

Paint Waste Management

ACCEPTABLE INDUSTRY PRACTICE

May 2012

Alberta User Guide for Waste Managers outlines the requirements for waste management, including hazardous waste and hazardous recyclables, in Alberta and is available at:

<http://environment.alberta.ca/02806.html>

Copies of Alberta's Acts, Regulations and Codes of Practice are available from the Queen's Printer at <http://www.qp.gov.ab.ca>

Management of Paint Waste

This information sheet describes Alberta Environment and Sustainable Resource Development's legal framework and recommended management applicable to paint waste. Paint waste means unwanted paint and includes, without limitation, leftovers or off-spec formulations of latex, oil or solvent-based coatings, stains, finishing oils, varnishes, lacquers, thinners, diluents, solvents or other wood or masonry treatment products and respective containers. Management includes the collection, transport, storage, recycling, treatment and disposal of paint waste. Industry specialty coatings should be managed on a case-by-case basis and as dictated by the respective Material Safety Data Sheet.

Legal Framework

Since the early nineties, Alberta Environment and Sustainable Resource Development (AESRD) has developed regulations and programs that ensure the proper management or recovery of paint waste. AESRD regulates paint waste as hazardous when the product exhibits one or more hazardous characteristics that in the case of paints are generally due to ignitability or toxicity because:

The paint is oil or solvent-based and has a flash point of less or equal to 60 degrees Celsius and then is designated as "hazardous ignitable waste", or

The paint may contain heavy metals (i.e., lead, chromium, cobalt, zinc or zirconium) in excess of the limits in Table 2 of the *Alberta User Guide for Waste Managers* in which case is described as "hazardous leachable waste", or

The paint has been removed from metal surfaces by using a shot blasting agent. Spent shot blasting waste is considered a hazardous waste in Alberta (Waste Type 205, Table 3 of the *User Guide*).

Specific provisions apply to the storage, transport, recycling and disposal of hazardous waste. A review of Alberta's related legislation, the *Environmental Protection and Enhancement Act (EPEA)*, the *Activities Designation Regulation (ADR)* and the *Waste Control Regulation (WCR)*, is available at AESRD's web site

<http://environment.alberta.ca/02643.html>.

Storage requirements for hazardous waste/recyclable are summarized in the document *Businesses that Store Hazardous Wastes and Hazardous Recyclables* available at the same site.

Latex or water-based paint and related waste is not hazardous waste.

In addition to waste legislation affecting these materials, the Alberta Government passed in 2007 the *Paint and Paint Container Designation Regulation* that establishes the basis for the paint recycling program managed by the Alberta Recycling Management Authority (ARMA). Contacts regarding associated economic incentives are available at www.albertarecycling.ca.

Transportation Requirements

Oil or solvent-based paints including lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base and paint related material including paint thinning or reducing compound are classified as *ignitable* dangerous goods, Class 3, UN Number 1263 or Class 8, UN Number 3066, respectively. These goods have to be accompanied by a bill of lading when transported on public roads as required by the *Transportation of Dangerous Goods Regulations*.

Hazardous Paint Waste or Spent Shot Blasting offered for transport within Alberta has to be accompanied by either a manifest/movement document or a recycle docket if handled as a waste or a recyclable, respectively. The shipment of hazardous recyclables in quantities below 205 kg or 205 litres does not require a recycle docket. Information on the manifest or recycle docket forms, guidelines and contacts is available on-line at <http://environment.alberta.ca/02808.html>.

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Hazardous waste manifest and management requirements are identified in the Waste Control Regulation.

Additional information on the transport of dangerous goods is available toll free at 1 800 272 9600.

For more information on the Basel Convention visit <http://www.basel.int/techmatters/index.html>.

Non-hazardous paint waste going for recycling does not require to be accompanied by specific documentation under *TDGR* or *EPEA*. In addition, like for any other non-hazardous recyclable, any person including an EPEA approved facility is entitled to ship that recyclable to a recycling facility that may not require an approval under EPEA. However, disposal of paint waste, hazardous or non-hazardous, has to be to facilities authorized under EPEA.

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Where recycling is not available the following disposal procedures should be followed:

Latex Paint

Let the paint dry completely or mix the paint residue with a sorbent such as cat box filler, shredded wood residues or sawdust and dispose of the dried material in your regular trash.

Collect the metal containers and direct them to an eco-centre, scrap metal dealer or steel foundry. Small amounts of paint dried residue will not affect the steel recycling process.

