



Waste Management Information

**FOR BUSINESSES THAT MANAGE
HAZARDOUS WASTE AND
HAZARDOUS RECYCLABLES**

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**Environmental Policy Branch
Environmental Assurance**

Alberta Environment Waste Management Information

FOR BUSINESSES THAT MANAGE HAZARDOUS WASTE AND HAZARDOUS RECYCLABLES

There are many small to medium sized businesses in Alberta that generate or manage hazardous waste and hazardous recyclables. Examples include used oil, undrained used oil filters, spent antifreeze, used car batteries, paint leftovers, spent solvents, corrosives, cleaning products, etc. The correct handling and storage of these used materials, and the proper management of accidental releases is essential towards achieving environmental protection objectives.

Hazardous waste and hazardous recyclables contain substances that could contaminate air, soil and water. For example, used oil may contain trace metals, chlorinated solvents, gasoline, polynuclear aromatic hydrocarbons (PAH's), glycols and PCBs. Just one litre of used oil can contaminate up to one million litres of fresh water. Used oil that has been released into soil can result in adsorption to solid organic matter and leaching through soil to groundwater, or runoff to surface waters. Alberta's used oil management system was established to protect the environment by facilitating the recovery of used oil products.

Provincial regulations concerning hazardous waste and hazardous recyclables have been developed to minimize the risk of environmental contamination and the risk of environmental liability for businesses that manage these used materials. This document is intended to provide small to medium sized businesses with a consolidated summary of the essential requirements and expected practices under the *Environmental Protection and Enhancement Act (EPEA)* for the management of hazardous waste and hazardous recyclables. The document is organized under the following headings:

- **Hazardous waste/hazardous recyclable classification**
- **Storage and handling of hazardous waste/recyclables**
- **Information requirements for hazardous waste/recyclable facilities**
- **Facilities requiring an *EPEA* approval**
- **Transportation of hazardous waste**
- **Transportation of hazardous recyclables**
- ***Transportation of Dangerous Goods Regulations***
- **Release of substances and reporting**
- **Recycling and disposal companies**

This is not a legal document or a complete listing of all existing legal requirements for the management of hazardous waste and hazardous recyclables. For additional information on hazardous waste storage and transportation please refer to the *Waste Control Regulation* and the references provided below. Activities requiring an approval, registration, or notification are outlined in the *Activities Designation Regulation*. Requirements pertaining to the release of substances and reporting are detailed in the *Release Reporting Regulation* and *EPEA*.

1. HAZARDOUS WASTE AND HAZARDOUS RECYCLABLE CLASSIFICATION

Substances are defined/designated as hazardous waste and/or hazardous recyclables if they exhibit hazardous properties such as corrosivity, toxicity, combustibility, reactivity or are identified as a waste type as specified in the *Waste Control Regulation*. The distinction between a hazardous waste and a hazardous recyclable is that a hazardous waste is a hazardous material that is intended for disposal, whereas a hazardous recyclable is a hazardous material that is intended for further use. For example, used oil and undrained used oil filters intended for recycling are classified as hazardous recyclables (containers that contained new oil are not hazardous waste). Information on whether or not a particular material is classified as a hazardous waste is outlined in the *Waste Control Regulation* and the *Alberta User Guide*

for Waste Managers. The *Waste Control Regulation* is available on the Queen's Printer web page at <http://www.gov.ab.ca/qp> (use the search function). The *Alberta User Guide for Waste Managers* provides more detailed information on hazardous waste classification and is available on Alberta Environment's web at: <http://www3.gov.ab.ca/env/info/infocentre/PubListing.cfm?Keyword> (scroll down to Waste – Industrial Hazardous). You can also contact Alberta Environment's Regional office that is nearest to you. Regional office contacts are listed on Alberta Environment's web page at: <http://www3.gov.ab.ca/env/regions/index.html>

2. STORAGE AND HANDLING OF HAZARDOUS WASTE/RECYCLABLES

The following requirements, precautions and practices represent minimum expectations for the storage and handling of hazardous waste/recyclables:

