HAZARD COMMUNICATION
RIGHT TO KNOW
PERSONAL PROTECTIVE EQUIPMENT
PROGRAM AND TRAINING MANUAL

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HAZARD COMMUNICATION
RIGHT TO KNOW
PERSONAL PROTECTIVE EQUIPMENT
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)
• 29 CFR 1910.132, Personal Protective Equipment

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:

• supporting this program by ensuring employees complete training, as required
• keeping their chemical inventory list current
• keeping a set of Safety Data Sheets for materials used in their department readily accessible to employees
• maintaining labels on containers
• completing PPE Hazard Assessments, as applicable
• providing and ensuring that employees wear necessary personal protective equipment

LIST OF HAZARDOUS MATERIALS

EHS will maintain a College-wide list of all hazardous materials. Updates will be accomplished through an annual review of chemical lists by each department using...
chemicals. The updated chemical lists will be sent to EHS for review and incorporation into the College-wide list. 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 material safety data sheets.
- The “job safety & health protection poster” required under New York State Labor Law, PESH.

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.

Immediate use containers, small containers into which materials are drained for the use on that shift by only the employee drawing the material, need not be labeled, although it is advisable.

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

SAFETY DATA SHEETS (SDS)

SDS must be obtained for all hazardous chemicals that are used by HVCC. EHS is responsible for ensuring that a master list of SDS links for all materials used on campus is available to the campus community and emergency responders. Departments that use hazardous materials are responsible for having a set of SDS available in the workplace for employees.

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

PERSONAL PROTECTIVE EQUIPMENT (PPE)

PPE will be selected based on a hazard assessment of the workplace to determine what hazards are present for each work task performed which necessitates the use of PPE.
This hazard assessment will be conducted by EHS or department supervisors and with input from employees. Signed copies of hazard assessments will be kept onsite by each supervisor and a copy with EHS. The hazard assessment form is contained in Appendix A.

The assessment shall include all hazards, whether related to chemical use or to other safety issues. The Federal regulation, 29 CFR 1910.132, and its appendices are used as a guide for the selection of eye and face protection. Appendix B contains the eye and face selection chart used.

HVCC will provide all required PPE to employees at no cost. Prescription safety glasses can be obtained by contacting EHS 7163 or 7787. The employee is responsible for obtaining an eye exam and prescription; the College will provide multiple options for safety eyeglasses through a local vendor.

The College will provide safety shoes at a cost of up to $100.00 through a local vendor. This provides for the choice of multiple options that will allow all employees to obtain a proper fit. Contact EHS at 7163 or 7787 to obtain safety shoes.

HVCC will provide all other needed PPE at no cost to the employee. Contact EHS for assistance in selecting other PPE.

Respiratory protection and procedures is not covered under this program. Departments will contact EHS whenever respirators are needed. Refer to the HVCC Respiratory Protection Program for use of respirators.

Training in the use of PPE will be conducted in accordance with 29 CFR 1910.132 and will be given at the same time as Haz Comm – RTK training by EHS. See Appendix D for content of training. Records will be kept as described in the Training section of this Program.

**NON-ROUTINE TASKS**

If products are to be used in a non-routine manner (other that what it was intended) the employee should consult with his supervisor to ensure that employees are informed of any hazards associate with performance of the tasks. Contact EHS for additional guidance if necessary.

**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 MSDS.

Physical Plant or other departments managing the project 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 HazCom, RTK and PPE 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 will consult with EHS and provide additional information whenever a new chemical hazard is introduced into the work area.

The HazCom 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 HazCom/RTK training include the following information:

- Requirements of the Hazard Communication and RTK 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 HazCom-RTK 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 with the list of hazardous chemicals present and the MSDS.
  - An explanation of the labeling system.
  - How employees can use the hazard information.
  - A summary of the standard and this Program.

Additional Hazard Communication training information is contained in Appendix C.
Personal Protective Equipment training will include the following:

- When and what PPE is necessary (as per the hazard assessment form)
- How to properly don, doff, adjust and wear PPE
- The limitations of PPE
- The proper care, maintenance and useful life and disposal of PPE

Additional PPE training information is contained in Appendix D.

