WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM 2015

PURPOSE

WHMIS (Workplace Hazardous Materials Information System) is a material labeling and information system which addresses the workers "Right to Know" about potentially hazardous substances or chemicals at the workplace.
J-AAR is responsible for providing hazard information on products received from suppliers concerning the use, handling, storage, and disposal of the products.

SCOPE

J-AAR requires **all** employees to undergo WHMIS training. This training covers both basic WHMIS literacy as well as company specific training. This may be conducted annually, as needed.

WHMIS 2015/GHS
WHMIS has changed to adopt new, international standards for classifying hazardous chemicals and providing information on labels and safety data sheets. Canada has aligned WHMIS with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). This makes hazard identification and classification more standardized.

Core Components of WHMIS
- hazard identification and product classification,
- labelling,
- safety data sheets, and
- worker education and training.

Hazardous Product Classification
Suppliers are those who sell or import products. When this product is considered a hazardous product according to the WHMIS legislation, a supplier must label the product or container, and they must provide a safety data sheet (SDS) to their customers.

WHMIS GHS applies to two major groups of hazards: physical and health:
- **Physical hazards group**: based on the physical or chemical properties of the product – such as flammability, reactivity, or corrosivity to metals.
- **Health hazards group**: based on the ability of the product to cause a health effect – such as eye irritation, respiratory sensitization (may cause allergy or asthma symptoms or breathing difficulties if inhaled), or carcinogenicity (may cause cancer).

Each hazard class contains at least one category. The hazard categories are assigned a number (e.g., 1, 2, etc.) Categories may also be called "types". Types are assigned an alphabetical letter (e.g., A, B, etc.). In a few cases, sub-categories are also specified. Subcategories are identified with a number and a letter (e.g., 1A and 1B).
The category tells you about how hazardous the product is (that is, the severity of hazard).

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- Category 1 is always the greatest level of hazard (that is, it is the most hazardous within that class). If Category 1 is further divided, Category 1A within the same hazard class is a greater hazard than category 1B.
- Category 2 within the same hazard class is more hazardous than Category 3, and so on.

Labels

The purpose of the labels is to clearly identify the contents of the hazardous material.

Labels are important because they are the first alert there may be hazards associated with using the product covered by WHMIS legislation. The labels also tell what precautions to take when using the product. Suppliers are responsible for labelling WHMIS products that they provide to customers.

The employer/employees shall not remove or deface labels on incoming containers of hazardous chemicals.
Supplier labels must be written in English and French. They may be bilingual (as one label), or available as two labels (one each in English and French).

The supplier label must include the following information:

1. **Product identifier** – the brand name, chemical name, common name, generic name or trade name of the hazardous product.
2. **Initial supplier identifier** – the name, address and telephone number of either the Canadian manufacturer or the Canadian importer.
3. **Pictogram(s)** – hazard symbol within a red "square set on one of its points".
4. **Signal word** – a word used to alert the reader to a potential hazard and to indicate the severity of the hazard.
5. **Hazard statement(s)** – standardized phrases which describe the nature of the hazard posed by a hazardous product.
6. **Precautionary statement(s)** – standardized phrases that describe measures to be taken to minimize or prevent adverse effects resulting from exposure to a hazardous product or resulting from improper handling or storage of a hazardous product.
7. **Supplemental label information** – some supplemental label information is required based on the classification of the product. Labels may also include information about precautionary actions, hazards not yet included in the GHS, physical state, or route of exposure. This information must not contradict or detract from the standardized information.

A **signal word** is a prompt that alerts you about the degree or level of hazard of the product. There are only two signal words used:
"Danger" - is used for high-risk hazards
"Warning"- is used for less severe hazards.
Each hazard class and category has an assigned **"hazard statement"**. Hazard statements are brief, standardized sentences that tell you more about the exact hazard of the product. The statements are short, but they describe the most significant hazards of the product.

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Precautionary statements provide advice on how to minimize or prevent adverse effects resulting from exposure to a hazardous product or resulting from improper storage or handling of a hazardous product. These statements can include instructions about storage, handling, first aid, personal protective equipment and emergency measures.

Labels require the following:

- the pictogram, signal word, and hazard statement are to be grouped together;
- to be clearly and prominently displayed on the container;
- to be easy to read (e.g., you can see it easily without using any item except corrective glasses), and
- to be in contrast with other information on the product or container.

Example of a bilingual label:

Product K1 / Produit K1

Danger

Fatal if swallowed.
Causes skin irritation.

Precautions:

Wear protective gloves.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.

Store locked up.
Dispose of contents/containers in accordance with local regulations.

IF ON SKIN: Wash with plenty of water.
If skin irritation occurs: Get medical advice or attention.
Take off contaminated clothing and wash it before reuse.
IF SWALLOWED: Immediately call a POISON CENTRE or doctor.
Rinse mouth.

Danger

Mortel en cas d'ingestion.
Provoque une irritation cutanée.

