Workplace Hazardous Materials Information System - A guide to the legislation

This guide provides an overview of the Workplace Hazardous Materials Information System (WHMIS), a Canada-wide system designed to give employers and workers information about hazardous products used in the workplace.

You can also order a printed copy of the Workplace Hazardous Materials Information System - A guide to the legislation (https://www.publications.gov.on.ca/browse-catalogues/occupational-health-safety/legislative-guides/workplace-hazardous-materials-information-system-whmis-a-guide-to-the-legislation-july-2017) .

The Workplace Hazardous Materials Information System (https://www.canada.ca/en/health-canada/services/environmental-workplace-health/occupational-health-safety/workplace-hazardous-materials-information-system.html) (WHMIS) is Canada's national standard for communicating information about hazardous workplace products. It is implemented through complementary federal, provincial and territorial laws. Originally established in 1988, the purpose of WHMIS (http://whmis.org/) is to ensure employers and workers receive consistent and comprehensive health and safety information about the hazardous products they may be exposed to at work. By setting standards for the type and amount of information to be given to the users of hazardous chemicals and biological agents, WHMIS is intended to reduce workplace injuries and illnesses related to such products.

The main elements of WHMIS are:

Product classification

Products intended for use in the workplace are classified based on their hazardous properties.

Labels

Provide basic information that a worker needs to know to safely use a hazardous product.

Safety data sheets (SDSs)

Supplement the label with more detailed information about a product's physical and chemical characteristics, its hazardous properties and necessary handling precautions.

Worker education

Ensures workers understand the information on labels and safety data sheets and can apply this knowledge on the job.

This guide is intended to give workplace parties a basic understanding of WHMIS and to direct readers to more detailed information, if needed.

This guide **does not replace** the *Occupational Health and Safety Act* **(OHSA) and its regulations, and should not be used as or considered legal advice**. Health and safety inspectors apply the law based on the facts in the workplace.

WHMIS 1988 to WHMIS 2015 – Making the transition

WHMIS has changed to adopt new international standards for classifying hazardous materials and providing information on labels and safety data sheets. These new standards are part of the Globally Harmonized System for the Classification and Labelling of Chemicals (http://www.unece.org/trans/danger/publi/ghs/ghs_rev05/05files_e.html) (GHS) being phased in across Canada between February 2015 and December 2018. The GHS standards have been endorsed by the United Nations. They are also being implemented in many other countries including the United States, Australia, New Zealand, China, Japan and members of the European Union. The original WHMIS requirements are generally referred to as "WHMIS 1988" and the new ones are called "WHMIS 2015." To give suppliers, employers and workers time to adapt to the new system, the transition from WHMIS 1988 to WHMIS 2015 took place in three phases.

The transition to WHMIS 2015 ended on December 1, 2018. There should now be no hazardous products in the workplace with WHMIS 1988 labels and safety data sheets.

The WHMIS legislation

WHMIS is implemented by complementary federal, provincial and territorial legislation and regulations. The main purpose of the **federal** WHMIS legislation is to require **suppliers** of hazardous products intended for use, handling or storage in a workplace to classify those products and provide health and safety information about them to their customers. The main purpose of the **provincial** and **territorial** WHMIS legislation is to require employers to obtain health and safety information about hazardous products

from their suppliers, and to use that information to train their workers. In addition, confidential business information is protected under WHMIS.

Federal WHMIS legislation

Federal WHMIS legislation is administered by Health Canada and includes:

- 1. The *Hazardous Products Act (http://laws-lois.justice.gc.ca/eng/acts/H-3/)* (HPA) requires a supplier who sells or imports a hazardous product intended for use, handling or storage in a workplace in Canada to provide a label and safety data sheet to the purchaser of the product.
- 2. The *Hazardous Products Regulations* (http://laws-lois.justice.gc.ca/eng/regulations/SOR-2015-17/index.html) (HPR) set out the criteria a supplier must use to assess and classify a product into prescribed hazard classes and categories (e.g. flammable liquid, skin irritant, etc.); and, set out in detail the information a supplier is required to put on a label and a safety data sheet.
- 3. The *Hazardous Materials Information Review Act (http://laws-lois.justice.gc.ca/eng/acts/H-2.7/)* (HMIRA) provides for the protection of confidential business information and defines the type of information that a supplier or employer may claim an exemption from disclosing on a label or safety data sheet. It assigns to Health Canada the responsibility for determining if a claim for exemption from disclosing confidential business information is valid.
- 4. The *Hazardous Materials Information Review Regulations (http://laws-lois.justice.gc.ca/eng/regulations/SOR-88-456/)* (HMIRR) set out the criteria that Health Canada must use when assessing the validity of a claim for exemption, and also set out the information that must be contained in a claim for exemption from disclosing confidential business information.

Under WHMIS 2015, there are key changes to the federal legislation:

- "Controlled Products" are now called "Hazardous Products."
- New rules and criteria for classifying hazardous chemicals improve the supplier's ability to indicate the severity of hazards.
- There are different hazard classes/categories and more of them.
- Supplier label requirements include new pictograms for hazard classes and prescribed hazard statements and signal words.

- Safety data sheets have a new, standardized 16-section format with prescribed information elements.
- Safety data sheets are required to be updated on an ongoing basis, as new information about a product becomes available. There is no longer a requirement to update a safety data sheet every three years.

Ontario's WHMIS legislation

In Ontario, WHMIS requirements are in:

- 1. The Occupational Health and Safety Act (https://www.ontario.ca/laws/statute/90o01) (OHSA) generally requires employers to ensure hazardous products are identified, to obtain safety data sheets and make them available in the workplace and to provide instruction and training to workers. The OHSA also provides for the protection of confidential business information according to procedures set out in the federal HMIRA.
- 2. The Workplace Hazardous Materials Information System Regulation (https://www.ontario.ca/laws/regulation/900860) (R.R.O. 1990, Regulation 860) sets out in detail the employer's duties respecting labels and safety data sheets for hazardous products and prescribes the content and delivery of worker education programs. The regulation also sets out the types of confidential business information the employer may withhold from a label or safety data sheet.

Ontario's WHMIS legislation applies to all workplaces covered by the *Occupational Health* and *Safety Act*, with the exception of farms.

Enforcing WHMIS legislation

In Ontario, the Ministry of Labour, Training and Skills Development is responsible for the enforcement of both the federal and provincial WHMIS legislation. This is done so that employers and suppliers will not be subject to inspections by both federal and provincial inspectors. It means that Ministry of Labour, Training and Skills Development inspectors monitor compliance with the HPA, HPR, the OHSA and the WHMIS Regulation.

The OHSA and WHMIS Regulation do not apply to federally regulated workplaces such as banks, post offices and airports in Ontario. Instead, certain sections of the Canada Labour Code and the Canada Occupational Health and Safety Regulations implement WHMIS in

federal workplaces and are enforced by inspectors of the federal government's labour program. Those pieces of legislation are not covered in this guide.

WHMIS and the transportation of dangerous goods

In general, WHMIS requirements apply to hazardous products inside a workplace. Products being shipped to and from workplaces are covered by transportation of dangerous goods (TDG) legislation. No overlap is intended. The WHMIS Regulation specifically exempts a hazardous product that is being transported and handled under federal or provincial TDG legislation.

The federal *Transportation of Dangerous Goods Act, 1992* defines handling as "loading, unloading, packing or unpacking dangerous goods in a means of containment for the purposes of, in the course of or following transportation and includes storing them in the course of transportation." Handling does not include use of a hazardous product.

It can be difficult to determine which requirements apply — WHMIS or TDG — when a hazardous product is in a warehouse. If a hazardous product is in temporary storage in a distribution warehouse, namely a warehouse operating as a trans-shipment point, and is not modified in any way at that warehouse, TDG requirements would apply. In this case, the goods are being stored for transport and are not handled except to be loaded onto a vehicle for removal from the warehouse.

If a hazardous product in a warehouse is repackaged (assembled, labelled or relabelled), processed or used, WHMIS requirements may apply.

WHMIS and the supplier

The duties of a supplier of hazardous products intended for use, handling or storage in a workplace are set out in the federal *Hazardous Products Act* (HPA) and the *Hazardous Products Regulations* (HPR). Employers who buy hazardous products should understand the obligations of their suppliers to provide them with accurate health and safety information. More importantly, employers who either produce or import a hazardous product for use in their own workplaces assume the responsibilities of a supplier in respect of those products, with a few minor exceptions as explained in WHMIS and the employer (https://www.ontario.ca/document/workplace-hazardous-materials-information-system-guide-legislation/whmis-and-employer).