**PROGRAM REVIEW**

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

PERSONAL PROTECTIVE EQUIPMENT
HAZARD ASSESSMENT, SELECTION
AND CERTIFICATION

<table>
<thead>
<tr>
<th>Work Tasks</th>
<th>Potential Hazard</th>
<th>PPE Required</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

Supervisor Signature: ______________________________________ ____________

EHS Signature: ____________________________________________

h:\S&H programs\ppe haz assess

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## APPENDIX B

### Eye and Face Protection Selection Chart

<table>
<thead>
<tr>
<th>Source</th>
<th>Assessment of Hazard</th>
<th>Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMPACT - Chipping, grinding machining, masonry work, woodworking, sawing, drilling, chiseling, powered fastening, riveting, and sanding.</td>
<td>Flying fragments, objects, large chips, particles sand, dirt, etc.</td>
<td>Spectacles with side protection, goggles, face shields. See notes (1), (3), (5), (6), (10). For severe exposure, use faceshield.</td>
</tr>
<tr>
<td>HEAT - Furnace operations, pouring, casting, hot dipping, and welding.</td>
<td>Hot sparks ..........</td>
<td>Faceshields, goggles, spectacles with side protection. For severe exposure use faceshield. See notes (1), (2), (3).</td>
</tr>
<tr>
<td></td>
<td>Splash from molten metals............</td>
<td>Faceshields worn over goggles. See notes (1), (2), (3).</td>
</tr>
<tr>
<td></td>
<td>High temperature exposure............</td>
<td>Screen face shields, reflective face shields. See notes (1), (2), (3).</td>
</tr>
<tr>
<td>CHEMICALS - Acid and chemicals handling, degreasing plating.</td>
<td>Splash ............</td>
<td>Goggles, eyecup and cover types. For severe exposure, use face shield. See notes (3), (11).</td>
</tr>
<tr>
<td></td>
<td>Irritating mists ..........</td>
<td>Special-purpose goggles.</td>
</tr>
<tr>
<td>DUST - Woodworking, buffing, general dusty conditions.</td>
<td>Nuisance dust .....</td>
<td>Goggles, eyecup and cover types. See note (8).</td>
</tr>
<tr>
<td>Welding: Gas</td>
<td>Optical radiation .</td>
<td>Welding goggles or welding face shield. Typical shades: gas</td>
</tr>
</tbody>
</table>
welding 4-8,
cutting 3-6,
brazing 3-4. See
note (9).

| Cutting, Torch | Optical radiation | Spectacles or welding face-shield. Typical shades, 1.5-3. See notes (3), (9). |
| brazing, Torch |                  |                                                                               |
| soldering     |                  |                                                                               |

| Glare         | Poor vision       | Spectacles with shaded or special-purpose lenses, as suitable. See notes (9), (10). |

Notes to Eye and Face Protection Selection Chart:

(1) Care should be taken to recognize the possibility of multiple and simultaneous exposure to a variety of hazards. Adequate protection against the highest level of each of the hazards should be provided. Protective devices do not provide unlimited protection.

(2) Operations involving heat may also involve light radiation. As required by the standard, protection from both hazards must be provided.

(3) Faceshields should only be worn over primary eye protection (spectacles or goggles).

(4) As required by the standard, filter lenses must meet the requirements for shade designations in 1910.133(a)(5). Tinted and shaded lenses are not filter lenses unless they are marked or identified as such.

(5) As required by the standard, persons whose vision requires the use of prescription (Rx) lenses must wear either protective devices fitted with prescription (Rx) lenses or protective devices designed to be worn over regular prescription (Rx) eyewear.

(6) Wearers of contact lenses must also wear appropriate eye and face protection devices in a hazardous environment. It should be recognized that dusty and/or chemical environments may represent an additional hazard to contact lens wearers.

(7) Caution should be exercised in the use of metal frame protective devices in electrical hazard areas.

(8) Atmospheric conditions and the restricted ventilation of the protector can cause lenses to fog. Frequent cleansing may be necessary.

