BCEIA British Columbia Environment Industry Association

Mining, Metals & Metal Finishing Fact Sheet

Hazardous Waste Management in BC

Mining, metals and metal finishing waste often include hazardous substances. Mining and metal operations commonly use hazardous chemicals, and sometimes naturally occurring toxic substances are released into the environment during operations and the disposal of waste materials.

Most of the hazardous wastes in the metals sector can be solids, gases, liquids, or semi-liquids like mining sludge and drilling mud. Most of the hazardous wastes in this sector are liquids or semi-liquids, but a wide variety of waste materials used in the sector may be viewed as hazardous.

Managing Mining & Metals Hazardous Waste

The BC Ministry of Environment categorizes several extraction and beneficiation wastes from hard-rock mining as hazardous wastes. Mineral processing operations generally follow beneficiation and include techniques that often change the chemical composition and the physical structure of the ore or mineral.

Examples of mineral processing techniques include smelting (for lead and zinc), electrolytic refining and acid digestion.

Mineral processing waste streams typically bear little or no resemblance to the materials that entered the operation, for example: acids, caustics and flotation agents must be managed properly to avoid serious consequences to public health, safety and the environment.

Slag, slag tailings and calcium sulphate in wastewater treatment plant sludge are generated from primary copper, lead and/or zinc processing.

Vehicle and equipment maintenance shops associated with mining operations generate waste oil, filters, oily rags, solvents and batteries.

Please note that facilities managing only tailings and waste rock management enjoy exemptions as defined in the regulations. Please refer to ***Section 2(8), Part 1 of the Hazardous Waste Regulation*** for further details.

Metal plating and fabrication shops can also produce acid, caustic and heavy metal contaminated waste streams and sludges that should be characterized to confirm whether they are hazardous.

This information sheet is presented by the BC Environment Industry Association (BCEIA) and is intended as information only and not to be the definitive interpretation of any act or regulations regarding Hazardous Waste. (January 2008)

BCEIA

British Columbia Environment Industry Association

www.bceia.com

Hazardous Waste Management

Companies that generate hazardous wastes have a responsibility to manage the wastes in compliance with the **Hazardous Waste Regulation** and the **BC Environmental Management Act**. The wastes must be properly characterized, stored, labeled, transported and disposed of.

The generator of hazardous wastes also has the responsibility to properly Manifest it before tendering it to a licensed waste transporter and an authorized waste receiver/processor. Generators must also obtain a BC Generator Registration Number, depending on the quantity of waste produced or stored. Please refer to the fact sheet: ***Generators of Hazardous Waste*** for a more comprehensive explanation of a generator's responsibilities.

There are penalties for non-compliance in the forms of fines and possible imprisonment. Please refer to ***Section 10, Division 1 of the Environmental Management Act*** for further details.

Industry organizations, such as the Mining Association of BC ***(www.mining.bc.ca)***, are working to make mining safer through the proper management of hazardous wastes.

If you are unsure if a particular waste is hazardous, you should retain the services of a qualified hazardous waste consultant, or contact a reputable hazardous waste management company for advice.

Hazardous Waste Manifest

The Hazardous Waste Manifest System keeps track of:

- The date, type, characteristics, quantity and origin of hazardous wastes
- Identity of the transporter of the wastes
- Proof of delivery of waste to the designated waste management site

It also provides a signed record (Manifest copy) for all parties, confirming that the wastes have been received and how they are intended to be managed.

Need More Information?

Contact the nearest regional office of the BC Ministry of Environment. A list of regional offices can be found at ***http://www.env.gov.bc.ca/main/regions.html***

Or you can find your nearest Ministry of the Environment office by phone.

Victoria: (250) 387-6121
Vancouver: (604) 660-2421
Elsewhere in BC: 1-800-663-7867
Outside BC: (604) 660-2421

There are links to the relevant legislation, as well as other helpful information on the BC Ministry of Environment's Hazardous Wastes Homepage, ***http://www.env.gov.bc.ca/epd/hazwaste/index.htm***

For more specific information please see the other fact sheets in this series

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012 Government & Institutional Generators

or visit Hazardous Waste BC at
http://www.hazwastebc.com

For Further Information:

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Last Updated: February 2013