004. During the same time period, Canadian figures show that the U.S. exported approximately 455,000 tons of hazardous waste into Canada. Available data indicate that the amount of hazardous waste shipped across the border has declined since peak volumes in 1999.

According to the most recent data provided by affected state environmental agencies, Canada exported nearly 4 million tons of MSW to the United States in 2004/2005. Most of the shipments came from the high population areas of southern Ontario and the greater Toronto area. Possibly



**Figure 1: U.S. States Involved in MSW Imports/Exports with Canada**



**Figure 2: U.S. generators in 31 states export hazardous waste to Canada**

A stylized map of the United States and Canada in shades of blue. The map is oriented vertically, with the United States on the left and Canada on the right. The Great Lakes and the Atlantic Ocean are visible. The text is overlaid on the map.

**The parties shall permit the export, import, and transit of hazardous waste and other waste across the common border for treatment, storage, or disposal pursuant to the terms of their domestic laws, regulations and administrative practices, and the provisions of this Agreement.**

— Article 2, General Obligation, U.S.-Canadian Bilateral Agreement

because of its proximity and low disposal fees, Michigan received most of these shipments. Washington, New York, and Virginia also received appreciable amounts of Canadian MSW. In contrast, the United States exported roughly 12,000 tons of MSW to Canada that same year, 11,000 of which was shipped from Maine to New Brunswick.

### **WHAT IS THE U.S.-CANADIAN BILATERAL AGREEMENT?**

In an effort to ensure appropriate oversight of transboundary movement of wastes, the U.S. and Canada signed an *Agreement between the Government of Canada and the Government of the United States of America Concerning the Transboundary Movement of Hazardous Waste and Other Waste*. Although the original 1986 Agreement only addressed hazardous waste, the U.S. and Canada agreed in 1992 to expand the scope of the Bilateral Agreement to include MSW (and the ash resulting from its incineration), referred to as “other waste,” and to implement the notice and consent provisions for MSW once each country obtained the necessary authorities.

The U.S.-Canadian Bilateral Agreement creates a blueprint that allows U.S.-Canadian shipments to move across the border and be managed in an environmentally safe way. Specifically, the Bilateral Agreement establishes a detailed procedure for national government-to-government notice and consent. This process begins with a potential exporter notifying its government of its intent to export a waste shipment. Having received this information, the environmental agency of the exporting country will then forward this notice of intent to export a waste shipment. Having received this information, the environmental agency of the exporting country will then forward this notice of intent to export to its counterpart, which in turn may either consent to the proposed shipment, object to it, or neither consent nor object if the waste is not regulated by the importing country. Although the Bilateral Agreement provides that consent may be given either explicitly or tacitly (by not objecting within 30 days of receiving notice), in practice both the U.S. and Canada usually consent explicitly. If the importing country consents to a proposed shipment, the environmental agency of the exporting country will then send an Acknowledgment of Consent to the exporter. At this point, the shipment may commence.

### **HOW IS THE U.S.-CANADIAN BILATERAL AGREEMENT INCORPORATED INTO U.S. REGULATIONS?**

The United States and Canada committed to incorporate the provisions of the Bilateral Agreement into their respective regulations. Both the U.S. and Canada have successfully incorporated the notice and consent provisions of the Bilateral Agreement for hazardous waste shipments into their regulations. Thus for these waste shipments, the



regulated community is subject to each country's domestic regulations that implement the terms of the Agreement. The U.S. notice and consent requirements concerning hazardous waste imports and exports have been codified in Title 40 of the Code of Federal Regulations (CFR), Part 262.

In order for the notice and consent provisions to apply to MSW, both countries will have to add the necessary provisions into their respective domestic laws and regulations. Canada's environmental ministry, Environment Canada, has recently received such statutory authority and has begun the process of developing proposed regulations. The U.S. Environmental Protection Agency (EPA) does not yet possess the statutory authority to implement these provisions in full. However, stringent standards for maintaining and operating MSW landfills ensure that MSW shipments are managed safely.

Waste importers and exporters also should note that other types of waste, such as construction and demolition (C & D) debris and nonhazardous industrial waste, are not covered by the U.S.-Canadian Bilateral Agreement and consequently are not subject to its notice and consent framework. International shipments of these wastes are subject to each country's respective domestic regulations. For more information on U.S. regulations concerning these waste streams, importers and exporters should refer to 40 CFR 257 and 258.