(9) Welding helmets or faceshields should be used only over primary eye protection (spectacles or goggles).

(10) Non-sideshield spectacles are available for frontal protection only, but are not acceptable eye protection for the sources and operations listed for "impact."

(11) Ventilation should be adequate, but well protected from splash entry. Eye and face protection should be designed and used so that it provides both adequate ventilation and protects the wearer from splash entry.

(12) Protection from light radiation is directly related to filter lens density. See note (4). Select the darkest shade that allows task performance.
APPENDIX C

HAZARD COMMUNICATION TRAINING MATERIAL

REGULATORY REQUIREMENTS

The federal and state “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.

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 MSDS.

EMPLOYEE RIGHTS

Several provisions of the NYS RTK Law extend explicit rights to 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. The Information Sources Section at the end of this guide provides locations of these offices.

EMPLOYEE EXPOSURE RECORDS

An exposure record is any record of air sampling or other form of hazardous material testing in the workplace that may represent an employee’s exposure to a hazardous material. When no such testing has been conducted, Material Safety Data Sheets are considered an employee exposure record. The employer must inform employees of all exposure records and provide a copy of such record upon request.
At HVCC, the Office of Human Resources (HR) and EHS are responsible for maintaining and supplying this information.

**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 major items of information categorized in the SDS are:

- Identity of the material
- Chemical ingredients
- Fire hazard
- Physical hazard (reactivity and incompatibility with other chemicals)
- Health hazards
- First aid measures
- Personal protective equipment recommendations
- Emergency and spill response

Each manufacturer is required to have a section covering each of these items of information. The identity of the material on the SDS must be the same as on the manufacturer’s label, so that the two can be cross-referenced.

The next section will list the chemical ingredients that are considered hazardous based on government standards and/or other reports from nationally-recognized organizations. However, there may be cases where some hazardous materials are not listed due to trade secrets. During medical emergencies, manufacturers must make this information available. If a manufacturer chooses to use the trade secret provision, this must be so noted on the SDS.

The remaining sections of the SDS will provide additional details in each of these subject areas.

As of June 1, 2015, the OSHA Hazard Communication Standard will require new 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.

**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.

The manufacturer is required to list the identity of the material, using the same terminology as listed on the corresponding SDS. The employer must also provide a brief description of the hazard, such as to keep the chemical away from flame or avoid skin contact. The label will also indicate the name and address of the chemical manufacturer.

Many manufacturers provide additional information such as: listing the chemical ingredients, personal protective equipment that should be worn, first aid measures, fire hazards, handling and storage, spill clean up and disposal.

OSHA has updated the requirements for labeling of hazardous chemicals under its Hazard Communication Standard (HCS). As of June 1, 2015, all labels will be 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.
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.

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

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 you supervisor to replace it. Remember, the only way you can handle a chemical safely is if you know what it is.

**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. 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 LEVEL**

The federal government (OSHA) has established standards for exposure to hazardous materials. These standards establish the airborne concentration to which an employee may be exposed in either a short term or eight-hour time frame with no adverse effects resulting.

