

Hazard Communication Plan

Purpose

The purpose of this plan is to ensure that all employees working with chemicals are fully apprised of the hazards of working with those chemicals. This plan is meant to meet the requirements of the OSHA Hazard Communication Standard (29CFR1910.1200).

Scope

This plan applies to all employees of Arkansas State University-Jonesboro (A-State) under the conditions specified below, except those that work in laboratories and/or laboratory-support areas with lab-scale quantities of chemicals. These employees must comply with the chemical hygiene plan.

Roles and Responsibilities

EMPLOYEES

It is the responsibility of all employees to know how to access this plan and how to access resources (SDSs) to inform them of the hazards associated with working with the hazardous chemicals present in the workplace.

MANAGEMENT/FACULTY

It is the responsibility of management to make employees aware of the requirements of this plan and make it readily available to them.

ENVIRONMENTAL HEALTH AND SAFETY

It is the responsibility of EHS to ensure that this plan remains up to date. It is also the responsibility of EHS to ensure that resources are available for employees to be able to access Safety Data Sheets.

Procedures

HAZARDOUS CHEMICAL LIST

A list of the hazardous chemicals used by an employer is required to be maintained by the Hazard Communication Standard. A list of the hazardous chemicals used at Arkansas State University is maintained by EHS in cooperation with the various departments of A-STATE.

LABELS

Labels placed on a chemical by the manufacturer are meant to convey the hazards of working with that chemical. Pictograms are displayed on chemical labels to help communicate these hazards. A list of the pictograms and their meanings is available as an appendix to this plan. The label that is placed on the chemical by the manufacturer shall not be removed unless an equivalent label is placed on the container that conveys the same information.

If a chemical is transferred to a different container meant for the immediate use the employee making the transfer, a full manufacturer's label is not required. However, the container should have the full name of the chemical and the date on which it was transferred, the date on which the original chemical was received or the expiration or disposal date.

SAFETY DATA SHEETS (SDS)

SDSs for all chemicals present that may be encountered by an employee shall be available near the location where the chemicals will be used. The location of the SDSs for a particular building must be noted in the space given at the end of this plan. If electronic format is used for SDSs (i.e. an internet search), the mechanism for ensuring that all SDSs can be found on the internet must be explained and for any SDS that cannot be found on the web, a hard copy must be maintained. If a chemical is found that does not have a SDS, contact EHS for assistance in getting one.

The SDS is divided into 16 sections. Each section and a description is given below:

1. Product and Company Identification: This just gives the information on the name of the product and its manufacturer.
2. Hazard Identification: This lists the various hazards of the substance. Each hazard is given a particular category numbering, in general, from 1-4 with 1 being the most serious hazard. The pictograms, described earlier, also appear in this section.
3. Composition/Information on Ingredients: This section describes the chemical composition of the substance including any synonyms.

4. First Aid Measures: This section outlines what first aid measures to take if a person is exposed to the substance.
5. Firefighting Measures: This section describes how to fight a fire that involves the substance indicated on the SDS.
6. Accidental Release Measures: This section gives information on how to cleanup a spill of the substance.
7. Handling and Storage: This section indicates proper storage and handling of the substance including storage conditions to avoid.
8. Exposure Controls/Personal Protection: This is an important section as it indicates the appropriate PPE to use when handling the substances. It also indicates regulatory levels for exposure limits, if they exist.
9. Physical and Chemical Properties: This section indicates the properties of the substance including appearance, odor (and threshold), pH, melting and boiling points, flash point, vapor pressure, density, viscosity and many other physical and chemical characteristics, if they exist.
10. Stability and Reactivity: This section gives information on stability of the substance as well as conditions to avoid.
11. Toxicological Information: This is another important section as it indicates levels at which the substance can become life-threatening based on the route of exposure. While the hazards section gives this information in general, this section is very specific, again, if the information is available.
12. Ecological Information: This section indicates the level at which the substance can have an environmental impact.
13. Disposal Considerations: This section is often not informative; follow the direction given by the Hazardous Waste Manager for disposal methods of unused or used product.
14. Transport Information: This section indicates the proper shipping name for the substance if it is regulated by the DOT.
15. Regulatory Information: This section lists some of the reporting requirements for the substance assuming that it is stored in quantities above certain thresholds.
16. Other Information: This section contains information that is not included in other sections. Often, this section includes the HMIS and NFPA classifications for the substance. GHS hazard statements may also appear here.

It is highly recommended that employees review the SDSs for all hazardous chemicals used in the area in which they work. The SDSs may be reviewed electronically so long as the most current version of the SDS is reviewed. SDSs may be designed to cover a group of hazardous materials where it is more appropriate to address the hazards of a process rather than the individual chemicals.

EMPLOYEE INFORMATION AND TRAINING

The availability of SDSs for employees is mentioned in the previous section. Employees must also be made aware of the location of this plan, which will reside on the EHS website. The location and contents of this plan will be explained in the hazard communication training module. The training also covers the sections of the SDS, an explanation of the pictograms and an explanation of the hazards associated with working with hazardous chemicals.

CONTRACTORS AND VENDORS (AND VISITORS)

When exposure to hazardous chemicals by contractors or vendors is foreseeable, the contents of this plan will be made available to them. A-STATE will also ensure that vendors and contractors are fully apprised of the hazards associated with any chemicals that are on-site with which the vendor or contractor are likely to come into contact. It is the responsibility of the contractor or vendor to notify A-STATE of any potential chemical hazards from materials that they bring as a result of their work on-site.

Visitors to the site that are not contractors or vendors shall not enter areas where hazardous materials are used without the escort of a trained A-STATE employee. If the visitor is escorted to an area where hazardous materials are used, the visitor must don the same level of personal protective equipment (PPE) as employees working in the area.

MEASURES TAKEN TO PROTECT WORKERS

Personal protective equipment (PPE) is provided to employees at no cost. PPE requirements are determined by a thorough hazard assessment as required by 29CFR1910.132. Chemical hazards in the lab will be handled under the procedures set forth in the chemical hygiene plan. For areas not covered by the chemical hygiene plan the appropriate controls will be used to reduce the likelihood of exposure.

Whenever possible, procedures involving hazardous materials should not be used. If the procedure must be performed, substituting less hazardous materials will be explored before implementing the procedure. When substitution and elimination are not possible, engineering controls should be used to separate the employee from the hazard whenever reasonable.

Access to areas where hazardous materials are used should be restricted to the minimum number of personnel possible. Where exposure to hazardous materials cannot be removed by any of the above measures, personal protective equipment (PPE) shall be used. All employees shall wear the appropriate PPE for the area. When a chemical is in use that may injure the eye, safety glasses, goggles or a face shield shall be used. When a chemical is in use that may cause injury to the skin, gloves compatible with the chemical hazard shall be used to protect the hands. A lab coat or other type of skin covering shall also be used to protect the body of the

employee. For chemicals where additional PPE may be required, employees shall follow the requirements set forth in the standard operating procedure for use of the hazardous material.