Conseils :

Porter des gants de protection.
Se laver les mains soigneusement après manipulation.
Ne pas manger, boire ou fumer en manipulant ce produit.

Garder sous clef.
Éliminer le contenu/récipient conformément aux règlements locaux en vigueur.

EN CAS DE CONTACT AVEC LA PEAU : Laver abondamment à l'eau.
En cas d'irritation cutanée : Demander un avis médical/consulter un médecin.
Enlever les vêtements contaminés et les laver avant réutilisation.
EN CAS D'INGESTION : Appeler immédiatement un CENTRE ANTIPOISON ou un médecin.
Rincer la bouche.

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A **workplace label**:

- must appear on all hazardous products produced in a workplace or transferred to other containers by the employer

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- must appear in placard form on hazardous products received in bulk from a supplier
- must have the following information:
  - product identifier (product name)
  - information for the safe handling of the product
  - statement that the SDS is available
- may contain the WHMIS pictograms.

WHMIS GHS PICTOGRAMS

Pictograms are graphic images that immediately show the user of a hazardous product what type of hazard is present:

	**Exploding bomb** (for explosion or reactivity hazards)		**Flame** (for fire hazards)		**Flame over circle** (for oxidizing hazards)
	**Gas cylinder** (for gases under pressure)		**Corrosion** (for corrosive damage to metals, as well as skin, eyes)		**Skull and Crossbones** (can cause death or toxicity with short exposure to small amounts)
	**Health hazard** (may cause or suspected of causing serious health effects)		**Exclamation mark** (may cause less serious health effects or damage the ozone layer*)		**Environment*** (may cause damage to the aquatic environment)
	**Biohazardous Infectious Materials** (for organisms or toxins that can cause diseases in people or animals)				

* The GHS system also defines an Environmental hazards group. This group (and its classes) was not adopted in WHMIS 2015. However, you may see the environmental classes listed on labels and Safety Data Sheets (SDSs). Including information about environmental hazards is allowed by WHMIS 2015.

Safety Data Sheets

WHMIS GHS refers to Safety Data Sheets (SDS's). Employers will be required to make sure that all hazardous products have an up-to-date SDS when it enters the workplace. The SDS's must be readily available to the workers who are exposed to the hazardous product, and to the health and safety committee or representative.

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You can think of the SDS as having four main purposes. It provides information on:

a. **Identification**: for the product and supplier.
b. **Hazards:** physical (fire and reactivity) and health.
c. **Prevention:** steps you can take to work safely, reduce or prevent exposure, or in an emergency.
d. **Response**: appropriate responses in various situations (e.g., first-aid, fire, accidental release).

SDS's provide more detailed hazard information about the product than the label. They are an important resource to help you learn more about the product(s) used.
SDS's must follow a standard 16-section format. SDSs will be updated when significant new data becomes available.

Education and Training
Employers are required to establish education and training programs for workers exposed to hazardous products in the workplace. Employers must also make sure that the products are labelled and that an SDS is present for each product and that they are readily available to workers.

Workers are required to participate in the training programs and to use this information to help them work safely with hazardous materials.

Education: refers to the instruction of workers in general information such as how WHMIS works and the hazards of products.
Training: refers to the instruction in site-specific information such as work and emergency procedures.
Both education and training are an important part of understanding workplace hazards.

Supervisors must ensure the following is available at their worksite:

- All materials have supplier and/or workplace labels.
- **S**afety **D**ata **S**heets (**SDS**'s) are readily available in the workplace.

Flammable Fuel Use and Storage

- All workers using propane must be certified. Propane must be secured and stored outside. Gloves must be worn when changing a propane tank.
- Fuels must be stored and carried in approved containers. Pails or loader buckets are not approved storage containers.
- No smoking is permitted within the vicinity of flammable liquids or gases.
- All tanks, cylinders and containers must be fully closed after use.
- Never leave a running fuel nozzle unattended.

A facility that stores fuel to be dispensed into any moving motorized vehicle or craft is legally required to follow the regulations and codes listed below:

- Technical Standards and Safety Act, 2000

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- Ontario Regulation 216/01, Certification of Petroleum Equipment Mechanics
- Ontario Regulation 217/01, Liquid Fuels
- Liquid Fuels Handling Code Adoption Document
- Liquid Fuels Handling Code 2017

GENERAL INSTRUCTIONS AND EMERGENCY PROCEDURES- Fueling

- In the event of an incident or accident involving personal injury always ensure you are safe and administer first aid if you are trained and certified to do so. Call 911 for any fire or explosion.
- In the event of a suspected leak or product release into the environment, notify the supervisor. Supervisors must notify management.
- Management will determine when the spill action centre (1-800-268-6060) is to be notified.
- Know the location of the fire extinguishing equipment and know how to use it.
- Know the location of and how to use the spill kits.
- You need to be able to see what is happening at every fueling position.
- Only persons trained in the safe operation of the equipment are authorized to use the equipment.
- The authority having jurisdiction in Ontario for Liquid Fuels is the Technical Standards and Safety Authority (TSSA) at 1-877-682-8772