General duties

A supplier is a person who, in the course of business, sells or imports a hazardous product. Suppliers have three main duties:

- 1. To determine which of their products intended for use, handling or storage in a workplace are "hazardous products" as defined in the HPA. This is the "classification" step.
- 2. To label hazardous products as a condition of sale or importation.
- 3. To provide safety data sheets for hazardous products as a condition of sale or importation.

This part of the guide gives an overview of these duties. Detailed technical guidance for suppliers is available from Health Canada:

Health Canada Address locator 0900C2 Ottawa, ON K1A 0K9

613 957-2991

1 866 225-0709

1 800 465-7735

Fax: 613-941-5366

Email: publications@hc-sc.gc.ca (mailto:publications@hc-sc.gc.ca)

Classification

WHMIS 2015 introduces a new system for classifying hazardous products. There are at least three possible levels of classification for an individual product.

Moving from the most general classification to more specific ones, these levels are:

- hazard "group"
- hazard "class"
- hazard "category" and, in some cases,

• hazard "subcategory"

There are two broad hazard groups: physical hazards and health hazards. Products in the physical hazards group are classified based on characteristics such as flammability or reactivity. Health hazards are grouped based on their ability to cause a health effect, such as cancer or skin irritation. Both groups are divided into classes of materials with similar properties. There are 19 distinct classes in the physical hazards group and 12 classes in the health hazards group.

Classes in the Physical Hazards Group are:

- 1. Flammable gases
- 2. Flammable aerosols
- 3. Oxidizing gases
- 4. Gases under pressure
- 5. Flammable liquids
- 6. Flammable solids
- 7. Self-reactive substances and mixtures
- 8. Pyrophoric liquids
- 9. Pyrophoric solids
- 10. Self-heating substances and mixtures
- 11. Substances and mixtures which, in contact with water, emit flammable gases
- 12. Oxidizing liquids
- 13. Oxidizing solids
- 14. Organic peroxides
- 15. Corrosive to metals
- 16. Combustible dusts^[1]
- 17. Simple asphyxiants^[2]

- 18. Pyrophoric gases^[3]
- 19. Physical hazards not otherwise classified^[4]

Classes in the Health Hazard Group are:

- 1. Acute toxicity
- 2. Skin corrosion/irritation
- 3. Serious eye damage/eye irritation
- 4. Respiratory or skin sensitization
- 5. Germ cell mutagenicity
- 6. Carcinogenicity
- 7. Reproductive toxicity
- 8. Specific target organ toxicity single exposure
- 9. Specific target organ toxicity repeated exposure
- 10. Aspiration hazard
- 11. Biohazardous infectious materials^[5]
- 12. Health hazards not otherwise classified^[6]

Most hazard classes are further subdivided into categories and subcategories based on the severity of the hazard. Most categories are identified by a number and subcategories by a number and letter. The lower the category number, the more severe the hazard, for example, a product classified as a Flammable Liquid-Category 1 is more hazardous than a Flammable Liquid-Category 2.

Determining if a product is a "hazardous product"

To determine if a particular product intended for use in the workplace is a hazardous product, a supplier should:

- identify the physical and toxicological properties of the product;
- consult Parts 2, 7 and 8 of the *Hazardous Products Regulations* (http://lawslois.justice.gc.ca/eng/regulations/SOR-2015-17/index.html) (HPR), which set out the

definitions and classification criteria relevant to each WHMIS hazard class, category and sub-category;

• compare the properties of the product to the criteria in the HPR.

A product is a "hazardous product" as defined in the HPA if it meets the criteria to be classified in at least one category or subcategory of any of the physical or health hazard classes listed above. Product classification is a complex process. Products should be evaluated in accordance with established scientific principles and using all available hazard data. Both suppliers and employers may need help from external experts.

The supplier label

The supplier label is the worker's first warning about the hazards of a product and how to use it safely. A supplier must put the following information on the label of a hazardous product (see section 3, of the *Hazardous Products Regulations* (http://lawslois.justice.gc.ca/eng/regulations/SOR-2015-17/page-3.html#h-11)).

Product identifier

Can be any one of the brand name, chemical name, common name, generic name or trade name. The product identifier displayed on the label of a hazardous product must be identical to the one on the hazardous product's safety data sheet.

• An **employer** who considers the product identifier to be confidential business information may file a claim under the *Hazardous Materials Information Review Act* for exemption from disclosure (see Confidential business information (https://www.ontario.ca/document/workplace-hazardous-materials-information-system-guide-legislation/confidential-business-information)). If the employer's claim is granted, the supplier would disclose a code name or number on the label in place of the product identifier (subsection 5.7(9), HPR).

Initial supplier identifier

The name, address and telephone number of either the Canadian manufacturer or importer of the hazardous product who operates in Canada. The initial supplier identifier displayed on the label of a hazardous product must be identical to the one on the safety data sheet.

• If an employer imports a hazardous product directly from a foreign supplier for use in its own workplace, the employer may retain the name, address and telephone

number of the foreign supplier on the label instead of providing its own contact information (subsection 5.9(2), HPR).

- An employer who considers the supplier identifier to be confidential business information may file a claim under the *Hazardous Materials Information Review Act* for exemption from disclosure (see Confidential business information (https://www.ontario.ca/document/workplace-hazardous-materials-information-system-guide-legislation/confidential-business-information)). If the employer's claim is granted, the supplier would not disclose its contact information on the label (subsection 5.7(10), HPR).
- The initial supplier identifier information may be replaced by a subsequent supplier information on both the label and the safety data sheet (section 5.8, HPR).

Pictogram(s)

Categories and subcategories of a hazard class have corresponding pictograms to convey the type of hazard (for example, a skull and crossbones to indicate acute toxicity). In general, the supplier label must include a pictogram for each WHMIS class/category that the hazardous product falls into (note that some hazard classes, such as combustible dust and simple asphyxiants, do not have pictograms). See the WHMIS 2015 pictograms (http://www.ccohs.ca/oshanswers/chemicals/whmis_ghs/pictograms.html).

Signal word

Either "Danger" or "Warning" is used to emphasize a hazard and to indicate its severity. "Danger" is used for more severe hazards.

Hazard statement(s)

A brief, standardized phrase to describe the nature of the hazard, for example, Causes Skin Irritation or Fatal if Swallowed.

Precautionary statement(s)

Recommended measures to minimize adverse effects from exposure to a hazardous product or resulting from improper storage or handling, for example, Wear Protective Gloves or Keep Away From Heat.

For some hazardous products, depending upon the classification, **supplemental information** is required on the supplier label. For example, the label for a product with an ingredient of unknown toxicity may require a statement of the percentage of that ingredient in the product. Information that is not required on a label may be added to it to provide further detail as long as it does not contradict or cast doubt on the required information. See an example of a supplier label

(http://www.ccohs.ca/oshanswers/chemicals/whmis_ghs/labels.html) that complies with WHMIS 2015.

Updating the supplier label

The HPR require a supplier to update labels within 180 days of becoming aware of significant new data about a hazardous product (subsection 5.12(4), HPR). "Significant new data" means information about a product that would:

- change its classification in a category or subcategory of a hazard class,
- result in its classification in another class, or
- change the ways to handle it safely.

If a hazardous product is sold during the 180-day grace period, without an updated supplier label, the supplier must provide the buyer (i.e. the employer) with the significant new data in writing and the date on which the data became available. Suppliers are not required to inform past buyers of a hazardous product that significant new data is available.

Design requirements of the supplier label

The design requirements of the supplier label have been modified under WHMIS 2015 and relate primarily to language, layout, and colour. A border is no longer required.

Language

The supplier label must be in English and French. The supplier can make two separate labels, one for each language, or one bilingual label (section 6.2, HPR).

Layout

The pictogram, signal word and hazard statements must be grouped together. Otherwise, the required information can be located anywhere on the label. While there is no minimum or maximum size specified for the supplier label, there is a general requirement that the label be easily legible (section 3.4, HPR).

Colour

Any pictogram required to be provided on a label must reproduce the colour depicted in column 3 of Schedule 3 (http://laws-lois.justice.gc.ca/eng/regulations/SOR-2015-17/page-26.html) of the HPR.

Labelling exceptions

Part 5 of the HPR sets out a number of exceptions to the general requirements for either providing a supplier label, or for providing certain information on a supplier label. Some key examples are listed below. Employers receiving these types of containers or products may wish to be familiar with the exceptions. Detailed information is available from Health Canada.