### **WHAT IF ONLY ONE COUNTRY CONSIDERS A WASTE HAZARDOUS?**

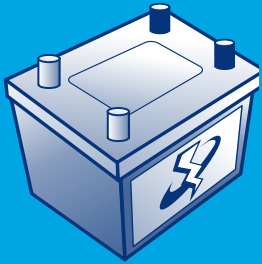
Because the United States and Canada have somewhat different regulatory definitions of what constitutes a hazardous waste, a waste is sometimes considered hazardous only in one of the countries. The U.S.-Canadian Bilateral Agreement anticipates this possibility and still applies in such situations. When differences in classification exist, only waste importers or exporters in the country that considers the waste hazardous will have regulatory obligations to fulfill. For example, a U.S. importer of a nonhazardous waste under U.S. law would not be subject to U.S. import regulations even when the waste is considered hazardous under Canadian law. The Canadian exporter, however, would have to fulfill all the applicable Canadian export requirements before it would be able to ship such a waste to the U.S. facility.

### **WHO MUST COMPLY WITH THE EXPORT REQUIREMENTS?**

The party subject to the export requirements is called the "primary exporter." EPA regulations at 40 CFR 262.51 define the primary exporter as the person who is responsible for originating the manifest. This person may be the hazardous waste generator or any intermediary arranging for export. Since more than one person could be the primary exporter, the parties should agree who will implement the primary exporter requirements.

## CASE STUDY:

### Importing Spent Lead Acid Batteries



Under U.S. regulations (40 CFR 266), spent lead acid batteries being shipped for recycling are exempt from import requirements. However, since Canada classifies these as a “hazardous recyclable material,” the Canadian exporter would have to submit an

application of intent to export and obtain a permit from Environment Canada in compliance with Canadian export regulations before any shipments could be sent to the U.S.

## WHEN DO IMPORT AND EXPORT REQUIREMENTS APPLY?

Before U.S. import/export regulations apply to any transboundary shipment, the waste must first be identified as a “hazardous waste.” The U.S. federal waste law, the Resource Conservation and Recovery Act (RCRA), defines hazardous waste according to a number of factors. First, it must meet the federal regulatory definition of

a solid waste. Further, the waste must either appear on any one of four hazardous waste lists or exhibit a hazardous waste characteristic (ignitibility, corrosivity, reactivity, or toxicity), as described in 40 CFR 261, Subparts C and D.

As a general rule, hazardous waste shipments between the U.S. and Canada are subject to federal import and export regulations. These include notification, reporting, and record-keeping requirements. Waste importers and exporters should be aware, though, that there are several exclusions and exemptions to these regulations. The type of waste being shipped and the reason for the shipment (e.g., recycling vs. disposal) often dictate whether the hazardous waste is subject to these requirements. For example, spent sulfuric acid that is destined for use in the production of virgin sulfuric acid, instead of for disposal, is not subject to the manifest or import/export requirements in the U.S. Waste handlers should contact their state environmental agency to learn if their shipment might fall into one of these categories.

U.S. waste importers and exporters should also be familiar with the Canadian regulations that control hazardous waste imports and exports. Canada separates its hazardous waste into two categories depending on its destination: shipments intended for disposal are classified as hazardous waste, while those intended for recycling are categorized as hazardous recyclable material. For more information on how Canada defines and regulates hazardous waste, U.S. waste importers and exporters should consult the Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations (EIHWHRMR) and Transportation of Dangerous Goods Regulations (TDGR).

The U.S. regulations concerning the export and import of hazardous waste, including those that implement the notice and consent provisions of the Bilateral Agreement, are described in the following sections.

## ***Common Hazardous Wastes with Special U.S. Import & Export Regulations\****

### **USED OIL SHIPPED FOR RECYCLING**

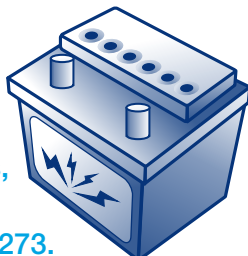


Waste importers and exporters should see 40 CFR 279 to learn how they may not be subject to the manifest or import/export requirements when transporting used oil.



