

A chemical and hazardous materials management system is in place to ensure a safe and healthy working and learning environment for staff, students and visitors and to ensure legislative requirements are met.

This procedure applies to chemicals and chemical controlled products used in the operation of the Division including, but not limited to, instruction, custodial, maintenance, clerical/support, career and technology studies, science and art programs.

Definitions

Chemical Inventory: a document or inventory system used to keep a record of chemicals and other hazardous materials, ensure Safety Data Sheet compliance, reduce health and safety risks, and reduce costs associated with managing excess chemicals.

Hazardous Material: any item or agent (biological, chemical, radiological, and/or physical) which has the potential to cause harm to humans, animals, plants or the environment, either by itself or through interaction with other factors unless given special handling or treatment. This includes hazardous wastes, carcinogens, toxic agents, reproductive toxins, and agents that may damage the lungs, skin, eyes or mucous membranes.

Hazardous Waste: substances that have properties that make them dangerous or harmful to human health or the environment. In Canada, hazardous wastes and hazardous recyclable materials are defined as those with properties such as flammability, corrosiveness, or inherent toxicity. These wastes and materials can pose a variety of risks, from skin damage on contact to the contamination of ground water, surface water, and soil as a result of leaching into the environment. Hazardous wastes and recyclables come from many sources, including material left over from industrial activities such as oil refining, chemical manufacturing and metal processing. Even some everyday household products such as used batteries, computers and other electronic equipment, cleansers, paints, and pesticides may be hazardous when improperly discarded or recycled.

Safety Data Sheet (SDS): previously referenced as a material safety data sheet (MSDS). Provided by the manufacturer, this document details the properties of a chemical product or substance and provides information on potential hazards including health effects of exposure to the product, safe storage and handling.

Supplier Label: a group of written, printed or graphic information elements applied by the product manufacturer or supplier to the container to alert to the hazards of the product and precautions to be taken when working with or near the product.

Transportation of Dangerous Goods (TDG): provincial and federal legislation provide standards for the safe transportation of dangerous goods, including regulated chemicals ordered or disposed of by schools, from point of generation shipment to point of disposal.

Workplace Hazardous Materials Information System (WHMIS): Canada-wide system designed to give workers the necessary information on the safe use of hazardous materials.

Information is provided by means of product labels, safety data sheets and worker education programs.

Work Site Label: a label applied to a portable or secondary container after a chemical product has been transferred from its original container. With respect to a hazardous product, the label shall include three categories of information: a product identifier that is identical to that found on the safety data sheet for the hazardous product, information for the safe handling of the hazardous product, and reference to the safety data sheet for the hazardous product.

Procedures

Principals/Directors shall implement the following chemical management practices to control and monitor the purchase, inventory, use, storage, transport and disposal of chemical products and hazardous wastes.

1. Chemical Management Practices

1.1. Facility Services

- 1.1.1. The Director of Facility Services shall approve chemicals ordered for custodial purposes and ensure an inventory is maintained, materials are stored in appropriate locations, and materials have the appropriate labels and Safety Data Sheets.
- 1.1.2. Custodial contractors shall use only those products approved by the Director of Facility Services.
- 1.1.3. The Director of Facility Services shall assist with and monitor the management, recycling, and/or disposal of chemicals and hazardous waste to ensure compliance with federal and provincial legislation.
- 1.1.4. Herbicides and pesticides may be applied on non-operational days only.
- 1.1.5. Mouse poison shall be limited to areas of the school which are secure from students.

1.2. Principals and Directors

- 1.2.1. On or before October 31, each department and instructional program with chemical usage is required to provide the Director of Facilities with an inventory list. The inventory must include the product name, location, purchase date, and date of the Safety Data Sheet. Form 7-11-A Chemical Inventory, a google doc or a spreadsheet may be used to report.
- 1.2.2. Chemicals and chemical products shall be purchased from reputable vendors. Used, surplus, recycled or donated chemicals shall not be brought into the workplace from homes or other sources without the approval of the Principal/Director in consultation with the Director of Facilities.
- 1.2.3. Chemicals and chemical products shall be purchased in quantities that will be used during the current school year or that can be fully consumed under normal conditions within the shelf life of the product. Chemicals may be purchased as needed throughout the school year to reduce the costs and management needs associated with excess and expired chemicals. It is recommended that liquid chemicals be purchased in amounts that will be used within one or two years and dry and powdered materials be purchased in amounts that will be used in three years.

