1 INTENT

The purpose of this policy is to inform University at Albany employees of the types of hazardous chemicals present in their work environment and ways they can protect themselves during normal operations and during foreseeable emergencies. This written program is intended to meet compliance with the NYS Public Employee Safety and Health Act, the Federal Hazard Communication Standard 29 CFR 1910.1200 (including the UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS)), and Article 28 of the NYS Labor Law.

In addition to ensuring that the University is in compliance with local, state, and federal standards, this policy creates guidelines for implementation and maintenance of a hazard communication program and, as part of an overall occupational safety and health program, can help safeguard the health of University at Albany employees.

2 SCOPE AND LIMITATIONS

All University employees who routinely handle chemicals are included in this program.

3 RESPONSIBILITIES

3.1 Environmental Health and Safety (EH&S)

EH&S is responsible for the following aspects of this program:

1. Development, oversight, and periodic review of this policy
2. Initial and refresher training, including training on GHS
3. Approval of incoming hazardous chemicals and maintaining an inventory of hazardous chemicals from the approval process
4. Providing assistance and guidance to all departments on how to comply with this program
5. Periodic review of job tasks to advise on the appropriate level of personal protective equipment (PPE) that may be needed as specified by the SDS or other current occupational health and safety guidelines

EH&S professional staff members responsible for oversight of this program can be reached at 518-442-3495
3.2 Responsibilities for departments, offices, principal investigators, and shop supervisors

Departments, offices, principal investigators, and shop supervisors have the following responsibilities:

1. Supporting this program by allowing employees to attend training as required
2. Keeping their chemical inventories current
3. Keeping Safety Data Sheets for materials used in their department, office, or shop readily accessible to employees
4. Maintaining labels on all chemical containers, including secondary containers
5. Securing the appropriate personal protective equipment (PPE) for employees that handle chemicals and ensuring that employees use the equipment appropriately

4 HAZARDOUS CHEMICALS

All hazardous chemicals are covered in this policy. A hazardous chemical, as defined by OSHA’s Hazard Communication Standard, is “any chemical which is classified as a physical hazard or a health hazard, a simple asphyxiant, combustible dust, pyrophoric gas, or hazard not otherwise classified.”

OSHA defines each as:

Physical hazard means a chemical that is classified as posing one of the following hazardous effects: explosive; flammable (gases, aerosols, liquids, or solids); oxidizer (liquid, solid or gas); self-reactive; pyrophoric (liquid or solid); self-heating; organic peroxide; corrosive to metal; gas under pressure; or in contact with water emits flammable gas. See Appendix B to §1910.1200—Physical Hazard Criteria.

Health hazard means a chemical which is classified as posing one of the following hazardous effects: acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single or repeated exposure); or aspiration hazard. The criteria for determining whether a chemical is classified as a health hazard are detailed in Appendix A to §1910.1200—Health Hazard Criteria.
5 CHEMICAL INVENTORY AND SAFETY DATA SHEETS

A chemical inventory will be maintained by each department, office, shop, or laboratory and updated as needed. As new chemicals are purchased, the list should be updated.

Electronic or hard copy files of the chemical and SDS inventories are acceptable as long as they are accessible to employees and available to EH&S staff to review or audit upon request.

Copies of the chemical inventory list shall be provided to EH&S staff upon request. EH&S does not maintain a central file of SDSs for the University. However, SDSs for many products are available through the Internet from the manufacturer or vendor.

The EH&S web site maintains hyperlinks to several of these sources: http://www.albany.edu/ehs/

6 SAFETY DATA SHEET REVIEW

The Hazard Communication Standard (HCS) requires chemical manufacturers, distributors, or importers to provide Safety Data Sheets (SDSs, formerly known as Material Safety Data Sheets or MSDSs) to communicate the hazards of hazardous chemical products.

As of June 1, 2015, the HCS 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.

*Note: Since other Agencies regulate this information, OSHA will not be enforcing Sections 12 through 15 (29 CFR 1910.1200(g)(2)).

Employers must ensure that SDSs are readily accessible to employees.

See Appendix D of 1910.1200 for a detailed description of SDS contents.

If deficiencies are noted on the SDS, the supplier or chemical manufacturer should be contacted for additional information.

Note: The EH&S staff is available to provide guidance and training to supervisors and their departmental staff to help interpret and understand the SDS information on a case-by-case basis, in addition to formal training.
7 GHS LABEL REVIEW

OSHA has updated the requirements for labelling 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. A sample revised HCS label, identifying the required label elements, is shown below. Supplemental information can also be provided on the label as needed.

![Sample Label Diagram]
8 GHS PICTOGRAM REVIEW

As of June 1, 2015, the Hazard Communication Standard (HCS) will require pictograms on labels to alert users of the chemical hazards to which they may be exposed. 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.

### 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 Irritant</td>
</tr>
<tr>
<td>• Aspiration Toxicity</td>
<td>• Organic Peroxides</td>
<td>• Hazardous to Ozone Layer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Non-Mandatory)</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>
<tr>
<td></td>
<td>(Non-Mandatory)</td>
<td></td>
</tr>
</tbody>
</table>
9 EMPLOYEE INFORMATION AND TRAINING

The Office of Environmental Health and Safety is responsible for coordination, development, and implementation of training programs on the Hazard Communication Standard, including GHS and the Right to Know Law. Training will be offered to all eligible University employees who use chemicals. Training will be offered at a reasonable interval after initial hire (provided EH&S is notified at time of hire) and at periodic refresher intervals. Departments, offices, and shops may request site-specific review of chemical hazards and unit-specific training by contacting EH&S at 518-442-3495.

Where appropriate, online training may be provided through Human Resources Management.

Training will include but is not limited to:
- A summary of the hazard communication and RTK laws
- GHS
- How to access a copy of this written program
- An explanation of container labeling systems and SDSs
- Classes of hazardous chemicals
- Basic concepts in toxicology, personal protective equipment, and other work practices employees can use to protect themselves from these hazards
- Methods and observations that may be used to detect the presence or release of a hazardous chemical
- Relevant information on occupational injuries or illnesses associated with specific chemical exposures (if known)

Departments, offices, principal investigators, and shop supervisors are responsible for ensuring that employees attend the training.

NON-ROUTINE TASKS (i.e. Special Projects)
Some University employees are periodically required to perform non-routine tasks. The department is responsible for identifying and informing employees of the hazardous substances that may be involved prior to the start of non-routine work.

Employees will be provided with the following information:
- The specific chemical hazards(s)
- Any protective measures required, such as personal protective equipment (PPE)
- Procedures for decreasing the hazard, such as proper ventilation, respiratory protection, or buddy systems
- Any established emergency procedures
10 CONTRACTORS
When contractors are expected to work in University at Albany 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 the appropriate construction project manager and the EH&S Office of any hazardous materials they intend to use while on University property and provide the appropriate SDSs.

11 REFERENCES


2. Article 28 of the NYS Labor Law, Right to Know

3. NYS Public Employee Safety and Health Act