Purpose

Environmental Health and Safety (EHS) has developed the Hazard Communication (HazCom) Program to comply with the requirements of the Occupational Safety and Health Administration (OSHA) Hazard Communications Standard (29 CFR 1910.1200).

Overview

HazCom is used to convey the hazards of chemicals in the workplace. Furthermore, it is a standard for communication from the manufacturer of the chemical to the employees at Radford University that may come across it in the workplace.

Scope

This program applies to faculty, staff, student employees, and others working in any University area. University personnel engaged in the laboratory use of hazardous chemicals should refer to the University Chemical Hygiene plan for the laboratory standard.

Responsibilities

Environmental Health and Safety (EHS)

EHS is responsible for the following:

- Development and implementation of the HazCom Program at Radford University
- Supporting Departmental Supervisors with program compliance
- Maintaining a master Safety Data Sheet (SDS) inventory for the entire campus
- Training of employees in HazCom Awareness
- Maintaining training records
- Serving as a liaison to regulatory agencies
- Conducting audits and evaluations of program effectiveness

Supervisors

Supervisors are responsible for the following:

- Ensuring participation of affected employees in EHS required training
- Establishing and implementing department specific training
- Establishing a department specific HazCom program which includes but is not limited to:
Standards for labeling
Chemicals being used
Department specific training
Proceedures for:
  - Chemical use by employees
  - Chemical spills
  - Chemical storage
  - Chemical disposal
  - Labeling

- Maintaining SDS for chemicals used by employees
- Providing EHS with a Hazardous Materials Inventory of chemicals used in their department
- Informing EHS of new chemicals being used within department

Employees

Employees are responsible for the following:

- Attend initial and yearly follow-up training conducted by EHS and the department supervisor
- Know location of department specific SDS
- Understand how to use a SDS
- Recognize GHS pictograms and understand hazards
- Ensure proper labeling of chemicals
- Report potential hazards, accidents, and near-misses to supervisor

Hazardous Materials Inventory

It is crucial to maintain a complete inventory of all hazardous chemicals at Radford University. In order for this to be maintained and updated regularly, EHS has made each department responsible for maintaining their own inventory. All of the department inventories are then compiled together as a University inventory, which is stored in the EHS office. Department inventories should be updated anytime a new chemical is introduced to the workplace.

Safety Data Sheets (SDS)

Safety Data Sheets (SDS) are fact sheets for chemicals that outline the potential hazards, storage and disposal methods, first aid, other important information for that specific chemical. SDSs are to be made accessible to all employees who work with chemicals that pose any hazard.
Departments are required to keep a set of all SDSs for the chemicals used by the employees within that department. EHS will maintain a master list of all SDSs for the University.

Upon receipt of a new SDS, department Supervisors are to send a copy to EHS immediately. This will ensure accuracy of the SDS master list as well as the Hazardous Materials Inventory. Furthermore, it is crucial that each department SDS list be stored in an accessible location for all employees within that department.

Training

Everyone who works with or is potentially “exposed” to hazardous chemicals on the job will receive initial training on the Hazard Communication Standard and the safe use of those hazardous chemicals before starting work. “Exposure” means that “an employee is subjected in the course of employment to a chemical that is a physical or health hazard, and includes potential (e.g., accidental or possible) exposure.” Whenever a new chemical hazard is introduced or an old hazard changes, additional training is provided. All training is conducted by EHS and department supervisors.

Effective information and training is a critical part of the Hazard Communication Program. We train our employees to read and understand the information on labels and SDSs, determine how the information can be obtained and used in their own work areas, and understand the risks of exposure to the chemicals in their work areas, as well as ways to protect themselves. Our goal is to ensure employees know that they are exposed to hazardous chemicals, have the skills to read and use labels and SDSs, and understand how to appropriately follow the protective measures we have established. We urge our employees to ask their supervisors questions for greater comprehension regarding HazCom within their department.

HazCom training is two parts, general and department specific. General awareness training is conducted by EHS yearly for all employees, and quarterly for all new hires. Department specific training should be conducted after awareness training and anytime there is a new chemical or procedure being introduced. Training is only good for one year and therefore requires awareness and department specific training to occur every year for all employees.

General

The general training program, conducted by EHS, emphasizes these elements:

- What hazardous chemicals are present in operations in employee work areas.
Environmental Health & Safety Programs

Title: Hazard Communication Program

- Chemical and physical properties of hazardous chemicals (e.g., flash point, reactivity, etc.) and how to detect the presence or release of these chemicals (including chemicals in unlabeled pipes).
- Physical hazards of chemicals (e.g., potential for fire, explosion, etc.)
- Health hazards, including signs and symptoms of overexposure, associated with exposure to chemicals and any medical condition known to be aggravated by exposure to them.
- Any simple asphyxiation, combustible dust, and pyrophoric hazards, as well as hazards not otherwise classified, of chemicals in work areas.
- Any steps the company has taken to reduce or prevent exposure to hazardous chemicals, such as engineering controls.
- Procedures to protect against hazards and exposure (e.g., work practices or methods to assure proper use and handling of chemicals and any required personal protective equipment and its proper use and maintenance).
- Procedures for reporting and responding to chemical emergencies.
- How to read and use both the workplace labeling system and labels received on shipped containers.
- The order of information found on SDSs and how to read the information and what it means.
- How to access SDSs and the written Hazard Communication Program, including the chemical inventory.