- Outer containers in multi-container shipment (section 5.2, HPR)
- Outer containers with at least two hazardous products packaged together (section 5.3, HPR)
- Small capacity containers 100 ml or less; and 3 ml or less (section 5.4, HPR)
- Bulk shipments and unpackaged hazardous products (section 5.5, HPR)
- Laboratory samples (section 5, HPR)
- Mixture of radioactive nuclides and non-radioactive carriers (section 5.1, HPR).

The supplier safety data sheet

A safety data sheet (SDS) is a technical document that summarizes health and safety information available about a hazardous product. It supplements the warning information on a label. A supplier's SDS is an important resource for the workplace but it is not intended to provide all of the information needed for the safe use of a product. The way a hazardous product is used, handled or stored, and consequently the hazard to the worker, can vary from plant to plant. The supplier is not expected to anticipate every required protective measure for every workplace to which a product is sold. The employer, through the worker education program, is expected to tailor the supplier's information to the conditions in the employer's workplace.

General information requirements for supplier SDS

A supplier SDS must have at least 16 sections, presented in a standardized format. Sections must appear with the following headings and corresponding numbers, and must be in the order shown below.

- 1. Identification
- 2. Hazard identification
- 3. Composition/Information on ingredients
- 4. First-aid measures
- 5. Fire-fighting measures
- 6. Accidental release measures
- 7. Handling and storage

- 8. Exposure controls/Personal protection
- 9. Physical and chemical properties
- 10. Stability and reactivity
- 11. Toxicological information
- 12. Ecological information
- 13. Disposal considerations
- 14. Transport information
- 15. Regulatory information
- 16. Other information

See Schedule 1 (http://laws-lois.justice.gc.ca/eng/regulations/SOR-2015-17/page-24.html#h-145), of the HPR for the specific information required in each of the 16 sections. For sections 12-15, the headings must be shown on the SDS but the supplier can choose whether or not to provide any information (subsection 4(2), HPR). Where required information is either "not available" (i.e. the information cannot be located or does not exist) or "not applicable" (i.e. the information is not relevant, such as the "odour threshold" for an odourless product), the supplier must clearly indicate this on the SDS (subclause 4(1)(b)(i), HPR).

All required information must be provided in both English and French. The supplier may provide either a single bilingual SDS, or they may provide a single document with two unilingual parts.

Special information requirements for supplier SDS

In some cases, a supplier's SDS must include specific information in addition to the 16 sections described above. Examples include:

Biohazardous Infectious Material

Where a hazardous product is classified as a "Biohazardous Infectious Material," the HPR requires additional information to be included on the supplier SDS. See subsection 4(3) and Schedule 2 (http://laws-lois.justice.gc.ca/eng/regulations/SOR-2015-17/page-25.html#h-146) of the HPR for details.

Combining Hazardous Products

Additional information must be added to the SDS when the instructions for using a hazardous product require it to be combined with one or more materials, and doing so

creates a new material that presents either new or more severe hazards than already identified on the SDS. For each new material, the supplier must provide the following, which can appear anywhere on the SDS (section 4.1, HPR):

- 1. The nature of the new or more severe hazard; and
- 2. The information normally required for SDS under sections 4 11 (see Schedule 1 (http://laws-lois.justice.gc.ca/eng/regulations/SOR-2015-17/page-24.html#h-145), of the HPR).

Use of generic SDSs

A generic <u>SDS</u> may be used for a group of hazardous products with the same hazard classification and similar chemical composition. For example, a generic <u>SDS</u> can be used for a series of paints where the only difference between products is the pigment used. A generic <u>SDS</u> must include the names of all hazardous products to which it applies. For any one product, if the concentration or concentration range of an ingredient, or other hazard information differs from that of other products in the group, these differences must be disclosed on the <u>SDS</u> (see Health Canada, "Technical Guidance on the Requirements of the *Hazardous Products Act* and the *Hazardous Products Regulations*" (https://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/occupational-health-safety/technical-guidance-requirements-hazardous-products-act-hazardous-products-regulations-whmis-2015-supplier-requirements.html)).

Updating the SDS

A supplier must ensure that the SDS for a hazardous product is accurate, current and meets requirements in the HPR every time the product is sold. If a supplier becomes aware of significant new data about a hazardous product, the supplier must update the SDS within 90 days (subsection 5.12(3), HPR). "Significant new data" means information about a product that would:

- change its classification in a category or subcategory of a hazard class,
- result in its classification in another class, or
- change the ways to handle it safely.

If a hazardous product is sold during the 90-day grace period, without an updated supplier SDS, the supplier must provide the buyer (i.e. the employer) with the significant new data in writing and the date on which the data became available. Suppliers are not

required to inform past buyers of a hazardous product that significant new data is available.

Exemptions from the federal WHMIS legislation

The federal WHMIS legislation does not apply to the products listed below. No supplier label or SDS is required on the sale or importation of any (section 12 and Schedule 1 (http://laws-lois.justice.gc.ca/eng/regulations/SOR-2015-17/page-24.html#h-145), of the HPA):

- Nuclear substance within the meaning of the *Nuclear Safety and Control Act*, that is radioactive;
- Hazardous waste, being a hazardous product that is sold for recycling or recovery or is intended for disposal;
- Tobacco or a tobacco product as defined in the Tobacco Act;
- Pest control products as defined in the Pest Control Products Act;
- Explosives as defined in the Explosives Act;
- Cosmetics, drugs, devices or food as defined in the Food and Drugs Act;
- Consumer products as defined in the Canada Consumer Product Safety Act;
- Any wood or product made of wood; or
- Manufactured article.

Note: Some requirements in Ontario's WHMIS Regulation apply to some of the above products. These are explained in WHMIS and the employer (https://www.ontario.ca/document/workplace-hazardous-materials-information-system-guide-legislation/whmis-and-employer) .

What is a manufactured article?

A manufactured article is any article that meets all of these conditions (section 2, HPR):

- 1. It is formed to a specific shape or design during manufacture;
- 2. Its intended use depends, either fully or partly, on that specific shape or design;
- 3. Under normal conditions of use, it will not release or cause an individual to be exposed to a hazardous product; and

4. When being installed, it will not release or cause an individual to be exposed to a hazardous product (if installation is necessary in order to use the article as intended).
Note: under WHMIS 1988, the definition of manufactured article did not include exposure to a hazardous product during the installation process.

The following examples are given to further illustrate the exemption for manufactured articles.

- Welding rods are not manufactured articles because although formed to a specific design — during use they release hazardous products previously contained in the rods.
- Piping, whether made of mild, galvanized or stainless steel, is a manufactured article because it does not release hazardous products during its intended use of conveying fluids from one point to another.
- Sheets of friction materials that contain asbestos and which are manufactured with the intent of later being cut or shaped to form specific friction products are not manufactured articles.
- A cylinder produced for the purposes of containing acetylene is a manufactured article. Once filled with acetylene, however, the cylinder is a container for a hazardous product and, when sold as such, must be provided with a label and safety data sheet.
- A refrigerator is a manufactured article made up of various components including a system for containing compressed gases. Unlike the compressed gas cylinder, the refrigerator is not considered to be a container of a hazardous product.

WHMIS and the employer

General duties

The Occupational Health and Safety Act (https://www.ontario.ca/laws/statute/90o01) (OHSA) and WHMIS Regulation (https://www.ontario.ca/laws/regulation/900860) set out the duties of an employer at a workplace where hazardous products are used, handled or stored. In general, an employer is required to:

- 1. ensure that hazardous products are identified (subsection 37(1), OHSA);
- 2. obtain or prepare current SDSs for hazardous products and make those SDSs available to various parties (subsection 37(1) and section 38, OHSA and sections 8-14,

WHMIS Reg.);

- 3. ensure that a worker who is exposed or likely to be exposed to a hazardous product receives instruction and training (subsection 42(1), OHSA); and,
- 4. assess all biological and chemical agents that the employer produces for its own use to determine if they are hazardous products (subsection 39(1), OHSA, section 3, WHMIS Reg.).

An exception

While the OHSA requires an employer to ensure a hazardous product is not used, handled or stored at a workplace unless prescribed requirements concerning identification, SDSs and worker instruction and training have all been met (subsection 37(3), OHSA), the WHMIS Regulation provides an exception. It permits an employer to store a hazardous product received from a supplier without a label on it, without obtaining an SDS for it, and without providing worker education, while the employer is actively seeking a supplier label and SDS for the product (subsection 5(1), WHMIS Reg.). The employer must notify the Ministry of Labour, Training and Skills Development in writing if, after making reasonable efforts, the employer is unable to obtain a supplier label or SDS (subsection 37(4), OHSA).

