



**HAZARD COMMUNICATION
PROGRAM**

TABLE OF CONTENTS

Purpose	1
Designated Responsibilities	1
Regulatory Requirements	1
Employee Rights	2
List of Hazardous Materials	2
Postings	3
Safety Data Sheets	3
Labels and Hazard Warnings	3
Contractors	4
Employee Information & Training	4
Emergency Procedures	4
Information Sources	5
Program Review	6
Appendix A – Accessing Safety Data Sheets	7
Appendix B – Reading and Understanding Safety Data Sheets	8
Appendix C – Reading and Understanding Chemical Labels	12

HAZARD COMMUNICATION PROGRAM

PURPOSE

The purpose of this Program is to inform employees working for Hudson Valley Community College of the hazardous materials present in their work environment and ways to protect themselves during normal operations and during foreseeable emergencies.

This program is intended to meet compliance with the following state and federal occupational safety and health regulations:

- 29 CFR 1910.1200, Hazard Communication
- Article 28, NYS Labor Law, NYCRR Part 820 Toxic Substances Information, Training and Education (Right-To-Know)

DESIGNATED RESPONSIBILITIES

The Director of **Environmental Health and Safety (EHS)** is responsible for:

- development, oversight and periodic review of this Program
- providing initial and annual training to employees, as required
- maintaining a copy of each Department's chemical list

College Departments are responsible for:

- ensuring employees complete training, as required
- keeping their chemical inventory list current
- maintaining the ready access of Safety Data Sheets to employees
- maintaining labels on containers
- conducting an annual review of their chemical inventory

REGULATORY REQUIREMENTS

The state and federal "Right-to Know" and Hazard Communication laws have been passed with an understanding that employees have an inherent right to know all of the health hazards associated with their exposure to hazardous materials in the workplace so that they and their employer can take appropriate action to mitigate any exposure. In addition, employees can observe symptoms of overexposure in themselves and understand the relationship between the symptoms and exposure, and can therefore evaluate the need for any corrective action.

The Federal Hazard Communication Standard 29 CFR 1910.1200 was promulgated in 1983. Its intent is to apprise employees of hazardous materials in the workplace and

to require chemical manufacturers to provide such information on all materials sold or distributed through labeling and material safety data sheets. In 2012, the standard was updated to align with the United Nations Globally Harmonized System (GHS) of Classification and Labelling.

Passed in 1980, the New York State, "Right-to-Know" act is similar in intent and requires employers to have a compliance program that makes information available to employees regarding the nature and hazards of hazardous materials found in the work place, provide training to employees, and maintain MSDSs/SDSs.

EMPLOYEE RIGHTS

Several provisions of the NYS RTK Law extend explicit rights to public-sector employees. These include:

- An employee and/or his/her representative may request, and must receive upon request, information about a hazardous substance in his/her workplace.
- An employee may refuse to work with a toxic substance if (s)he has requested information about it and the written reply is not received back by the employee within 72 working hours of receipt of request by the employer.
- An employee may exercise any right pursuant to the pertinent laws without fear of any discrimination.
- An employee cannot be required to waive rights under the pertinent laws as a condition of employment.
- An employee may file a complaint against HVCC with the NYS Public Employee Safety & Health Program (PESH) or the NYS Attorney General's Office if (s)he has been discriminated against in violation of the NYS Law.

LIST OF HAZARDOUS MATERIALS

EHS will maintain a list of all hazardous materials by location/department on MSDSOnline. Each department using chemicals should provide any changes or updates to EHS as they occur and conduct an annual review of chemical lists. ESH will provide assistance with this process as necessary.

Hazardous materials are not permitted to be purchased or brought onto the Campus through any means other than by purchasing through the Purchasing Office. Where appropriate, EHS will discuss the use of hazardous materials with departments to ensure worker and environmental protection and ensure the least hazardous substances are used.

POSTINGS

The following signs are posted in various departments throughout HVCC and at the HR office as notice to employees:

- The poster required by New York State Labor Law, Article 28 Section 876(1) with the name of the person and number from whom to obtain safety data sheets.
- The “job safety & health protection poster” required under New York State Labor Law, PESH.

SAFETY DATA SHEETS (SDS)

Each department at Hudson Valley Community College using, handling or storing chemicals is responsible for maintaining a manufacturer-specific Safety Data Sheet (SDS) for each chemical used or stored in the work area(s), and for ensuring they are readily accessible to employees.

Electronic access to SDSs and department chemical listings is provided through MSDSOnline, a web-based SDS management system. SDSs can be accessed through a department’s chemical listing on MSDSOnline or by searching for the product name.

SDSs must be obtained for all hazardous chemicals that are used by HVCC. Departments are responsible for providing new or updated SDSs to EHS for uploading on the MSDSOnline system. Departments are also responsible for periodically verifying the accuracy of their chemical listing.