- Storage containers should be in good condition and must not be leaking.
- Storage containers should be compatible with the materials to be stored to avoid corrosion problems or chemical interactions that could lead to container leakage and fires.
- Containers should be closed except when adding or removing waste/recyclables. Containers should also be closed during transportation (see Section 7). Containers should not be opened, handled, or stored in ways that could cause ruptures or leaks. Any spills that occur when adding or removing hazardous waste/recyclables from containers must be immediately cleaned-up (see Section 8).
- Secondary containment must be provided when storing liquid hazardous waste/recyclables. There must be no openings in the secondary containment system that provide a direct connection to the area surrounding the system, including sewers and the ground underneath the site. A variety of approaches can be taken to provide secondary containment; from simply placing hazardous waste/recyclable containers into an over-pack drum along with absorbent materials, to the construction of an impervious concrete pad with continuous curbing for tank farms. The secondary containment system for tank farms should provide containment for 110 percent of the volume of the largest tank plus 10 percent of the aggregate capacity of all other tanks. For small quantity drum/container storage facilities, spill trays or containment devices having a minimum wall height of 15 centimetres should be used for secondary containment.
- Containers of hazardous waste/recyclables must be stored in a structure designed and maintained so that precipitation and surface run-off water cannot enter the secondary containment system. For example, the structure should have appropriate sidewalls and roof to protect the containers from weather, and prevent the entry of rain and snow that could reduce the capacity of the secondary containment system.
- Each storage container and tank must be clearly labelled to identify the hazardous waste/recyclable being stored, and the containers must be stored in a manner that allows access and visibility of the labelling during inspection.
- Wastes/recyclables in storage should be inspected weekly. Inspections should focus on the condition and security of containers including for example, examination for deterioration or damage of containers from corrosion or other factors. Hazardous wastes/recyclables should be removed from a deteriorating or damaged container or the container transferred to an over-pack container. Inspection activities, including observations and actions taken at the storage facility should be recorded in a logbook.
- Incompatible wastes/recyclables must be segregated within the storage system to prevent contact between materials, even in the event of a release. Incompatible wastes/recyclables should not be stored in the same or adjacent containers unless a dike, berm, wall, or other barrier separates them.

The mixing of incompatible wastes/recyclables can result in an adverse effect. For example, mixing strong bases and strong acids can result in heat generation or a violent reaction.

- The waste/recyclable storage facility must be secure from entry from unauthorized persons. The storage facility should be enclosed by a fence and locked.
- The waste/recyclable storage facility must be prominently identified as a hazardous waste/recyclable management facility where hazardous waste/recyclables are being stored.
- The waste/recyclable facility must be equipped with suitable equipment to handle emergency situations. For example, fire suppression equipment, spill procedures, spill cleanup equipment, personal protection equipment, etc.
- The facility operators must be trained to respond to emergency situations specific to the hazardous waste/recyclable stored.

3. INFORMATION REQUIREMENTS FOR HAZARDOUS WASTE/RECYCLABLE FACILITIES

A person responsible for a hazardous waste/recyclable facility must retain the following information for at least two years:

- Copies of all recycle dockets for hazardous recyclables received at the facility.
- A record of any substance releases (i.e., spills, leaks, etc.) that occurred at the facility.
- Calibration and maintenance records of monitoring equipment.
- Records of all physical inventories of hazardous waste/recyclables at the facility.

4. FACILITIES REQUIRING AN EPEA APPROVAL

An approval under *EPEA* is required for businesses/facilities that store or process hazardous wastes/recyclables that are generated by a person other than the person responsible for the facility, and meet any of the following conditions:

- Hazardous waste or hazardous recyclables are stored for a continuous period of more than 365 days
- More than 10,000 kilograms or 10,000 litres of hazardous waste/recyclables are stored at any one time.
- Processing of hazardous recyclables that exceed 10,000 kg/litres per month.

Exemption

- An approval is not required for a facility processing the following hazardous recyclables:
 - Spent process and lube oil filters for volume reduction and liquid removal by compaction or draining.

Note: Anyone storing hazardous wastes/recyclables is required to meet the storage requirements outlined in this document regardless of whether the facility requires an EPEA approval or not. If the approval requirement conditions outlined above apply to your business/facility and you do not hold an approval (or if you are uncertain whether your facility requires an approval), you should contact the nearest Alberta

Environment regional office. Regional office contacts are listed on Alberta Environment's web page at: <http://www3.gov.ab.ca/env/regions/index.html>

5. TRANSPORTATION OF HAZARDOUS WASTE

Consigners (generators), shippers and receivers of hazardous waste must be registered with Alberta Environment:

- A consigner of hazardous waste must register with Alberta Environment to obtain a personal identification number (PIN or generator number), as this number is required on the hazardous waste manifest. An application for a consigner number is available on Alberta Environment's web page at <http://www3.gov.ab.ca/env/waste/rr/Manifest.html>
- Carriers of hazardous waste must obtain a carrier number by registering and obtaining approval from Alberta Environment to transport hazardous waste.
- A receiver of third party hazardous waste in Alberta must have a receiver number. Receiver numbers are issued to hazardous waste management facilities that have an approval under *EPEA*.