Similarly, an employer may store a hazardous product that the employer has produced for its own use, without attaching a label or other identification, without preparing an SDS for it and without providing worker education, while the employer is actively seeking the information needed to prepare a workplace label and SDS for the product (subsection 5(2), WHMIS Reg.).

Labelling and identification

Several factors affect the requirements for labels and identification on a hazardous product including, for example, how it is packaged, the size of the container, whether it has been transferred from its original container, whether it was purchased from a Canadian supplier or imported directly from a foreign supplier, or produced in the employer's own workplace. The employer's duties to ensure hazardous products are properly identified are described below. The OHSA prohibits any person from removing or defacing the identification on a hazardous product (subsection 37(2), OHSA).

The supplier label

The employer must ensure that every hazardous product received from a supplier, whether in a container or not, is labelled with a supplier label (subsection 8(1), WHMIS Reg.). If a supplier label is accidentally removed, destroyed or becomes illegible, the employer must replace it with either a new supplier label or a workplace label (subsection 8(3), WHMIS Reg.). See below for information about workplace labels.

The employer is prohibited from altering a supplier label as long as any hazardous product is still in the container received from the supplier (subsection 8(2), WHMIS Reg.).

Exception for small containers

A supplier label may be removed from a container with a capacity of 3 millilitres or less if the label interferes with the normal use of the hazardous product (subsection 8(4), WHMIS Reg.).

Imported hazardous products

An employer who imports and receives a hazardous product for use in its own workplace, either without a supplier label or with a supplier label that does not comply with the requirements of the federal HPR, must attach a label to the product that meets the labelling requirements of the HPR for that product (subsection 8(6), WHMIS Reg.). In effect, the employer must create the equivalent of a supplier label.

Generally, a supplier label must display the name, address and telephone number of the Canadian manufacturer or importer of the hazardous product who operates in Canada (i.e. the "initial supplier identifier" as defined in the HPR). However, if the Canadian importer is an employer, importing a hazardous product directly to its own workplace, and only for use in its own workplace, the employer can retain the name, address and telephone number of the foreign supplier on the label and SDS, rather than replacing it with its own contact information. This small exception is provided by the HPR (section 5.9).

Bulk shipments and unpackaged hazardous products

A "bulk shipment" means a shipment of a hazardous product that is contained without intermediate containment or intermediate packaging in,

- a. a. a vessel with a water capacity equal to or greater than 450 litres;
- b. a. a freight container, road vehicle, railway vehicle or portable tank;

- c. a. the hold of a ship; or
- d. a. a pipeline (subsection 1(1), WHMIS Reg.).

If an employer receives a hazardous product transported as a bulk shipment or without packaging, without a supplier label, the employer must label the hazardous product or the containers into which it is off-loaded with a label that meets the labelling requirements of the HPR for that product (subsection 8(7), WHMIS Reg.). The employer can use the supplier's SDS, which must contain all required labelling information, to create a supplier label. Employers have this duty because suppliers are exempt under federal law from providing a label for bulk shipments or unpackaged hazardous products, although some may voluntarily provide one.

There are circumstances where the employer is permitted to use a placard to identify the hazardous product (section 12, WHMIS Reg.). One example would be a bulk shipment or unpackaged hazardous product that is transferred directly into a piping system. Where a placard is used, it must contain the information normally required on a workplace label (clause 12(b), WHMIS Reg.).

Updating the supplier label

If an employer receives significant new data from a supplier about a hazardous product, the employer must use this information to update every relevant supplier label as soon as practicable (subsection 8(5), WHMIS Reg.). This duty applies to any container of the hazardous product in the workplace including past shipments of the product. The employer's duty complements provisions in the federal HPR that require a supplier to update labels within 180 days of becoming aware of significant new data about a hazardous product. "Significant new data" means information about a product that would:

- change its classification in a category or subcategory of a hazard class,
- result in its classification in another class, or
- change the ways to handle it safely.

If a hazardous product is sold during the 180-day grace period, without an updated supplier label, the supplier must provide the buyer (i.e., the employer) with the significant new data in writing and the date on which the data became available. Suppliers are not required to inform past buyers of a hazardous product that significant new data is available.

The employer's workplace label

A workplace label is a label made by an employer and used only in the employer's workplace. The information requirements for a workplace label are general and employers have some flexibility regarding language and format but it must contain three items:

A product identifier identical to that on the SDS for the hazardous product meaning it must be the brand name, chemical name, common name, generic name, trade name, code name or code number of the hazardous product.

Information for the safe handling of the hazardous product

meaning precautions that the worker must take to minimize the risks of adverse health effects or physical injury. These precautions can be conveyed using pictures, words, pictograms or any other mode of communication. Whatever mode of communication is used, it must be combined with worker education to ensure that the purpose and significance of the information is conveyed to workers.

A statement that a safety data sheet, if supplied or produced, is available

For some hazardous products, no safety data sheet will be available; for example, the hazardous products listed in Hazardous products exempt from WHMIS of this guide as partially exempt from the WHMIS Regulation. In such cases, a workplace label would not require any statement regarding a safety data sheet.

Employer-produced hazardous products

An employer who produces a hazardous product in its own workplace must ensure that the product or its container has a workplace label (subsection 9(1), WHMIS Reg.).

There is an exception to this requirement – a workplace label is not required if the hazardous product is packaged for sale or disposition, and it is already, or is about to be, appropriately labelled (subsection 9(2), WHMIS Reg.). An example would be a hazardous product such as household bleach that is in a container, ready for sale or distribution to retail outlets, and is labelled according to requirements in consumer protection legislation.

Decanted hazardous products

In general, if a hazardous product is transferred from the supplier container into another container at the workplace, the second container must have a workplace label (subsection 10(1), WHMIS Reg.).

There are two exceptions. No label is required on a portable container filled directly from a container with a supplier or workplace label:

- 1. if all of the hazardous product in the portable container is required for immediate use (clause 10(2)(b), WHMIS Reg.); or
- 2. if all of the following conditions are met (clause 10(2)(a), WHMIS Reg.):
 - **i.** the hazardous product is used only by the worker who filled the portable container;
 - ii. the hazardous product is used only during the shift in which the portable container was filled; and
 - iii. the contents of the portable container are clearly identified.

There is no prescribed form that must be used to identify the contents of a portable container as referred to in 2(iii) above. The ministry recommends as a best practice that the employer use the chemical name, common name, generic name, trade name or brand name of the product to clearly identify the contents of a portable container (i.e. means of clear identification that is understood by workers).

Updating a workplace label

An employer is required to update a workplace label as soon as practicable after significant new data about the product becomes available to the employer (subsection 9(3), WHMIS Reg.).

Identifying hazardous products in piping systems and vessels

When a hazardous product is contained or transferred in,

- a. a. a pipe,
- b. a. a piping system including valves,
- c. a. a process vessel,
- d. a. a reaction vessel, or
- e. a. a tank car, tank truck, ore car, conveyor belt or similar conveyance.

The employer must ensure its safe use, handling and storage through a combination of worker education and any clear means of identification such as colour coding, labels, placards, piping diagrams, warning signs, etc. (section 11, WHMIS Reg.). The employer can use any means of clear identification as long as it is understood by workers. The

education program should also explain procedures for the safe handling of hazardous products contained in (a) to (e).

Note: A safety data sheet is required for a hazardous product contained in a piping system or vessel unless it is an intermediate undergoing further reaction.

Placard identifiers

The employer is allowed to post a placard to meet the labelling requirements of the WHMIS Regulation if the hazardous product:

- 1. is not in a container,
- 2. is in a container or form intended for export, or
- 3. is already packaged for sale or distribution, and the containers will be appropriately labelled within the normal course of the employer's business, but not immediately.

The placard posted must contain the information normally required on a workplace label for the hazardous product, and must be clearly visible and legible to workers (section 12, WHMIS Reg.).

Safety data sheets (SDS)

Under the OHSA, employers have a general duty to obtain or prepare a current SDS for all hazardous products present in the workplace, as may be prescribed. More specific requirements are in the WHMIS Regulation.

The supplier SDS

An employer who purchases a hazardous product for use, handling or storage at a workplace must obtain a supplier SDS for the product. Under federal law, it is the supplier's responsibility to ensure that the SDS for a hazardous product is current and complies with all applicable requirements every time the product is sold. Where a supplier is exempted under federal law from providing a SDS, the employer is not required to obtain one (subsection 17(1), WHMIS Reg.). By definition, a "supplier safety data sheet" is one that meets the requirements of the federal HPR (subsection 1(1), WHMIS Reg.).

An employer must notify the Ministry of Labour, Training and Skills Development in writing if, after making reasonable efforts, he/she is unable to obtain a SDS from the supplier (subsection 37(4), OHSA).