- 1.2.4. Purchasing decisions regarding chemical products shall first consider curriculum needs, appropriate amounts, least toxic alternatives, available storage, shelf life, and disposal requirements.
- 1.2.5. When practicable, use strategies for reducing the volume of hazardous waste. Strategies include using micro-scale experiments, recycling chemicals for reuse, and converting hazardous materials to non-hazardous products using precipitation and neutralization methods.
- 1.2.6. Maintain good housekeeping and organization at all times in areas where chemicals are used and stored.
- 1.2.7. Staff and students shall be provided with and utilize the appropriate personal protective equipment (PPE) when working with hazardous materials.
- 1.2.8. Chemical spill kits, eyewash stations and first aid kits shall be located in areas where hazardous chemicals are used.
- 1.2.9. Areas where chemicals are stored (e.g. chemical prep rooms, custodial closets, etc.) shall be kept locked and secured from students and unauthorized users.
- 1.2.10. All chemicals shall be stored in proper containers on sturdy shelves based on chemical compatibility as described in the Alberta Education resource [Safety in the Science Classroom](#).
- 1.2.11. Flammable and corrosive materials shall be stored separately in approved cabinets or containers.
- 1.2.12. Food shall not be stored or consumed in areas where chemicals are used or stored.
- 1.2.13. Hazardous waste generated at the work site shall be documented on Form 7-11-B Hazardous Waste Disposal. Hazardous waste shall be disposed of at least every three years through a company registered in Alberta. This includes unnecessary, outdated, unknown, contaminated or degraded chemicals.
- 1.2.14. Schools/sites may make their own arrangements for disposal of hazardous waste or contact the Director of Facilities for assistance in acquiring quotes from reputable companies. The Director of Facilities must be advised when arrangements have been made to dispose of hazardous waste. A copy of Form 7-11-B Hazardous Waste Disposal and all other documentation such as shipping information, hazardous waste manifest form filed by the contractor with Alberta Environment and Parks, etc., must be forwarded to the Director of Facilities for record keeping and audit purposes.

2. Workplace Hazardous Materials Information System (WHMIS)

2.1. Facility Services

- 2.1.1. The Director of Facilities is responsible for establishing and maintaining an education and training program for workers who may be exposed to work site hazardous materials. The education program should include:
 - 2.1.1.1. Procedures for the safe handling, use, storage and disposal of controlled products used in the work place including controlled products used in piping systems and vessels.
 - 2.1.1.2. Procedures to be followed in the case of an emergency involving a controlled product and fugitive emissions of a controlled product.

2.2. Principals and Directors

- 2.2.1. All staff using or handling chemical controlled products shall receive WHMIS training. Staff training shall be refreshed every three years or when new products or processes are introduced to the work site.
 - 2.2.2. All staff using or handling chemical controlled products shall follow recommended procedures in handling chemicals, be familiar with the chemical's Safety Data Sheet and first aid requirements in case of an accident. Accidents must be reported.
 - 2.2.3. All students using or handling chemical controlled products shall receive appropriate instruction.
 - 2.2.4. All chemical products received, used, and stored at the work site shall have appropriate and legible supplier labels attached to them. Products with a damaged supplier label must either be replaced with a new label from the manufacture or work site label affixed to the product.
 - 2.2.5. Work site labels that include the product name, hazard statement, and reference to the Safety Data Sheet shall be applied to all containers of chemical products dispensed into portable containers.
 - 2.2.6. All staff members shall know how to electronically access Safety Data Sheets. When a hazardous product is brought into the facility, a safety data sheet must be present in the facility.
3. Transportation of Dangerous Goods (TDG)
 - 3.1. Dangerous goods shall be handled and transported in accordance with Transportation of Dangerous Goods legislation and [Transportation of Chemical Wastes from School Laboratories](#). TDG requirements for training, shipping documents and placards does not apply to chemicals when compliant with the small quantity exemption requirements; however, there are still stringent requirements that must be met.
 - 3.2. When schools and sites of the Division require transportation of hazardous waste to a waste receiving facility, the services of a company registered in Alberta must be contracted because each individual waste must be sealed within an inner container carrying an identifying label. Inner containers are then packed in a steel drum and surrounded by inert filler material. The outer drum must then be labelled appropriately with the most dangerous good listed as per Special Provision 16. Special packaging and transportation arrangements may be also necessary for shock-sensitive materials.

Reference

[Education Act](#)

[Environmental Protection and Enhancement Act](#)

[Occupational Health and Safety Act](#)

[Transportation of dangerous goods – Legislation and standards](#)

[Alberta Education – Safety in the Science Classroom \(March 2006\)](#)

[Transportation of Chemical Waste from School Laboratories](#)

[Policy 19 Welcoming, Caring, Respectful and Safe Learning Environment](#)

[Form 7-11-A Chemical Inventory](#)

[Form 7-11-B Hazardous Waste Disposal](#)