Back-up of all SDSs will be maintained in the EHS department on USB drives. This will allow for the access of all HVCC SDSs from any computer with a USB drive in the event of a website or network outage.

NOTE: MSDSOnline may only be used as the sole SDS resource for a department if all employees with the potential for chemical exposure have full access (i.e. computer access, a general understanding of how to navigate the system, etc.) to the service; otherwise, hard copies must also be maintained by the department and be made readily available.

Instruction for accessing SDSs can be found in Appendix A. Additional information on reading and understanding SDSs can be found in Appendix B.

LABELS & HAZARD WARNINGS

Proper labeling of hazardous chemical containers is assured by maintaining all materials in their original containers. If materials are transferred into secondary containers, they are required to

be labeled by department staff making the transfer. The label will list, at a minimum, the material identity and an appropriate hazard warning.

Labeling Guidelines:

Non-Labeled Containers: If a container doesn't have a warning label, don't handle the chemical until you know what it is. Report to your supervisor, who can find out what the chemical is and provide a label if the chemical is hazardous.

Transfer Containers: If you transfer a hazardous chemical from its primary container to a new one, be sure the transfer container is labeled. Then your co-workers will know how to handle it safely, too.

Torn Labels: If a label is torn, damaged, or misplaced, ask your supervisor to replace it. Remember, the only way you can handle a chemical safely is if you know what it is.

Additional information on reading and understanding labels can be found in Appendix C.

CONTRACTORS

When contractors are expected to work in HVCC facilities, they will be informed of any hazardous chemical they may come into contact with in the project area. The contractor, in turn, must inform HVCC of any hazardous chemicals they intend to use while on University property and provide the appropriate SDS.

Physical Plant or other departments managing the project will provide this information to College personnel present in the area of the project upon request. The project manager is responsible for ensuring that the chemical/product is labeled and stored appropriately. Contact EHS for guidance.

EMPLOYEE INFORMATION & TRAINING

EHS will conduct initial and annual Hazard Communication training, as required, through online and/or classroom training. Additional department specific training will be provided by supervisors regarding specific chemical and safety procedures to be followed. They should consult with EHS and provide additional information whenever a new chemical hazard is introduced into the work area.

The Hazard Communication training provided by EHS will be documented and maintained through the Banner HR database system. All employees attending classroom training sessions will certify attendance at the training session and copies of the certification will be kept in the EHS department records as a back up to the database system. Online training completion will be documented in the Banner system with back-up documentation of training/quiz completion

stored in the online Blackboard course page. Contents of the Hazard Communication training include the following information:

- Requirements of the Hazard Communication and Right To Know Standards
- Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area.
- The physical, health, simple asphyxiation, combustible dust and pyrophoric gas hazards of the chemicals present in the work area.
- The measures employees can take to protect themselves from these hazards.
- The details of the Hazard Communication Program that has been developed, including the following:
 - Identifying tasks or operations where hazardous chemicals are present.
 - The proper procedure for using these chemicals
 - The location and availability of the written program
 - The location and availability of listings of hazardous chemicals present and the associated SSDs
 - How to access an SDS using MSDSOnline
 - An explanation of the labeling system
 - How employees can use the hazard information
 - A summary of the standard and this Program

EMERGENCY PROCEDURES

HVCC is protected by Public Safety Officers who are readily recognizable and generally known. The Public Safety Office is staffed 24 hours a day, seven days a week.

Contact Public Safety by dialing 911 from any campus phone or 518-629-7210 on cell phones.

First aid and medical services are provided during normal working hours by the HVCC Health Services Office. At other times, contact Public Safety for assistance.

For injuries involving hazardous materials, follow these guidelines:

- Contact your supervisor or someone in the immediate area
- If anyone is injured, obtain medical assistance through Public Safety or Health Services. Faculty should ensure that injured students have an escort to the Health Services, if needed, or otherwise obtain medical care
- Provide medical staff and your supervisor with information about the situation and obtain the SDS for the medical staff whenever possible

- For emergencies involving skin and eye contact with corrosive materials, get the person to a shower/eye wash flushing station and flush the area for 15 minutes

For spills involving hazardous materials, follow these guidelines:

- Incidental spills should be cleaned up by staff in the immediate area, using the spill response materials in their area (including the appropriate personal protective equipment), and following their department's procedures for spill clean-up. If there are designated persons in your area who handle spills, contact them and/or your supervisor immediately. The SDS may also be a good reference
- For larger spills that go beyond the capability of the department, leave the area and contact Public Safety to initiate the Emergency Response capabilities of HVCC and outside responders.