Updating a supplier SDS

An employer is required to update the most recent supplier SDS at the workplace as soon as practicable after significant new data about a product is provided by the supplier, or becomes available to the employer in some other way (subsection 17(2), WHMIS Reg.). "Significant new data" means information about a product that would change its classification in a category or subcategory of a hazard class, or result in its classification in another hazard class, or change the ways to handle the product safely.

This employer duty complements provisions in the federal HPR that require a supplier to update a SDS within 90 days of becoming aware of significant new data about a hazardous product. If a hazardous product is sold during the 90-day grace period, without an updated supplier SDS, the supplier must provide the buyer (i.e., the employer) with the significant new data in writing and the date on which the data became available. Suppliers are not required to inform past buyers of a hazardous product that significant new data is available.

Alternate SDS permissible

For hazardous products purchased from a supplier, an employer may provide a SDS in a different format, or containing more hazard information than the supplier's SDS, on two conditions:

- a. a. the SDS has no less content than the supplier's SDS (with the exception of information withheld on the grounds that it is confidential business information); and,
- b. a. the supplier's SDS is available at the workplace and the SDS provided by the employer states that fact (subsection 17(3), WHMIS Reg.).

The employer SDS

An employer who produces a hazardous product for use in its own workplace must prepare a SDS for the product that meets the requirements in the federal HPR for a supplier SDS (subsection 18(1), WHMIS Reg.). An employer must update the workplace SDS as soon as practicable, but not later than 90 days, after significant new data about the hazardous product becomes available to the employer (subsection 18(3), WHMIS Reg.).

No workplace SDS is required for a laboratory sample produced by the employer at the workplace (subsection 18(2), WHMIS Reg.). See Special applications of WHMIS (https://www.ontario.ca/document/workplace-hazardous-materials-information-system-guide-

legislation/special-applications-whmis) of this guide for more information on laboratory samples.

Disclosure of data source for employer SDS

Subject to any exemptions for confidential business information, the employer must disclose the source of any toxicological data the employer used to prepare the workplace SDS, if asked to do so by an inspector, a worker, a member of a joint health and safety committee, a health and safety representative, or a representative of the workers if there is no joint health and safety committee or health and safety representative (section 25, WHMIS Reg.).

Making SDSs available in the workplace

The OHSA requires the employer to make copies of current SDSs:

- a. a. available to all workers (clause 38(1)(a), OHSA);
- b. a. readily available to those workers who may be exposed to the hazardous product to which an SDS relates (subsection 38(1.1), OHSA); and
- c. a. available to the joint health and safety committee (JHSC) or a health and safety representative (HSR), if any, or a worker representative where there is no joint health and safety committee or health and safety representative (clause 38(1)(b), OHSA).

The employer is required to consult the joint health and safety committee or health and safety representative, if any, on how best to make SDSs available in the workplace, both to workers and to the joint health and safety committee or health and safety representative (subsection 38(6), OHSA). As a general principle, making copies of SDSs (whether paper or electronic) readily available to workers who may be exposed to a hazardous product means that they must be located close to the workers and accessible during each shift. It would not be acceptable, for example, to keep safety data sheets, or a computer terminal for accessing safety data sheets, in an office that is remote from the shop floor or that is locked during the night shift.

Electronic copy

The employer is not required to provide paper copies of SDSs. Providing a SDS in an electronic format complies with requirements in the OHSA for making a SDS available at the workplace and to prescribed parties outside the workplace (subsection 38(5), OHSA).

Note: The OHSA provides for distribution of SDSs outside the workplace, to medical officers of health, fire departments and the Ministry of Labour, Training and Skills Development. Members of the public have access to SDSs through their local medical officer of health (section 38).

Worker education

General information to be provided to workers

An employer must ensure that a worker who works with, or may be exposed to a hazardous product is informed about all hazard information the supplier has provided about the product. In general, this means the information on supplier labels and safety data sheets, but it can also include other information such as letters from the supplier in response to inquiries from the employer. Workers must also be informed of any other hazard information that the employer is or ought to be aware of concerning the product's use, handling or storage (subsection 6(1), WHMIS Reg.).

Similarly, if a hazardous product is produced in the workplace, the employer must ensure every worker who works with or may be exposed to the product is informed about all hazard information the employer is or ought to be aware of concerning its use, handling and storage (subsection 6(2), WHMIS Reg.).

Information the employer "is or ought to be aware of"

To understand what hazard information the employer "is or ought to be aware of" the following are considered to be sources of occupational health and safety information that the employer should know about:

- Publications and on-line information from the Canadian Centre for Occupational Health and Safety;
- Publications from the employer's industry or trade association, or from labour organization(s) representing workers at the workplace; and
- Publications and on-line information from the Ministry of Labour, Training and Skills Development.

There may be sources in addition to those listed above that the employer may wish to consult.

Specific topics to be covered in a worker education program

A worker education program on hazardous materials must include instruction on the following (subsection 7(1), WHMIS Reg.):

- a. a. Labels the information required on a supplier and workplace label and the purpose and significance of the information;
- b. a. Modes of identification when used at the workplace instead of labels;
- c. a. SDSs the information required, and the purpose and significance of the information;
- d. a. Procedures for the safe use, storage, handling, and disposal of a hazardous product;
- e. a. Procedures for the safe use, storage, handling and disposal of a hazardous product when it is in a piping system, a process vessel or conveyance such as a tank car;
- f. a. Procedures to be followed when fugitive emissions are present; and
- g. a. Procedures to be followed in case of an emergency involving a hazardous product.

Participating in worker education programs

Under the OHSA, an employer has a general duty to ensure a worker "exposed or likely to be exposed" to a hazardous product receives and participates in prescribed instruction and training (subsection 42(1), OHSA). The WHMIS Regulation requires a worker "who works with or who may be exposed in the course of his or her work to a hazardous product" to receive certain information (section 6, WHMIS Reg.). The following points are intended to guide workplace parties and inspectors when determining which workers should participate in instruction and training:

- 1. An "exposed worker" is any worker who uses, handles, stores or disposes of a hazardous product, or who directly supervises another worker performing these activities.
- 2. A worker "likely to be exposed" is any worker who could be at risk during:
 - the use, handling, storage or disposal of a hazardous product;
 - maintenance operations; or
 - emergencies, such as an accidental leak or spill.

Examples

- 1. Bulk quantities of chlorine are piped above ground from the receiving point at a pulp and paper mill to a storage location on site for use as a bleaching agent. Education about the hazards of chlorine will be required for all workers at the plant who may be exposed.
- 2. A container of benzene at a hospital for transfer to and use in a laboratory. Instruction on the product will be required for the shipper/receiver, the worker who takes the container to the laboratory, lab personnel who handle, store or use the product, workers responsible in event of an emergency with the product and supervisors as appropriate.
- 3. Boxes of welding rods are received at an auto manufacturing plant that employs 600 workers for use by five welders in an assembly area. No workers other than the welders are likely to be exposed to welding fumes. Instruction will be required only for the five welders and supervisors as appropriate.
- 4. In a retail store, education must be provided to those workers who routinely handle large quantities of hazardous and consumer products, and those workers who may be exposed as the result of a spill or other accident (e.g. warehouse staff).

Developing and implementing a worker education program

The worker education program must be developed and implemented for the employer's workplace and be related to any other training, instruction and prevention programs at the workplace (subsection 7(2), WHMIS Reg.). In developing and implementing the program, the employer must consult the joint health and safety committee or health and safety representative (subsection 42(2), OHSA). There is no specific requirement to keep records of WHMIS training, but an employer may wish to do so to be able to demonstrate to an inspector that workers have received appropriate information and instruction.

Evaluating workers

The employer must ensure, so far as is reasonably practicable, that the WHMIS education program results in workers being able to use the information to protect their health and safety (subsection 7(3), WHMIS Reg.). The OHSA requires the employer to review the worker's familiarity with the training and instruction provided at least annually, and in consultation with the joint health and safety committee or health and safety representative, if any (subsection 42(3), OHSA).

It is left to the individual employer to devise the means to determine that a worker has been properly trained and instructed. For example, the employer may ask workers to take some form of written or oral test, or to participate in a practical demonstration of their knowledge. Subsection 7(3) of the WHMIS Regulation includes the phrase "so far as is reasonably practicable" because it is recognized the employer may have difficulty at times determining with certainty what workers have learned, due either to language or literacy problems. In general, workers should be able to answer the following questions for every hazardous product they use.

- 1. What are the hazards of this product?
- 2. How do I protect myself?
- 3. What should I do in an emergency?
- 4. Where is the safety data sheet? Where can I get more information?