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 all use of respiratory protection 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 takes most commonly occurs. By understanding the hazards and how exposure occurs, workers can protect themselves and avoid any adverse effects.
<table>
<thead>
<tr>
<th>Category</th>
<th>Examples</th>
<th>Potential Hazard</th>
<th>How Exposure Occurs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acids and bases</td>
<td>Hydrochloric acid (HCl), Caustic soda (NaOH)</td>
<td>Corrosive – destroys living tissue on contact</td>
<td>Skin contact, splash to eye Inhalation</td>
</tr>
<tr>
<td>Reactives</td>
<td>Hydrogen peroxide</td>
<td>Burns, strongly irritating, some are toxic</td>
<td>Skin contact, splash to eye Inhalation</td>
</tr>
<tr>
<td>Flammables</td>
<td>Solvents, degreasers, fuels</td>
<td>Flammable Toxic Dry skin, irritant</td>
<td>Inhalation Fire Skin contact, splash to eye</td>
</tr>
<tr>
<td>Dusts</td>
<td>Wood dust Metal dust from grinding or welding Asbestos Silica (concrete)</td>
<td>Toxic Irritating/allergic</td>
<td>Inhalation (primary) Ingestion</td>
</tr>
<tr>
<td>Compressed gases or liquids</td>
<td>Oxygen, nitrogen, LPG</td>
<td>Material under pressure – explosion Toxic Irritating Flammable</td>
<td>Physical hazard from explosion Inhalation</td>
</tr>
<tr>
<td>Soaps, cleaners, waxes</td>
<td>Custodial products</td>
<td>Irritant Usually nontoxic, nonflammable</td>
<td>Skin contact, splash to eye</td>
</tr>
<tr>
<td>Biological agents</td>
<td>AIDS Hepatitis SARS TB Bloodborne pathogens Mold</td>
<td>Infectious that can lead to specific diseases Allergies/irritation</td>
<td>Inhalation Skin or other direct contact Ingestion (food poisoning)</td>
</tr>
</tbody>
</table>

**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 629-7210 on cell phones.**

First aid and medical services are provided during normal working hours by the HVCC Health 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 the Health Office. Faculty should ensure that injured students have an escort to the Health Office, 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 any of the following:

At HVCC:

Laurie Vivekanand
Director of Environmental Health and Safety
629-7163
l.vivekanand@hvcc.edu

Maxine Ortiz
Environmental Health & Safety Specialist
629-7787
m.ortiz@hvcc.edu

HVCC College-wide chemical inventory and Safety Data Sheet links:

Log into Blackboard:
https://bbprod.hvcc.edu/webapps/portal/frameset.jsp

Navigate to the Environmental Health and Safety Organization
Navigate to Chemical Inventory by Department
Other Safety Data Sheet Web Resources:

http://siri.org/msds/index.php
http://www.vwrsp.com/search/index.cgi?tmpl=msds

Government Resources:

NYS Dept of Labor
Public Employee Safety & Health Bureau
The Gov. W. Averell Harriman
State Office Bldg. Campus
Tel: (518) 475-5508
http://www.labor.state.ny.us/workerprotection/safetyhealth/DOSH_PESH.shtm

New York State Department of Health
Division of Occupational Epidemiology
And Environmental Epidemiology
2 University Plaza
Albany, NY 12203
(518) 458-6392 RTK Hotline
http://www.health.state.ny.us/home.html

United States Environmental Protection Agency
Chemical Substances Information Network
Office of Pesticides and Toxic Substances
Mail Code TS 788
401 M Street S.W.
Washington, D.C. 20460
(202) 382-2902
http://www.epa.gov

National Institute of Occupational Safety and Health
Registry of Toxic Effects of Chemical Substances
Health Hazard Evaluation Program
4676 Columbia Parkway
Cincinnati, Ohio 45226
(513) 684-8326
http://www.niosh.cdc.gov
APPENDIX D

PERSONAL PROTECTIVE EQUIPMENT (PPE) TRAINING REFERENCE

Federal and State OSHA and PESH regulations require that the College provide PPE and training in using PPE to all employees where such equipment is necessary in order to perform their job safely.

Employees are responsible for wearing the PPE they have been provided and caring for it in accordance with the instructions they have been given.

Supervisors are responsible for ensuring that their employees wear their PPE when appropriate.

Instructions on the Use and Care of Personal Protective Equipment:

**Eye and Face Protection** – National injury data shows that 60% of workers with eye injuries were *not* wearing eye protection. For workers who were using eye protection, 40% were wearing the *wrong* eye protection for the job. It is estimated that more than 1,000 eye injuries occur each day and that over the course of a year, more than 100,000 of these injuries will result in some form of vision loss.

1) Selection of the Correct Eye Protection
   a) Safety glasses with side shields – must be utilized where there is potential for flying particles and chips or other debris, when working around power tools and equipment and other impact hazards
   b) Goggles and or safety glasses and a face shield – must utilized where there is a potential for a splash from liquid chemicals, vapors or gases, molten metal
   c) Shaded eyewear is needed for working around light radiation sources: welding, cutting, lasers, etc.