**Department Specific**

More in depth training is required for each department. This training is conducted by the department supervisor and covers specific chemicals and procedures used by their employees. Furthermore, this training is used to inform employees of the department specific HazCom program.

**Labeling**

In most cases, hazardous chemical containers at the workplace must be clearly labeled, tagged, or marked in accordance with the Hazard Communication Standard, either with:

- The product identifier, signal word, hazard statement(s), pictogram(s), and precautionary statement(s); or
- The product identifier and words, pictures, symbols, or combination thereof, which provide at least “general” information regarding the hazards of the chemicals, and which, in conjunction with the other information immediately available to employees under the
Hazard Communication Program, will provide employees with the “specific” information regarding the physical and health hazards of the hazardous chemical.

While not required for in-house labeling, the name and address of the manufacturer, importer, or other responsible party may also be found on the label, tag, or marking. Hazards not otherwise classified do not have to be addressed on a container.

Because the product identifier is found on the label, the SDS, and our chemical inventory, the product identifier links these three sources of information, permitting cross-referencing. The product identifier used by the supplier may be a common or trade name, a chemical name, or a number. Employees should be aware that label information can be verified by referring to the corresponding SDS.

Department supervisors and EHS personnel are responsible for ensuring that all hazardous chemicals in containers at the workplace have proper labels or other forms of warning that are legible, in English (although other languages may also be included), and displayed clearly on the container or readily available in the work area throughout each work shift, as required. Supervisors will update labels, as necessary.

If employees transfer chemicals from a labeled container to a portable, secondary container that is intended only for their IMMEDIATE use, no labels, tags, or markings are required on the portable container. Otherwise portable containers must be labeled, tagged, or marked in accordance with our in-house labeling system for workplace containers.

OSHA also allows for alternatives to labeling, tagging, and marking to convey the required information, as long as the containers to which the alternative method is applicable are identified. Departments are permitted to create labeling alternatives for in-house containers, please refer to the department supervisor and their HazCom program for their labeling procedures. Department supervisors are advised to contact EHS with any questions regarding labeling alternatives in order to maintain OSHA compliance.

**Contractors**

All contractors working on Radford University property are required to follow OSHA’s Hazard Communications Standard (29 CFR 1910.1200).

**Record Keeping**

Departments are responsible for maintaining a specific HazCom program and inventory within their department.
EHS is responsible for oversight of this program, the master SDS list, University chemical inventory, and training records.

**Document Revision History**

<table>
<thead>
<tr>
<th>Revision</th>
<th>Section(s) Changed</th>
<th>Change(s) Made:</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>All</td>
<td>Initial Draft</td>
<td>Unknown</td>
</tr>
<tr>
<td>01</td>
<td>All</td>
<td>Document redrafted with more specifics.</td>
<td>11/11/16</td>
</tr>
</tbody>
</table>

**Document Author(s):** Nathan Tripp, EHS Specialist
### APPENDIX A: OSHA QUICK CARD

#### HCS Pictograms and Hazards

<table>
<thead>
<tr>
<th>Health Hazard</th>
<th>Flame</th>
<th>Exclamation Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carcinogen</td>
<td>Flammables</td>
<td>Irritant (skin and eye)</td>
</tr>
<tr>
<td>Mutagenicity</td>
<td>Pyrophorics</td>
<td>Skin Sensitizer</td>
</tr>
<tr>
<td>Reproductive Toxicity</td>
<td>Self-Heating</td>
<td>Acute Toxicity (harmful)</td>
</tr>
<tr>
<td>Respiratory Sensitizer</td>
<td>Emits Flammable Gas</td>
<td>Narcotic Effects</td>
</tr>
<tr>
<td>Target Organ Toxicity</td>
<td>Self-Reactives</td>
<td>Respiratory Tract</td>
</tr>
<tr>
<td>Aspiration Toxicity</td>
<td>Organic Peroxides</td>
<td>Irritant</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gas Cylinder</th>
<th>Corrosion</th>
<th>Exploding Bomb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gases Under Pressure</td>
<td>Skin Corrosion/ Burns</td>
<td>Explosives</td>
</tr>
<tr>
<td></td>
<td>Eye Damage</td>
<td>Self-Reactives</td>
</tr>
<tr>
<td></td>
<td>Corrosive to Metals</td>
<td>Organic Peroxides</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flame Over Circle</th>
<th>Environment</th>
<th>Skull and Crossbones</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxidizers</td>
<td>Aquatic Toxicity</td>
<td>Acute Toxicity (fatal or toxic)</td>
</tr>
</tbody>
</table>

For more information:

[OSHA](http://www.osha.gov)  (800) 321-OSHA (6742)