Reviewing the worker education program

At least once a year, the employer must review the training and instruction provided to workers, in consultation with the joint health and safety committee or health and safety representative of the workplace, if any (subsection 42(3), OHSA). This review must take place more often if:

- 1. the employer, on the advice of the joint health and safety committee or health and safety representative, determines that such reviews are necessary (clause 42(4)(a), OHSA); or
- 2. there is a change in circumstances that may affect worker health and safety (clause 42(4)(b), OHSA).

A change in circumstances could include a change in workplace conditions, or a hazardous product new to the workplace, or new hazard information about a product already in use.

The requirement for a review of the education program does not necessarily mean that workers will need retraining. The review is meant to identify whether updating the education program and/or retraining are necessary. An employer may demonstrate that reviews have been conducted in various ways, for example, through the keeping of records, or in the minutes of a joint health and safety committee meeting.

Although this issue is not directly addressed in any of the WHMIS legislation, it is the Ministry of Labour, Training and Skills Development's position that time spent at training sessions should be considered work time. Therefore, workers should be paid at their regular or premium rate in accordance with their collective agreement, if any, or the *Employment Standards Act, 2000*.

Assessing employer-produced products

An employer is required to assess every biological and chemical agent produced for use in the employer's own workplace to determine if it is a hazardous product (section 39, OHSA and subsection 3(1), WHMIS Reg.). To do this assessment, the employer must go through the same steps that a supplier goes through when classifying products intended for sale to other workplaces. The employer should:

- identify the physical and toxicological properties of the biological or chemical agent;
- consult Parts 2, 7 and 8 of the Hazardous Products Regulations (http://laws-lois.justice.gc.ca/eng/regulations/SOR-2015-17/index.html) HPR, which set out the definitions and classification criteria relevant to each WHMIS hazard class, category and sub-category;
- compare the properties of the biological or chemical agent to the criteria in the HPR.

If the material meets the criteria of any category or sub-category of a WHMIS hazard class, it is a hazardous product.

The employer's assessment of any biological or chemical agent must be in writing. A copy of it must be available to workers and given to the joint health and safety committee or health and safety representative (if any), or else it must be given to a representative of the workers if there is no joint health and safety committee or health and safety representative (subsection 39(2), OHSA).

Assistance to the employer to properly assess and classify hazardous products is available from private consultants and from the Canadian Centre for Occupational Health and Safety.

Hazardous products exempt from WHMIS

The WHMIS Regulation provides complete or partial exemptions for various hazardous products, including hazardous waste.

1. Complete exemption

The WHMIS Regulation does not apply to a hazardous product that is:

- a. a. wood or a product made of wood;
- b. a. tobacco or a tobacco product as defined in section 2 of the *Tobacco Act*;
- c. a. a manufactured article (see What is a manufactured article?
 (https://www.ontario.ca/document/workplace-hazardous-materials-information-system-guide-legislation/whmis-and-supplier#manufactured) of this guide for a definition and examples that illustrate the exemption for manufactured articles); or,
- d. a. being transported or handled pursuant to either Ontario or federal transportation of dangerous goods legislation (subsection 4(3), WHMIS Reg.).

2. Partial exemption

The WHMIS Regulation has limited application to a hazardous product that is:

- a. a. an explosive as defined in the Explosives Act (Canada);
- b. a. a cosmetic, device, drug or food as defined in the Food and Drugs Act (Canada);
- c. a. a pest control product as defined in the Pest Control Products Act (Canada);
- d. a. a nuclear substance that is radioactive and defined in the *Nuclear Safety and Control*Act (Canada); or
- e. a. a consumer product as defined in the *Canada Consumer Product Safety Act* (Canada) (subsection 4(2), WHMIS Reg.).

While WHMIS label and SDS requirements do not apply to these products, if any of them are used, handled or stored at a workplace, the employer is still required to train workers who are or may be exposed. Various laws govern the sale and use of these products and include labelling and other information requirements. Worker training should result in workers being able to understand the existing product labels and information and using the products safely.

3. Hazardous waste

"Hazardous waste" is defined as a hazardous product that is acquired or generated for recycling or recovery or is intended for disposal (subsection 1(1), WHMIS Reg.). An employer is required to ensure the safe storage and handling of hazardous waste through

a combination of identification and worker education (subsection 4(4), WHMIS Reg.). Any means of container identification would be considered acceptable, as long as it is understood by the workers. Examples include:

- a. a. colour coding of hazardous waste containers (in combination with education to ensure that workers will recognize the meaning of the colour);
- b. a. a warning sign with the words, "Caution Hazardous Waste"; or
- c. a. a warning sign with a picture that conveys the appropriate message.

The employer is not required to provide a label or SDS for containers of hazardous waste.

4. Other exemptions

No workplace label, identification or SDS is required for a fugitive emission, or for a hazardous product that exists only as an intermediate and undergoes further reaction within a process or reaction vessel (subsection 1(2), WHMIS Reg.).

"Fugitive emission" means a gas, liquid, solid, vapour, fume, mist, fog or dust that meets the following conditions:

- 1. The gas, liquid, solid, vapour, fume, mist, fog or dust escaped from process equipment, from emission control equipment or from a product.
- 2. Workers may be readily exposed to the gas, liquid, solid, vapour, fume, mist, fog or dust (subsection 1(1), WHMIS Reg.).

"Fugitive emission" refers to a small amount of a hazardous product that is known to escape from process equipment or from emission control equipment where workers may be readily exposed (e.g. a volatile organic compound such as benzene at a chemical plant escaping due to leakage from a valve). It does not refer to an escaped amount that would require any type of containment or clean-up measures to be taken nor does it include emissions to the environment.

WHMIS and the worker

The worker's right to know about hazards

One of the three basic rights that the OHSA gives to all workers is the right to know about hazards they may be exposed to on the job. Compliance with the OHSA and WHMIS

Regulation is necessary to fulfill the worker's right to know about hazardous chemical and biological agents in the workplace. Under WHMIS, workers have access to labels, safety data sheets and training and instruction about hazardous products. In addition, through the joint health and safety committee or health and safety representative, workers have the right to be consulted about how the WHMIS training is developed and implemented. While the OHSA does not address who should deliver WHMIS training, the Ministry of Labour regards the principle of workers training other workers as a good one, which should be encouraged where appropriate.

The worker's responsibilities

Workers also have responsibilities that support the successful implementation of a WHMIS program at a workplace. In general, a worker should:

- read and follow instructions on product labels and safety data sheets,
- follow procedures established for the workplace, including the use of personal protective equipment,
- participate in instruction and training,
- ask a supervisor if unsure about how to use or handle a particular product, and
- report to the employer or supervisor any contraventions of the legislation or hazards, such as the absence of a safety data sheet for a new product, or a label that can no longer be read.

Special applications of WHMIS

Laboratories and laboratory samples

Under WHMIS 2015, the exemptions that previously applied to products originating from a laboratory supply house and intended for use in a laboratory have been eliminated. However, specific provisions for laboratory samples still exist. A laboratory sample is defined as

"a sample of a hazardous product that is packaged in a container that contains less than 10 kg of the hazardous

product and that is intended solely to be tested in a laboratory but does not include a sample that is to be used:"

- a. a. by the laboratory for testing other products, mixtures, materials or substances; or
- b. a. for educational or demonstration purposes" (subsection 1(1), WHMIS Reg.).

Laboratory samples received from a supplier

The federal HPR provides certain exemptions to suppliers respecting labels and SDSs for samples of hazardous products sent to a laboratory for analysis (i.e. possession of the sample has been transferred but not ownership). The employer at a laboratory receiving a sample of a hazardous product does not have to obtain a full supplier label if:

- the laboratory sample is exempt from labelling requirements under the HPR, and
- an abbreviated supplier label that discloses the following information is provided:
 The statement "Hazardous Laboratory Sample, for hazard information or in an emergency call/Échantillon pour laboratoire de produit dangereux. Pour obtenir des renseignements sur les dangers ou en cas d'urgence, composez ..." followed by an emergency telephone number for a person who can provide the emergency information required on the SDS for the hazardous product (section 14, WHMIS Reg.).
 - 1. The chemical name or generic chemical name, if known to the supplier, of every material or substance in the sample that,
 - i. individually, is classified in a category or subcategory of a hazard class listed in the *Hazardous Products Act* (Canada) and, is present above the concentration limit designated for that category or subcategory, and
 - ii. in a mixture, is present at a concentration that results in the mixture being classified in a category or subcategory of a hazard class.