INFORMATION SOURCES

For more information or assistance in regards to chemical safety issues, contact the EHS Department.

PROGRAM REVIEW

This program will be reviewed periodically by EHS and revised as necessary.

APPENDIX A – ACCESSING SAFETY DATA SHEETS

Electronic access to Safety Data Sheets (SDSs) and department chemical listings is provided through MSDSonline, a web-based SDS management system.

From the HVCC EHS Website, click on the SDS toolbar button, then HVCC's site-specific [MSDSOnline](#) link and follow the instructions below to access HVCC SDSs in one of two ways:

Option 1 - Accessing SDSs by department

Use the location drop down menu to select your department, then click on the search button. The search results will show all chemicals listed for your department. Find the product you wish to view on your department listing and double-click on the PDF icon for the SDS.

Option 2 - Searching for SDSs from all HVCC products

Click on "All Products" and type the chemical name or manufacturer name, then click on the search button. A listing of all HVCC products meeting the search criteria will be displayed. Click on the PDF icon for the one you wish to view.

APPENDIX B – READING AND UNDERSTANDING SDS

HOW TO READ AND USE AN SDS

The SDS details specific information designed to concisely inform the user about the hazards associated with the use of that product so that the user can protect him or herself and respond appropriately to emergency situations.

The OSHA Hazard Communication Standard requires SDSs to be in a uniform format, and include the section numbers, the headings, and associated information under the headings below:

Section 1, Identification, includes product identifier; manufacturer or distributor name, address, phone number; emergency phone number; recommended use; restrictions on use.

Section 2, Hazard(s) identification, includes all hazards regarding the chemical; required label elements.

Section 3, Composition, information on ingredients includes information on chemical ingredients; trade secret claims.

Section 4, First-aid measures, includes important symptoms/ effects, acute, delayed; required treatment.

Section 5, Fire-fighting measures, lists suitable extinguishing techniques, equipment; chemical hazards from fire.

Section 6, Accidental release measures, lists emergency procedures; protective equipment; proper methods of containment and cleanup.

Section 7, Handling and storage, lists precautions for safe handling and storage, including incompatibilities.

Section 8, Exposure controls/personal protection, lists OSHA's Permissible Exposure Limits (PELs); Threshold Limit Values (TLVs); appropriate engineering controls; personal protective equipment (PPE).

Section 9, Physical and chemical properties, lists the chemical's characteristics.

Section 10, Stability and reactivity, lists chemical stability and possibility of hazardous reactions.

Section 11, Toxicological information, includes routes of exposure; related symptoms, acute and chronic effects; numerical measures of toxicity.

Section 12, Ecological information

Section 13, Disposal considerations

Section 14, Transport information

Section 15, Regulatory information

Section 16, Other information, includes the date of preparation or last revision.

CONCEPTS IN TOXICOLOGY

The extent to which a material will cause harmful effects is called the toxicity of that material. Toxicity is the potential for a chemical substance to cause harm to biological tissue and systems. The actual hazard involved depends on several factors, most importantly on route of exposure, amount of chemical material, physiological effects, length and frequency of exposure, and personal susceptibility. With proper handling, highly toxic or hazardous materials can be used safely. However, even chemicals that are not highly toxic can be hazardous if handled improperly.

Even our food contains small doses of chemicals, which, if present in high concentrations, can be harmful to our health. Examples are copper and iodine. These naturally occur in tiny amounts in many foods and are essential for proper nutrition and health, yet too much of either can be toxic.

In order to avoid exposure to hazardous materials, it is necessary to consider possible routes of entry and to become aware of the safety precautions to take to protect against accidental exposure.

The four common routes of entry to the body are:

- Inhalation
- Skin contact and absorption through the skin
- Ingestion

- Injection

Once a chemical has entered the body through one of these routes, it may travel throughout the body and accumulate in a specific area or organ, depending on its chemical characteristics. Even though our bodies are very efficient at getting rid of these chemicals, too much exposure over too long a time period can lead to damage of the specific body organ or system where the chemical is accumulating. Thus the term “target organs”. Target organs include (but is not limited to) the lungs, central nervous system, liver, heart, and kidneys.

ACUTE VS. CHRONIC TOXICITY

Acute is short-term exposure of a single dose. The contact may be with the skin or eyes, by oral intake, or exposure to contaminated air. Harmful effects caused by acute exposure usually appear quickly, as in the case of burns from a cleaning agent or being overcome by chemical vapors and are alleviated once removed from the exposure.

Chronic is long-term exposure over an extended period of time. Many chronic effects are not readily observable at first since there are no symptoms. An example would be exposure to mercury or lead compounds. Symptoms of overexposure may not show up for years and, if left unchecked, can lead to irreversible damage to the central nervous system and other target organs and systems.