Hazardous Waste Manifest

Shipments of hazardous wastes must be accompanied by a six-copy hazardous waste manifest, which is used to track the movement of hazardous waste from where it is generated to where it is received for disposal. The consignor, carrier and receiver of hazardous waste must complete the applicable parts and copies of the manifest.

When consigning hazardous waste, the consignor must:

- Sign all copies of the manifest and ensure that the carrier certifies receipt of the hazardous waste.
- Mail the first copy of the manifest to Alberta Environment within 2 days, excluding Saturdays and holidays.
- Retain the 2nd copy for at least 2 years following the consignment.
- Deliver the 3rd, 4th, 5th and 6th copies to the carrier.
- When consigning waste that is shipped out of Alberta, the consignor must ensure a copy of the manifest completed by the out-of-province receiver is given to Alberta Environment, the carrier, the consignor and, if the waste is shipped out of Canada, to Environment Canada.
- Retain the 6th copy of the manifest that must be sent to the consignor by the receiver, for at least 2 years.

To obtain a hazardous waste manifest, send a request by e-mail to: lina.liew@gov.ab.ca

6. TRANSPORTATION OF HAZARDOUS RECYCLABLES

Recycle Docket

Shipments of hazardous recyclables in Alberta must be accompanied by a recycle docket, which must include:

- The name of the consignor of the hazardous recyclable in the shipment.
- The location from which the hazardous recyclable in the shipment originated.
- The amount of hazardous recyclable in the shipment.
- The signature of an authorized representative for the consignor of the hazardous recyclable in shipment.
- Out-of-province shipments of hazardous recyclables must be accompanied by a hazardous waste manifest.

A written Ministerial authorization must be obtained from Alberta Environment prior to importing hazardous recyclables into Alberta. An application for a Ministerial authorization to import hazardous recyclables and a copy of a recycle docket are available on Alberta Environment's web site at <http://www3.gov.ab.ca/env/waste/rr/Manifest.html>

Exemption

Shipments of hazardous recyclables that are less than 205 kg/litres, do not require a recycle docket and are not required to go to a facility approved under *EPEA*.

7. TRANSPORTATION OF DANGEROUS GOODS REGULATIONS

The *Transportation of Dangerous Goods Act and Regulations (TDGR)* identify materials that are dangerous goods and stipulate requirements for packaging during transportation, placarding, shipping document format and completion, etc. For transportation requirements under the *Transportation of Dangerous Goods Act* refer to Transport Canada's web page at: <http://www.tc.gc.ca/tdg/clear/menu.htm> or call the Dangerous Goods and Rail Safety Branch, Alberta Transportation information line at 1-800-272-9600. Note: under the *TDGR* used oil and used oil filters are classified as dangerous goods and are subject to all applicable *TDGR* requirements. Containers that contained new oil are not classified as dangerous goods and are therefore exempt from the *TDGR* (i.e., a *TDGR* shipping document is not required).

8. RELEASE OF SUBSTANCES AND REPORTING

The *Release Reporting Regulation*, pursuant to *EPEA* requires that where a release of a substance falling within the class and quantity limits outlined in the Table in Section 8.1(1) of the *Transportation of Dangerous Goods Regulations, Clear Language Edition* (<http://www.tc.gc.ca/tdg/clear/part8.htm>) occurs and the release has caused, is causing or may cause an adverse effect, it must be reported to the nearest Alberta Environment regional office as identified on Alberta Environment's web page at: <http://www3.gov.ab.ca/env/regions/index.html> or by calling 1-800-222-6514 (on a 24 hour basis).

Alberta Environment's *Release Reporting Guideline* is also available on the Department's web site at: <http://www3.gov.ab.ca/env/protenf/publications/RelRepGuideline.pdf>

Remedial Measures

The person that is responsible for a released substance must take all reasonable measures to:

- Repair, remedy and confine the effects of the substance.
- Remove or otherwise dispose of the substance in such a manner as to effect the maximum protection to human life, health and the environment.

9. RECYCLING AND DISPOSAL COMPANIES

There are numerous companies and waste/recyclable brokers that can assist you in establishing a proper storage, processing and transportation system, and in identifying material recycling or disposal options. A listing of these companies/brokers is available on the Environmental Services Association of Alberta (ESAA) web sit at <http://www.esaa.org>

For further information contact Alberta Environment at:
<http://www3.gov.ab.ca/env/info/infocentre/contactsenv.cfm> or call 1-877-944-0313.