### **UNIVERSAL WASTES**

Batteries, Pesticides, Lamps, and Mercury-Containing Equipment are subject to import and export requirements, but not the manifest if managed under 40 CFR 273.



### **BATTERIES SHIPPED FOR RECYCLING**

When spent lead acid batteries are shipped for recycling under 40 CFR 266, they are not subject to the import and export requirements.

\* Note: When differences in classification exist, only waste importers or exporters in the country that considers the waste hazardous will have regulatory obligations to fulfill.

## **What About State Regulations?**

*RCRA is the U.S. federal waste law that establishes a protective framework for safe waste management.*

*RCRA also allows individual states the opportunity to tailor their own waste programs to meet their specific needs, provided the state program is as least as protective as the federal one. Consequently, regulations for managing MSW, C & D debris, industrial nonhazardous waste, and hazardous waste may vary somewhat from state to state. For questions concerning a state regulatory program or the regulatory status of a specific waste in a particular state, waste importers and exporters should contact the applicable state environmental agency. Links to all state environmental agencies are provided at <http://www.epa.gov/epahome/state.htm>.*



### Exporting Hazardous Waste To Do List

- ✓ Notify EPA 60 Days Before Sending Hazardous Waste to Canada (still need to get contact information from the Canadian facility and get details about the export's itinerary)
- ✓ After Canada consents, EPA will send me an Acknowledgment of Consent (now I'm allowed to export my hazardous waste!)
- ✓ Get Uniform Hazardous Waste Manifest from approved supplier (remember special requirements for exports)
- ✓ Carry both the Manifest and Acknowledgment of Consent with the Shipment!
- ✓ Get confirmation from Canadian facility that they've received my hazardous waste
- ✓ Send EPA Annual Report by March 1st (make sure I don't have to send a Biennial or Exception Report this year)
- ✓ Keep Records of all important documents for 3 years!

# What Do I Need to Do if I Want to Export a Hazardous Waste to Canada?

U.S. exporters of hazardous waste must comply with all applicable laws and regulations (both federal and state), including regulations under RCRA contained in 40 CFR Part 262, Subpart E. When shipping hazardous waste to Canada, an exporter must comply with specific U.S. notification, manifest, reporting, and record-keeping requirements. (See Figure 4 on page 13.)

**Notification:** First, an exporter must send to EPA headquarters in Washington, D.C. a notification of intent to export. This notice must be submitted 60 days prior to export and can cover all similar hazardous waste shipments going to the same importing facility for up to a one-year period. This notification must describe the type and amount of hazardous waste, its itinerary, the number of shipments expected, and the period during which shipments will occur. EPA then sends this information to Environment Canada, its Canadian counterpart. Usually, the reply from Environment Canada will be either to consent or object to the proposed shipment. If the materials are not considered hazardous under Canadian regulations, then the response will be that Canada neither consents nor objects to the shipment. If an objection is not received within 30 days of receiving notice, EPA can assume that Canada has consented. If consent is given, EPA will forward an Acknowledgment of Consent to the exporter and the shipment(s) of hazardous waste may commence.

**Manifest:** The exporter must also obtain a Uniform Hazardous Waste Manifest from an EPA-approved supplier. The manifest is the tracking document that must accompany hazardous waste shipments. A completed manifest, as well as a copy of the Acknowledgment of Consent, must accompany the shipment while it is in transit.

ER INT'L	16. International Shipments	<input type="checkbox"/> Import to U.S.	<input type="checkbox"/> Export from U.S.	Port of entry/exit: _____
	Transporter signature (for exports only): _____			Date leaving U.S.: _____
	17. Transporter Acknowledgment of Receipt of Materials			

Figure 3: International Shipments Block of Uniform Hazardous Waste Manifest

To meet its reporting and record-keeping requirements, the exporter must receive a signed copy of the manifest from the transporter indicating the date and place of departure the waste left the United States. Exporters must also obtain written confirmation that the waste was received by the specified Canadian facility. A copy of the manifest signed by the importing facility fulfills this requirement.

There are several exclusions to these general manifest requirements for a number of specific hazardous wastes. For example, universal wastes, as defined in 40 CFR 273, are exempt from the manifest requirements, but are still subject to the import and export regulations.