Wash your paint brushes and tools with normal detergent and drain the washings to the sewer system. Never discharge these washings or paint residues to the storm sewer.

Oil or Solvent-Based Paint

Small quantities of paint leftovers (i.e., less than 5 litres) can be allowed to dry fully and taken to the landfill.

Unused oil-based paints and solvents such as thinners, mineral spirits and solvents are hazardous and require special management practices. These wastes are ignitable and their reduction should be minimized by re-using these products.

When there is no further use for the paint and related products, these wastes should be directed to collection centres or approved facilities. Composting is not an acceptable industry practice for managing paint waste.

Information on Alberta's collection centres and facilities is found at www.albertarecycling.ca

Additional assistance is available from the *Environmental Services Association of Alberta* at 1-800 661 9287 or www.esaa.org.

Paint and Aerosol Containers

Paint and aerosol containers are made up of steel or plastic are recyclable.

Non-empty oil and solvent-based paint containers are considered hazardous waste and receive the same label as the paint they contain. Empty containers are not hazardous and recycling them does not require any authorization from AESRD.

Volume reduction of the containers should be done prior to recycling or disposal. Guidance on the management of aerosol cans is available at <http://environment.alberta.ca/02793.html>

Recycling opportunities are readily available at reasonable cost due to the value of the plastic or metal containers. Information on companies that manage these materials is available from the *Environmental Services Association of Alberta* at <http://www.esaa.org>.

To encourage and facilitate paint waste recovery and facilitate enforcement, the management of paint waste is exempt from environmental authorizations under *EPEA*, provided that the storage and/or processing of hazardous recyclables do not exceed the limits set in Schedule 1 of the *ADR*.

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Spent Shot Blasting

Spent shot blasting is a waste resulting from the removal of paint from metal surfaces. This waste is identified in Table 3 of the Schedule to the *Guide* as Waste Type 205 and should be managed as hazardous waste. This *Guide* and the list of facilities approved to receive that waste are available on line at <http://www.environment.alberta.ca/2452.html>, and <http://environment.alberta.ca/02994.html> respectively.

Consequently, manifesting during transportation and other requirements applicable to the management of hazardous waste have to be met. For proper waste classification, a representative sample of the waste should be tested using the *Toxicity Characteristic Leaching Procedure* and comparing the results of the metal concentrations in the leachate with the limits indicated in Table 2 of the *Guide* mentioned above.

Detailed information on the management of hazardous waste is described in the *Guide*. Management options may include disposal at two commercial Class I landfills. One, located at Cynthia (Drayton Valley) is operated by Secure Energy Services.; the other, at Ryley, is operated by Clean Harbors. These landfills can be contacted by telephone at (780) 621-8686 or (780) 663-3828, respectively.

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Authorizations Required

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Table 1 summarizes the authorizations that apply to the management of paint waste including paint designated materials affected by the *Alberta Recycling Management Authority* (ARMA)'s stewardship program.

Table 1 – Authorizations Applicable to Paint Waste Management Activity

Activity	Authorizations Required (third party waste)		Applicable Legislation
	Oil or Solvent-Based Paint (HW)	Latex Paint (NHW)	
Identification and Classification/Generator	Required	NR ¹	WCR, 3(1)
Storage/Receiver Imported waste >30 d Waste Recyclable	Ministerial Approval > 10 tonnes/365 days Approval > 10 tonnes/365 days	EPEA Notice ² NR NR	WCR, 11, 18 ADR, Schedule 1(e) ADR, Schedule 1(f)
Transportation/Carrier Dangerous good Waste Recyclable	Bill of Lading PIN/Manifest Recycle docket ≥ 205 L or kg	NR NR NR	TDGR, Part 3 WCR, 3-10 WCR, 17
Processing/Receiver	Approval > 10 tonnes	NR	ADR, Schedule 1(h)
Importation/Receiver Recycling Treatment	Ministerial/PIN/Approval Approval/PIN	NR	WCR, 15, 21, 23(1)
Disposal/Receiver Treatment Disposal	Approval/PIN (Swan Hills) Prohibited	NR Approval or Registration	WCR, 13 or 23(1)

1 NR – No authorization is required under EPEA.

2 Notice is not required when:

- (a) The paint waste is collected at approved sites and the approval recognizes the activity; or
- (b) The paint waste is going for recycling. Composting is not considered an acceptable industry practice for managing paint waste.

Hazardous waste manifest and management requirements are identified in the Waste Control Regulation.

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