2) Proper Use
   a) Eye and face wear should be adjusted to provide maximum protection and comfort. Goggles or safety glasses can be worn over prescription glasses. Faceshields are not adequate for eye protection and must be worn with safety glasses or goggles.

   Contact lenses may be worn under safety glasses but wearers should know that heavily contaminated or chemical environments may present additional hazards if chemical vapors or gases get trapped under their lenses. Proper eye protection must be utilized in conjunction with, or instead of, contact lenses.

   Prescription eyewear: The College will provide prescription safety glasses with permanent side shields to those employees requiring eye wear in order to perform their job. Contact the Department of Environmental Health & Safety at 7163 or 7787.

3) Limitations: eye protection may decrease peripheral vision, they may fog (use vented goggles), of if scratched and dirty will obstruct vision

4) Inspection & Maintenance: keep clean, inspect daily, clean with soap and warm water or a cleaning solution. Replace scratched or pitted lenses.
Skin and Hand Protection

1) Selection

a) Gloves – will protect from work tasks with potential for chemical or biological contact, electrical shock, burns, abrasions, cuts, punctures. There is a wide assortment of gloves designed for various jobs.

For chemical contact, there are many glove materials and it is important to match the glove to the chemical. Go to this web site for guidance developed by Michigan State University: [http://www.hazmat.msu.edu:591/glove_guide/](http://www.hazmat.msu.edu:591/glove_guide/) or contact your supervisor or the Director of Environmental Health & Safety (7163)

b) Suits, aprons, jackets: will protect from body splashes of chemicals or biological agents. The correct material must be used for the chemical and work tasks involved. Manufacturers of this PPE will provide guidance on appropriate use.

2) Proper Use

Gloves and other PPE should fit properly and provide the degree of dexterity needed for the job. Some people have skin sensitivity to gloves, especially latex gloves. There are alternatives available, such as gloves containing powder or latex free gloves.

When putting on PPE, ensure there are no tears, holes or split seams. If damaged, replace immediately. Be aware that gloves and other protection will eventually degrade after continual exposure to chemicals. If you notice wrinkling, peeling, cracking, replace immediately.

Do not leave the work area with gloves still on!! Do not eat, drink or smoke while wearing PPE. Remove gloves as soon as your work is completed and wash your hands. Proper procedures for removal of gloves:

a) Pinch the glove only just below the wrist and pull it off slowly, allowing it to turn inside out as it is pulled off
b) Use the inside of the first glove to grasp the second glove and pull off slowly, allowing the glove to turn inside out as you go

Place the gloves in a sealed container or bag and handle the same as other hazardous waste. Never re-use disposable gloves
d) Wash your hands

c) Place the gloves in a sealed container or bag and handle the same as other hazardous waste. Never re-use disposable gloves

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3) Limitations – no gloves or PPE will protect your from everything, and the material will degrade after continuous use – chemicals will eventually penetrate them, or they may be torn or punctured. Replace immediately when this occurs. Wearing gloves reduces dexterity, touch and finger movement.

4) Inspection & Maintenance – inspect gloves and other PPE before each use. If gloves or PPE are to be re-used, inspect after use and clean and store in accordance with the manufacturer’s recommendations. Do not re-use gloves or PPE past their service life.

Foot Protection

1) Selection

Use steel toed safety shoes when there is a potential of falling or rolling objects, sharp objects, molten metal, hot surfaces and when performing manual handling of heavy materials.

The College provides safety shoes to those employees who require them for their job through the Department of Environmental Health and Safety. Call 7787 or 7163 to obtain shoes.

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It is important to make sure shoes fit properly; consult with the safety shoe vendor on advice on fit and appropriateness to specific work conditions.

2) Proper Use – follow the manufacturer’s recommendations

3) Limitations – the greatest protection of the foot will be under the area of the steel insert, other parts of the foot will not have as great a protection but will have some.

4) Inspection and Maintenance – keep footwear clean and polished to last longer. Replace broken or frayed laces and be attentive to overall wear and deterioration.