**Reporting:** Hazardous waste exporters must file an annual report with EPA headquarters by March 1 of each year. This report summarizes the exporter's shipments of hazardous waste over the previous calendar year.

Further, annual reports submitted during even-numbered years by exporters shipping more than 1,000 kg of hazardous waste monthly must also describe all efforts undertaken to reduce the volume and toxicity of the hazardous waste.

In addition, exporters not receiving either a signed copy of the manifest from the transporter or a written confirmation from the Canadian facility that the waste has been delivered must file an exception report to EPA, explaining the efforts taken or being taken to locate the shipment. An exception report is also required if the waste is returned to the U.S. for any reason.

**Record-Keeping:** Finally, exporters are required to keep copies of relevant documents for three years, including any notices of intent to export, Acknowledgments of Consent, confirmations of delivery from Canadian facilities, and all reports submitted to EPA.



**Notifications, Manifests, and Reports sent to EPA headquarters must be addressed to:**

Office of Enforcement and Compliance Assurance  
Office of Federal Activities,  
International Compliance Division  
(2254A)  
Environmental Protection Agency  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

## What Do I Need to Do if I Want to Import a Hazardous Waste from Canada?

In order to import hazardous waste from Canada, U.S. importers must comply with all applicable domestic laws and regulations (both federal and state), including those under RCRA codified in 40 CFR Part 262, Subpart F. (See Figure 5 on page 13.)

**Notification:** The importing treatment, storage, or disposal facility must provide written notice to its EPA Regional Office at least 4 weeks in advance of receiving an expected hazardous waste shipment. This notification is only required prior to the first shipment and covers all similar shipments from the same Canadian source indefinitely.

**Manifest:** Imports of hazardous waste require a manifest. The importer, rather than the Canadian generator, fills out the manifest prior to the waste entering the U.S. The manifest must include both contact information for the Canadian exporting facility as well as the U.S. importing facility. Importers who are not also the receiving TSDF must provide an additional copy of the signed manifest to the receiving TSDF, which then must be submitted to EPA within 30 days by the TSDF.

**Reporting:** Finally, any TSDF importing hazardous waste must file a Biennial Report by March 1 of each even-numbered year to its EPA Regional Office. This report summarizes the importing facility's waste activities over the past two years.