The employer is not required to obtain a supplier SDS for a laboratory sample if the supplier is not required to prepare one (subsection 17(1), WHMIS Reg.). Under the HPR, a supplier is exempted from providing a SDS for a laboratory sample if:

- the chemical name and concentration of the hazardous product or its ingredients are unknown, or
- the hazardous product from which the sample originates has not been offered for sale (subsection 5(4), HPR).

In addition, if a laboratory sample is classified only as Biohazardous Infectious Material – Category 1, and possession but not ownership is transferred, the sample does not require a label or SDS (subsection 5(3), HPR).

If a lab sample is transferred or decanted from the supplier's original container

No workplace label is required, but the employer must ensure that the lab sample is clearly identified through a combination of identification visible to workers and worker education. The combination of identification and education must enable lab workers handling the sample to readily identify and obtain either the information required on a SDS, if one has been prepared or the labelling information required on an abbreviated supplier's label (section 15, WHMIS Reg.).

If a lab sample is produced in the employer's workplace

No workplace label is required for a laboratory sample that is produced in the employer's workplace, but the employer must ensure that the sample is clearly identified through a combination of identification visible to workers and worker education. The identification and education must enable lab workers handling the sample to readily identify and obtain either the information required on a SDS, if one has been prepared, or the labelling information required on an abbreviated supplier's label (section 15, WHMIS Reg.).

No SDS is required for a hazardous product that is a laboratory sample produced by the employer at the workplace (subsection 18(2), WHMIS Reg.).

Hazardous product produced for research and development

No workplace label is required on a hazardous product that is produced in a lab, not removed from the lab, and intended by the employer solely for research and development purposes. Instead the employer must ensure that the hazardous product is clearly identified through a combination of identification and education that enables workers to identify and obtain either the information required on a SDS, if one has been prepared, or such other information as is needed for the safe use, storage and handling of the product (section 16, WHMIS Reg.).

Construction projects

This section describes the application of WHMIS to construction projects. While there are no requirements in the WHMIS legislation that apply specifically to construction projects, this information is provided because there are differences between construction projects and other workplaces that affect the division of employer responsibilities. Specifically, a construction project may be a multi-employer site. The constructor is an employer, but so is every contractor or sub-contractor associated with a building trade, such as the employer of the electricians, the employer of the painters, etc. The information below is intended to clarify the responsibilities of the constructor, who has overall responsibility for the whole project, and the responsibilities of the contractor or sub-contractor who employs a group of tradespeople who may be on site for only part of the duration of the entire project.

Responsibilities of the constructor

Key responsibilities of a constructor in relation to WHMIS include:

- 1. To ensure that all hazardous products on the project are labelled.
- 2. To maintain, and make available to workers, copies of all SDSs received from contractors and sub-contractors at the project.
- 3. To train the constructor's workers about WHMIS and about the hazardous products that the constructor brings on site.
- 4. To resolve any WHMIS-related conflicts among contractors and sub-contractors on site.

Responsibility 4 is not specifically set out in the OHSA but is suggested as important to the successful implementation of WHMIS on construction projects. It may be considered to fall under the employer's general duty in the OHSA to take every precaution reasonable in the circumstances for the protection of a worker (clause 25(2)(h), OHSA) or the constructor's duty in the OHSA to ensure that the health and safety of workers on the project is protected (clause 23(1)(c), OHSA).

Responsibilities of contractors and sub-contractors

Key responsibilities of contractors and sub-contractors in relation to WHMIS include:

1. To ensure that any hazardous product the contractor or sub-contractor brings on site is labelled.

- 2. To maintain, and make available to workers, SDSs for hazardous products the contractor or sub-contractor brings on site.
- 3. To give the constructor copies of all SDSs for hazardous products the contractor or sub-contractor brings on site.
- 4. To train their own workers about WHMIS and about the hazardous products they may be exposed to.
- 5. To inform other contractors, sub-contractors and workers who may be affected by the hazardous products that the contractor or sub-contractor brings on site.
- 6. To inform the constructor of WHMIS-related conflicts among contractors or sub-

Responsibilities 3, 5 and 6 above are not specifically set out in the OHSA but are suggested as important to the successful implementation of WHMIS on construction projects. They may be considered to fall under the employer's general duty in the OHSA to take every precaution reasonable in the circumstances for the protection of a worker (clause 25(2)(h), OHSA).

Where a construction project is carried out in an operating workplace (e.g. a renovation to an existing plant), what are the responsibilities of the constructor and the employer of the workplace)?

Note: In some cases, the constructor and the employer may be one and the same.

- 1. The employer should give the constructor the SDSs for any hazardous products in the employer's workplace that the constructor's workers may be exposed to.
- 2. The constructor should ensure that all hazardous products brought into the employer's workplace by the constructor are labelled.
- 3. The constructor should give the employer the SDSs for all hazardous products that the constructor brings into the employer's workplace.
- 4. The constructor must train his/her own workers respecting the hazardous products used on the construction project, and the hazardous products likely to be encountered in the employer's workplace.

How does WHMIS apply to construction materials such as sand, gravel or limestone?

The application of WHMIS to materials like sand, gravel, and limestone is a special one. These materials meet the definition of a hazardous product because of their silica content; however, because of their physical size and shape, they are not necessarily hazardous to worker health. For example, aggregate that is piled on a construction site or used in road building is not likely to endanger worker health or safety. On the other hand, aggregate that is being crushed and sized for use as an abrasive cleaner could endanger worker health because of the dust released during the processing of the aggregate.

Neither the federal nor provincial WHMIS legislation specifically address materials such as sand or gravel, which may or may not be hazardous depending upon the circumstances. It is therefore the policy of the regulators that the WHMIS requirements (labels, SDSs and training) will apply only when such materials are packaged or processed for a specific purpose as described above, and there is a likelihood of endangerment to worker health or safety.

Confidential business information

Confidential business information (CBI) generally refers to technical information on a product or its manufacturing process that has economic value and that is usually known only to the producer. CBI is protected under WHMIS. Both suppliers and employers can file a claim to be exempted from disclosing information normally required on a label or SDS for a hazardous product if that information is considered to be CBI. A claim for exemption must be filed with Health Canada, which assesses its validity and ensures that the label and SDS for a product comply with all requirements for health and safety information. This process balances the worker's right to know about hazardous materials with industry's right to protect CBI.

CBI legislation

Several acts and regulations have provisions related to the protection of CBI. Relevant federal legislation includes the *Hazardous Products Act* (HPA), the Hazardous Products Regulations (HPR), the *Hazardous Materials Information Review Act* (HMIRA), the Hazardous Materials Information Review Regulations (HMIRR) and the *Hazardous Materials Information Review Act* Appeal Board Procedures Regulations.

In Ontario, the *Occupational Health and Safety Act* and the WHMIS Regulation also include provisions governing the protection of CBI. The OHSA provides:

- that an employer may file a claim for exemption from disclosing information normally required on a label or SDS (section 40);
- that an employer's claim for exemption is to be determined according to processes set out in the federal HMIRA (subsection 40(3));
- for an employer, worker, or trade union to appeal a determination made under the HMIRA (subsection 40(4));
- an exemption from disclosure while the claim is being determined and a three-year exemption from disclosure if a claim is found to be valid (subsection 40(6)); and,
- for the protection of CBI obtained by a Ministry of Labour employee or other person in specific circumstances (section 40.1).

The WHMIS Regulation prescribes:

- the types of information for which an employer may file a claim for exemption; and,
- specific information that must be disclosed on the label and SDS of a hazardous product that is the subject of an employer's claim for exemption.

This section of the guide is an overview of provisions in the OHSA and WHMIS Regulation governing CBI. An employer wishing to file a claim for exemption should contact Health Canada for detailed technical guidance on:

- obtaining, completing and submitting a claim form;
- information required to support the claim;
- fees payable for filing a claim or an appeal;
- preparing a compliant label and SDS; and
- appealing a determination related to a claim.

Employer's claim for exemption

What types of information can an employer claim as CBI?

An employer may file a claim for exemption from disclosing the following types of information on either a label or SDS (subsection 19(1), WHMIS Reg.):

1. In the case of a material or substance that is a hazardous product:

- a. a. the chemical name of the material or substance,
- b. a. the Chemical Abstracts Service (CAS) registry number, or any other unique identifier of the material or substance, and
- c. a. the chemical name of any impurity, stabilizing solvent or stabilizing additive in the material or substance that:
- is classified in a category or subcategory of a hazard class under the *Hazardous Products Act*, and
- contributes to the classification of the material or substance in the hazard class:
- 2. In the case of an ingredient that is in a mixture that is a hazardous product:
 - a. a. the chemical name of the ingredient,
 - b. a. the CAS registry number or any other unique identifier of the ingredient, and
 - c. a. the concentration or concentration range of the ingredient;
- 3. For a hazardous product that is either a material, substance or mixture, the name of any toxicological study that identifies either the material or substance, or any ingredient in the mixture;
- 4. The product identifier of a hazardous product (i.e. its chemical name, common name, generic name, trade name or brand name);
- 5. Information about a hazardous product, other than the product identifier, that could be used to identify it; and,
- 6. Information that could be used to identify a supplier of a hazardous product.

