

GUIDELINE TITLE: ASBESTOS DISPOSAL AT A LANDFILL

BRANCH/DIVISION: Environmental Approvals / Environmental Stewardship

Effective Date: December 14, 2016

INTENT

To provide guidance to the public and landfill operators for acceptable disposal options of asbestos waste and asbestos containing materials at permitted or licenced landfills.

DEFINITIONS

Asbestos – *the fibrous form of crocidolite, amosite, chrysotile, anthophyllite, actinolite, tremolite or a mixture containing any of those minerals.*

Asbestos containing material – *a friable material containing 0.1 per cent or greater asbestos or a non-friable material containing 1.0 per cent or greater asbestos.*

Friable material – *a material that when dry can be crumbled, crushed or powdered by hand pressure.*

Landfill – *means a facility at which solid waste is disposed of by placing it on or in land, but does not include a remote seasonal waste facility.*

Non-friable material – *a material that when dry cannot be crumbled, crushed or powdered.*

BACKGROUND

Asbestos is contained in more than 3,000 building materials made before 1990 including ceiling and floor tiles, pipe insulation, cement, insulation, and other building materials. Asbestos has also been used in schools, hospitals, and in residential, commercial and industrial establishments.

Health risks arise from asbestos during repair, renovation, or demolition activities where the fibres can become airborne. Fibres can become lodged in the lungs when inhaled and prolonged exposure to asbestos fibres can cause asbestosis, mesothelioma, and lung cancer. Be aware that asbestos is highly carcinogenic and therefore has the potential for loss of life and significant liability. Therefore, asbestos use and management is now highly regulated.

Not all landfills are authorized to accept asbestos or asbestos containing material. Proper handling and disposal of asbestos at a landfill will minimize the risk to human health and the environment.

GUIDELINE

NOTE: This disposal criteria applies only to friable asbestos material.

A. Handling and Labelling Asbestos

- Wet all loose cuttings, dust and broken pieces to suppress dust and double bag waste in a 6-mil polyethylene bags.
- Full bags must be sealed immediately to prevent the escape of airborne asbestos fibres. The bags must be clearly labelled as containing asbestos.
- Asbestos waste awaiting disposal must be stored so that bags will not be damaged.
- Asbestos waste must be kept separate from other wastes having no special disposal requirements.
- Persons involved in the handling of asbestos material must be **properly trained and wear personal protective equipment** as specified by Manitoba Growth, Enterprise and Trade.

For more information, review the "**Guideline for Asbestos Management**" prepared by the Workplace Safety and Health Division, or visit the Manitoba Growth, Enterprise and Trade website at <http://www.gov.mb.ca/labour/safety/index.html>

B. Transportation

- Transport of asbestos waste does not require a hazardous waste movement document or a hazardous waste carrier licence.
- Shipments and transporters of regulated asbestos waste shall be in compliance with the *Transportation of Dangerous Goods Regulations*. This includes the requirements that a dangerous goods shipping document shall be prepared, the driver shall have a transportation of dangerous goods training certificate and, for quantities of 500 kg or greater, the vehicle shall display four class 9 dangerous goods placards.
- Waste asbestos must be transported in enclosed trucks.
- In the event a spill occurs during transport, wet material immediately to prevent fibers from becoming airborne.

C. Disposal Sites

- Unless otherwise approved, only landfills permitted under the *Waste Management Facilities Regulation 37/2016* or a licensed facility under *The Environment Act* will be considered for asbestos disposal.

D. Disposal

- Prior to disposal, approval must be obtained from the owner of the landfill.
- Asbestos waste must be located in a separate area or a dedicated trench for immediate burial.
- The disposal site must have all weather access to the separate area or the dedicated trench for asbestos disposal.
- The hauler must ensure that equipment for burying asbestos is available before any asbestos waste is hauled to the landfill.
- Asbestos waste shall not be stockpiled at the landfill for burial at a later date.
- Caution should be exercised to ensure that bags or containers are not broken open before they are covered. If an asbestos container is ruptured, it should be re-packed by trained personnel prior to burial.
- An initial layer of cover material or fill must be placed over the asbestos waste before heavy equipment passes over the asbestos waste.
- A minimum of two metres of compacted fill is required by the end of the working day. If asbestos waste is deposited in the active area, up to 50% of the fill may consist of solid waste.
- Do not handle asbestos waste in windy conditions.
- Detailed location and maps must be recorded and maintained to minimize the risk of exposing asbestos waste during future activities at the landfill.
- Consider having an asbestos emergency response plan.

Any environmental emergency or a release of a pollutant or contaminant to the environment must be reported immediately to the Manitoba Emergency Response line at 1 (204) 944-4888 or toll free in Manitoba at 1 (855) 944-4888.

FOR MORE INFORMATION

Manitoba Sustainable Development

Environmental Compliance and Enforcement Branch
Regional Office Contact Information

www.gov.mb.ca/conservation/ece/contact.html

Manitoba Sustainable Development

Environmental Approvals Branch
2nd Floor, 123 Main Street (Box 80) Winnipeg, MB R3C 1A5
General Inquiry: (204) 945-8321
<http://www.gov.mb.ca/conservation/eal/index.html>

Manitoba Sustainable Development

Solid Waste Management Program
1007 Century Street Winnipeg, MB R3H 0W4
<http://www.gov.mb.ca/conservation/envprograms/swm/index.html>

Manitoba Growth, Enterprise and Trade

Workplace Safety and Health Division
General Inquiry: (204) 945-3446
<http://www.gov.mb.ca/labour/safety/index.html>

Transport Canada

Transport Dangerous Goods (TDG) Directorate
TDG Regional Office: Prairie & Northern
1 (888) 463-0521
TDG-TMDPNR@tc.gc.ca
<http://www.tc.gc.ca/eng/tdg/menu.html>

SUPPORTING DOCUMENTS

Guideline for Asbestos Management. Safe Work Manitoba. 2016.
<http://files.ctctcdn.com/94bb6814501/a9d14baf-386a-41c4-928e-f7d04287efd7.pdf>

REFERENCES

Guideline for Asbestos Management. Safe Work Manitoba. Workplace Safety and Health Division. June, 2016.

Phyper, J. & Ibbotson, B. (2003). *The Handbook of Environmental Compliance in Ontario*. McGraw-Hill Ryerson.

Solid Waste Association of North America (SWANA) Landfill Operations Basics On-Site Training. Course Manual (2010).