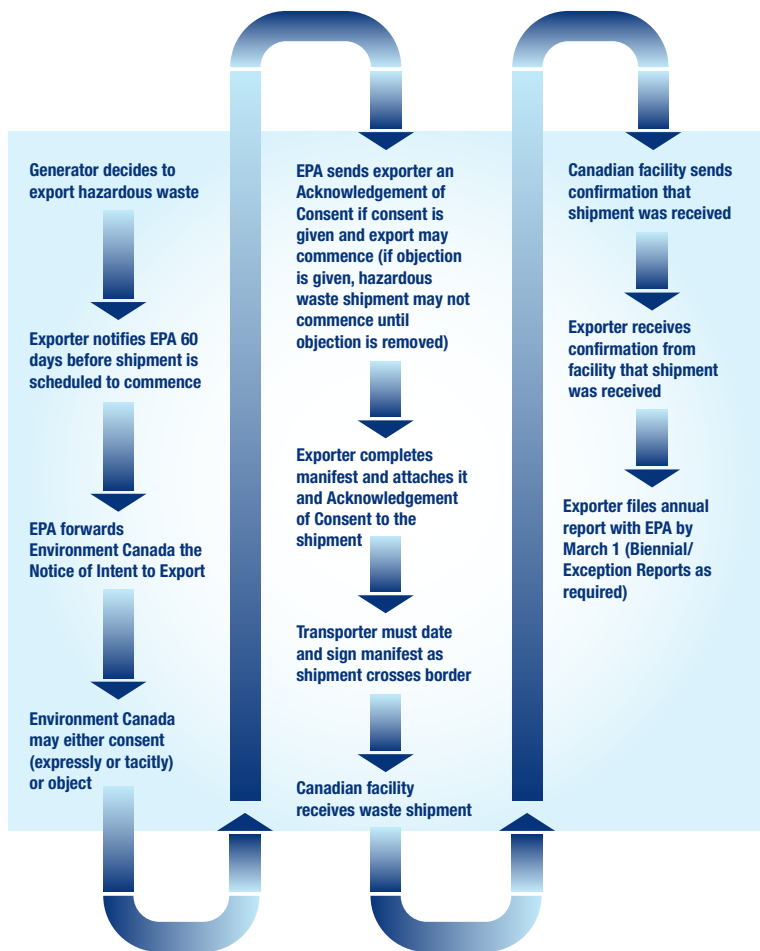


Figure 4: Exporting Hazardous Waste to Canada

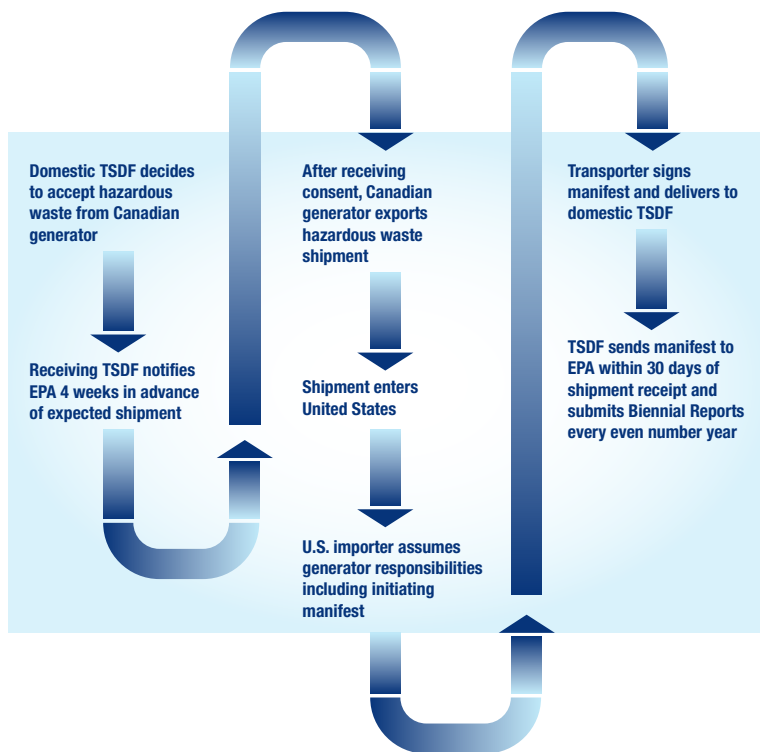


Figure 5: Importing Hazardous Waste From Canada



### Importing Hazardous Waste To Do List

- ✓ Stay in contact with exporting Canadian Facility
- ✓ NOTE: if I'm the receiving TSDF, then I have to notify the appropriate EPA Regional Office at least 4 weeks before hazardous waste shipment expected (but, I only have to do this once!)
- ✓ I have to prepare a Uniform Hazardous Waste Manifest from an approved supplier to accompany the shipment
- ✓ NOTE: if I'm the receiving TSDF, I also need to send a copy of the manifest to EPA in Washington, D.C. within 30 days
- ✓ Remember: if I'm the receiving facility, I also need to send a Biennial Report to EPA's Regional Administrator describing my waste activities and other relevant info



# Where Can I Find More Information?

## INFORMATION ON U.S. REGULATIONS

### *International Trade in Hazardous Waste: An Overview*

[www.epa.gov/compliance/resources/publications/monitoring/programs/importexport/trade.pdf](http://www.epa.gov/compliance/resources/publications/monitoring/programs/importexport/trade.pdf)

This guide describes in general terms the international and domestic requirements applicable to U.S. hazardous waste exports and imports.

It also describes the roles that the U.S. Environmental Protection Agency (EPA) and the U.S. Customs Service play in this process. It is designed to provide the general public with a basic understanding of the operation and control of this commerce.

### *The Import-Export Program*

[www.epa.gov/epaoswer/osw/meeting/pdf02/heiss.pdf](http://www.epa.gov/epaoswer/osw/meeting/pdf02/heiss.pdf)

This document describes the EPA's Import-Export Program responsibilities, and describes the general obligations of U.S. entities importing or exporting with foreign countries.