PERMISSIBLE EXPOSURE LIMITS

The Occupational Safety and Health Administration (OSHA) has established standards for exposure to hazardous materials. These standards establish the maximum permissible airborne concentration to which an employee may be exposed in either a short term or eight-hour time frame.

When exposures exceed these limits, engineering controls and work practices or use of respiratory protection (in this priority order) must be used to reduce exposure. It is important to note that respiratory protection is the least desirable control method. Contact EHS for assistance in evaluating chemical exposures and recommending control measures. All use of respiratory protection must be approved by EHS and comply with the HVCC Respiratory Protection Program to ensure workers are adequately trained and screened and using the proper protection.

CHEMICAL CLASSIFICATION OF HAZARDOUS MATERIALS

The table on the next page provides general classes of chemicals, common examples, the associated potential hazards, and how exposure most commonly occurs. By

understanding the hazards and how exposure occurs, workers can protect themselves and avoid adverse effects.

Hazardous Materials Classification

Category	Examples	Potential Hazard	How Exposure Occurs
Acids and bases	Hydrochloric acid (HCl), Caustic soda (NaOH)	Corrosive – destroys living tissue on contact	Skin contact, splash to eye Inhalation
Reactives	Hydrogen peroxide	Burns, strongly irritating, some are toxic	Skin contact, splash to eye Inhalation
Flammables	Solvents, degreasers, fuels	Flammable Toxic Dry skin, irritant	Inhalation Fire Skin contact, splash to eye
Dusts	Wood dust Metal dust from grinding or welding Asbestos Silica (concrete)	Toxic Irritating/allergic	Inhalation (primary) Ingestion
Compressed gases or liquids	Oxygen, nitrogen, LPG	Material under pressure – explosion Toxic Irritating Flammable	Physical hazard from explosion Inhalation
Soaps, cleaners, waxes	Custodial products	Irritant Usually nontoxic, nonflammable	Skin contact, splash to eye
Biological agents	AIDS Hepatitis SARS TB Bloodborne pathogens Mold	Infectious agents that can lead to specific diseases Allergies/irritation	Inhalation Skin or other direct contact Ingestion (food poisoning)

APPENDIX C - HOW TO READ AND UNDERSTAND LABELS

Every product container is labeled by the manufacturer with certain required information. It is advisable to always read the label on all new products in your work area and become familiar with the information on products you use routinely. If you have questions after reading the label, check the SDS for more information or contact your supervisor or EHS.

OSHA has updated the requirements for labeling of hazardous chemicals under its Hazard Communication Standard (HCS). All labels on new chemical shipments are required to have pictograms, a signal word, hazard and precautionary statements, the product identifier, and supplier identification. Supplemental information can also be provided on the label as needed

Pictograms

Each pictogram consists of a symbol on a white background framed within a red border and represents a distinct hazard(s). The pictogram on the label is determined by the chemical hazard classification. The pictograms are shown in the chart below.

<p>Exploding bomb</p> 	<p>Skull and Crossbones</p> 	<p>Flame</p> 
<p>Explosives; Self Reactive; Organic Peroxides</p>	<p>Acute toxicity (severe)</p>	<p>Flammables; Pyrophorics; Self-Heating; Emits Flammable Gas; Self Reactive; Organic Peroxides</p>
<p>Gas Cylinder</p> 	<p>Health Hazard</p> 	<p>Flame over circle</p> 
<p>Gases under pressure</p>	<p>Carcinogen; Mutagenicity; Reproductive Toxicity; Respiratory Sensitizer; Target Organ Toxicity; Aspiration Toxicity</p>	<p>Oxidizers</p>
<p>Corrosion</p> 	<p>Exclamation mark</p> 	<p>Environmental</p> 
<p>Corrosives</p>	<p>Irritant; Skin Sensitizer; Acute Toxicity (harmful); Narcotic effects; Respiratory Tract Irritant; Hazardous to Ozone Layer</p>	<p>Aquatic Toxicity</p>

Signal Word

The signal word indicates hazard level. "Danger" is used for the most severe instances, while "Warning" is less severe.

Precautionary Statements/First Aid

These are phrases that are tied to each hazard statement. They describe general preventative, response, storage or disposal precautions. These statements are found on the chemical's Safety Data Sheet. Similar to Hazard Statements, Precautionary Statements can be identified by a P-Code (like P100).

Hazard Statements

These are phrases that describe the nature of hazardous products and the degree of hazard. Hazard statements are on the chemical's Safety Data Sheet (SDS) and identified by an H-Code (like H100).

Product Name or Identifiers

This identifies the product or chemical name. Additional identifiers can be noted to the right of the Manufacturer's information.

Manufacturer Information

This identifies the manufacturer's company name, address and telephone number.