Note: Under federal law, a supplier may file a claim for exemption from disclosing the information described in 1-3 above (subsection 11(1), HMIRA).

Health and safety information about a hazardous product can never be withheld from disclosure on a label or SDS (subsection 19(2), WHMIS Reg.).

If a claim is filed

An employer who has filed a claim with Health Canada may use the product for which the claim has been filed and may withhold the information that is the subject of the claim pending a final determination, but the SDS and, if applicable, the label or container of the product must show:

- a. a. the date the claim for exemption was filed, and
- b. a. the registry number assigned to the claim by Health Canada under the HMIRA (subsection 20(1), WHMIS Reg.).

The filing date and registry number must remain on the SDS or label:

- a. a. for 30 days after the claim is finally determined; or,
- b. a. if an order is issued under the HMIRA in relation to the claim, until the end of the period specified in the order (subsection 20(2), WHMIS Reg.).

If a claim is granted

If a claim or a portion of a claim for exemption is determined to be valid, the employer must disclose on the SDS and, if applicable, on the label or container of the hazardous product:

- a. a. a statement that an exemption has been granted;
- b. a. the date of the decision granting the exemption; and
- c. a. the registry number assigned to the claim by Health Canada under the HMIRA (subsection 23(1), WHMIS Reg.).

The employer must disclose this information beginning not more than 30 days after the final determination of the claim and ending on the last day of the exemption period (subsection 23(2), WHMIS Reg.). Under the OHSA, if a claim is granted, CBI is exempt from disclosure from the time a claim is filed until it is finally determined and for three years after that (subsection 40(6), OHSA).

Health Canada maintains a list of active claims on its website.

If a claim is rejected

If a claim for exemption is rejected in whole or in part, the employer has three options:

- 1. Accept the decision and revise the SDS, and where applicable the label, to include the CBI that was the subject of the claim;
- 2. Appeal the decision; or
- 3. Withdraw the product from the workplace without revealing the information considered to be confidential.

Special SDS requirements

If an employer produces a hazardous product for use in its own workplace, and files a claim for exemption from disclosing CBI, the employer may be required to disclose prescribed information on the SDS in place of the information that is the subject of the claim. The following rules apply with respect to the SDS (section 21, WHMIS Reg.):

- If the hazardous product is a material or substance and the employer wishes to withhold:
 - the chemical name of the material,
 - o its CAS registry number or other unique identifier, and
 - the chemical name of any corresponding impurity, stabilizing solvent or stabilizing additive,

the employer's SDS must disclose the generic chemical name of the material in place of its actual identity (subparagraph 1.i. of section 21, WHMIS Reg.).

- If the hazardous product is a mixture and the employer wishes to protect information that would identify its ingredients i.e. the chemical name of any ingredient and the CAS registry number or other unique identifier of any ingredient the employer's SDS must include the generic chemical name of each ingredient that is the subject of the claim that:
 - individually is classified in a category or subcategory of a hazard class listed in the HPA, and that is present above the designated concentration for that category or subcategory; or
 - is present at a concentration that results in the mixture being classified in a category or subcategory of a hazard class (subparagraph 1.ii. of section 21, WHMIS Reg.).
- If the product identifier (i.e. chemical name, common name, generic name, trade name or brand name) is the subject of the claim, the SDS must include the code name or code number of the hazardous product in place of the product identifier (paragraph 2 of section 21, WHMIS Reg.).

Disclosure of CBI in a medical emergency

In a medical emergency, an employer must provide information about a hazardous product, including CBI, to a medical professional who asks for it in order to make a diagnosis or give treatment (section 24, WHMIS Reg. and clause 25(2)(b), OHSA).

Disclosure of CBI to government officials

The federal HMIRA permits CBI obtained from a supplier or employer to be disclosed to certain government officials for the purpose of administering or enforcing prescribed legislation. Specifically, CBI may be given to a provincial government official for the purpose of enforcing occupational health and safety laws if, under the laws of that province, the CBI is protected (clause 46(2)(e), HMIRA).

In a workplace in Ontario where a chemical is used whose identity has been withheld from labels and safety data sheets because it is the subject of a claim for exemption and Regulation 833, Control of Exposure to Biological or Chemical Agents, sets a limit for exposure to that chemical, a Ministry of Labour inspector would need to know the identity of the chemical to ensure worker exposure to it is properly controlled. The inspector could obtain the identity of the chemical from a person acting under the authority of the HMIRA.

Under the OHSA, a Ministry of Labour employee who obtains CBI from a person acting under the authority of the HMIRA is prohibited from disclosing that information, except to another MOL employee, for the purpose of enforcing the OHSA; or, to a medical professional who asks for the information to make a diagnosis or provide treatment in an emergency (section 40.1, OHSA).

Appeals

The OHSA provides for an employer, any worker of the employer, or a trade union representing the employer's workers to appeal a determination made under the federal HMIRA in relation to a claim for exemption. The appeal must be filed and determined in accordance with processes set out under the HMIRA (subsection 40(4), OHSA). An appeal can relate to a decision or order on the validity of a claim for exemption, or to a decision, order or undertaking related to the compliance of a label or SDS associated with a claim.

Appendix: Employer compliance checklist

There are many tasks facing the employer trying to comply with WHMIS. The following checklist will help the employer to identify these tasks. The list contains questions that can be answered either "yes" or "no." A question answered with a "no" may identify an area requiring attention. Please note that not all questions may be relevant to all employers.

General

- 1. Do you know which materials in your workplace are classified as hazardous products under WHMIS?
- 2. Have you assessed and classified all biological and chemical agents produced inhouse for your own use against the criteria in Parts 2, 7 and 8 of the *Hazardous Products Regulations* (http://laws-lois.justice.gc.ca/eng/regulations/SOR-2015-17/index.html) to see which ones are hazardous products?
- 3. Have you written out this assessment and made a copy available to workers and the joint health and safety committee, health and safety representative, if any, or a representative of the workers if there is no joint committee or health and safety representative?

Labelling and identification

- 1. Do all containers of hazardous products received from a supplier have a supplier label?
- 2. Have you made and attached workplace labels to hazardous products:
 - a. a. produced in-house for use in your own workplace?
 - b. a. decanted from the original supplier container into another container?
- 3. Have you attached a supplier label to any containers of a hazardous product received as a bulk shipment?
- 4. Have you posted a placard with workplace label information for any hazardous product not in a container?
- 5. Have you provided identification for hazardous products (except intermediates) that are in pipes, process or reaction vessels, tank cars, etc.?
- 6. Is all hazardous waste that is acquired or generated on site safely stored and identified?
- 7. Do you have a process in place to update supplier and workplace labels with significant new data about a hazardous product?

Safety data sheets (SDSs)

1. Do you have current SDSs for hazardous products received from a supplier?

- 2. Have you prepared a SDS that meets the requirements for a supplier SDS for all hazardous products that you produce for use in your own workplace?
- 3. Do you have a process in place to update SDSs with significant new data about a hazardous product?
- 4. Are copies of SDSs readily available to workers? Do workers know how to access SDSs that are in electronic format?
- 5. Does the joint health and safety committee or health and safety representative, if any, or a representative of the workers if there is no joint committee or health and safety representative have copies of all SDSs?

Worker education

- 1. Have you identified all workers required to receive WHMIS training and instruction?
- 2. Have workers been trained on the topics set out in section 7 of the WHMIS Regulation? Was the information provided to workers tailored to circumstances and conditions in your workplace?
- 3. Did you consult the joint health and safety committee or a health and safety representative about the development and delivery of the worker training?
- 4. Do workers understand the significance of any modes of identification (e.g. colour coding, pictures, etc.) in the workplace, where these have been used in place of labels on hazardous products?
- 5. Do you have a process to verify that workers have understood their training and know how to safely handle any hazardous products they use? How to find SDSs? What to do in an emergency?
- 6. Do you have a process for reviewing the worker education program at least once a year; or, whenever a new hazardous product enters the workplace; or when new information about a hazardous product becomes available? Does your review process include the joint health and safety committee or a health and safety representative?