### *Collection of Materials on Import/Export Regulatory Requirements*

[www.epa.gov/epaoswer/osw/internat/guide2.htm](http://www.epa.gov/epaoswer/osw/internat/guide2.htm)

This collection of materials provides a description of the federal regulatory requirements for importing and exporting hazardous waste under RCRA. It introduces the special provisions for hazardous waste that is generated domestically and subsequently shipped outside of the United States, as well as hazardous waste generated elsewhere and shipped into the U.S.

### *RCRA Orientation Manual*

[www.epa.gov/epaoswer/general/orientat/romtoc.pdf](http://www.epa.gov/epaoswer/general/orientat/romtoc.pdf)

This manual serves as an introduction to the various facets and basic structure of the RCRA program that regulates solid waste, hazardous waste, and underground storage tanks.

### ***RCRA in Focus***

<http://www.epa.gov/epaoswer/hazwaste/id/infocus/index.htm>

RCRA in Focus (RIF) provides an overview of the RCRA regulations affecting specific industry sectors. Intended as a guide for small businesses, RIF presents the lifecycle of a typical waste for each industry and focuses on recycling and pollution prevention options.

### ***RCRA Online***

<http://www.epa.gov/rcraonline/>

The RCRA Online database is designed to enable users to locate documents, including publications and other outreach materials, that cover a wide range of RCRA issues and topics.

### ***Resources for Large Quantity Generators (LQG)***

[http://www.epa.gov/osw/gen\\_trans/lqg\\_resources.htm](http://www.epa.gov/osw/gen_trans/lqg_resources.htm)

### ***Hazardous Waste Requirements for Large Quantity Generators (LQG)***

<http://www.epa.gov/epaoswer/hazwaste/gener/lqgpdf.pdf>

### ***Small Quantity Generator (SQG) Handbook***

[http://www.epa.gov/epaoswer/hazwaste/sqg/handbook/sqg\\_bk.txt](http://www.epa.gov/epaoswer/hazwaste/sqg/handbook/sqg_bk.txt)

### ***Uniform Hazardous Waste Manifest***

<http://www.epa.gov/epaoswer/hazwaste/gener/manifest/>

Find more information on the Uniform Hazardous Waste Manifest, the Manifest Registry, and the upcoming e-manifest system on this website.

### ***State Agencies: Where You Live***

<http://www.epa.gov/epahome/state.htm>

This website provides links to all state environmental agencies.



### ***Code of Federal Regulations (CFR)***

<http://www.gpoaccess.gov/cfr/index.html>

This site allows you to search specific regulatory provisions applying to hazardous waste imports and exports, and hazardous waste identification.

For more detailed information about hazardous and nonhazardous solid waste, please see the Office of Solid Waste's Homepage at [www.epa.gov/osw](http://www.epa.gov/osw).

## **INFORMATION ON CANADIAN REGULATIONS**

### ***Environment Canada***

[www.ec.gc.ca/](http://www.ec.gc.ca/)

Environment Canada is the regulatory body responsible for regulating the international movements of waste.

### ***Environment Canada's Waste Management Division***

[www.ec.gc.ca/wmd-dgd/](http://www.ec.gc.ca/wmd-dgd/)

Formerly known as the Transboundary Movement Branch (TMB), the Waste Management Division is responsible for implementing terms of international agreements aimed at the monitoring and control of transboundary movements of hazardous wastes, hazardous recyclable materials, and nonhazardous wastes. This site provides details on the division's responsibilities and the Canadian regulations covering the transboundary movement of various wastes. Environment Canada's Waste Management Division is developing regulations under the Canadian Environmental Protection Act, 1999 (CEPA 1999) to control international movements of non-hazardous wastes.

### ***Backgrounder on Hazardous Waste Management in Canada***

[www.ec.gc.ca/press/2005/050817\\_b\\_e.htm](http://www.ec.gc.ca/press/2005/050817_b_e.htm)

This site offers a background of hazardous wastes and the Canadian regulations that assure safe management of these wastes.

### ***Public Consultations***

[www.ec.gc.ca/CEPARegistry/participation](http://www.ec.gc.ca/CEPARegistry/participation)

Pertinent information regarding ongoing consultations is available through the CEPA Environmental Registry.





United States  
Environmental Protection  
Agency

5305P

Washington, DC 20460

EPA530-K-06-004

January 2007

[www.epa.gov/osw](http://www.epa.gov/osw)