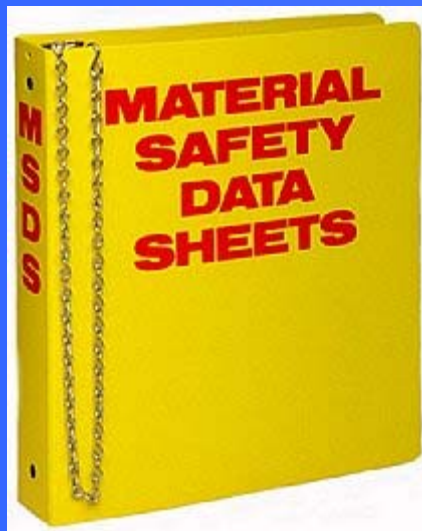


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2009

# NAU Hazard Communication Program



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## **1.0 Introduction to NAU's Hazard Communication Program**

Chemical exposure may cause or contribute to many serious health effects such as heart ailments, kidney and lung damage, sterility, cancer, burns, and rashes. Some chemicals may also be safety hazards and have the potential to cause fires, explosions and/or other serious accidents.

To ensure that employees know about the hazards of chemicals and how to protect themselves, the Occupational Safety and Health Administration (OSHA) issued the [Hazard Communication Standard \(29 CFR 1910.1200\)](#), also known as "The Right to Know" or "HazCom" standard.

Northern Arizona University's (NAU) Hazard Communication Program is designed to inform all employees who may be potentially exposed to hazardous chemicals on the job and reduce chemically-related injuries and illnesses. NAU's Written Hazard Communication Program is available online: [www.orc.nau.edu/manuals\\_policies.html](http://www.orc.nau.edu/manuals_policies.html)

## **2.0 Scope**

This program applies to all NAU employees/facilities in Flagstaff, Arizona except where exemptions are detailed below. Employees are covered by this standard if they:

- work in a non-laboratory setting where any known hazardous chemical is stored or used, and
- may be exposed to any hazardous chemical under normal working conditions or in a foreseeable emergency

## **2.1 Exemptions**

NAU Laboratory employees are covered by a separate, workplace-specific standard, Occupational Exposure to Hazardous Chemicals in Laboratories (29 CFR 1910.1450). The requirements of this standard and program components are covered in NAU's Lab Safety Manual and Chemical Hygiene Plan ([www.orc.nau.edu/CHP\\_Lab\\_Manual.pdf](http://www.orc.nau.edu/CHP_Lab_Manual.pdf)).

Also exempt from the Hazard Communication Standard are chemical products typically found in households, **if** they are not used more often than typically used in a household setting. Examples of these may include dish detergent occasionally used in a break room, or glass cleaner used to occasionally clean work surfaces.

## **3.0 Program Components and Responsibilities**

Under OSHA's Hazard Communication Standard, chemical manufacturers and importers are required to determine the hazards of each chemical they produce or sell and

communicate this hazard information to the user through labels and material safety data sheets (MSDS's).

NAU is required to:

- Identify and list the hazardous chemicals in the workplace;
- Ensure that all containers of hazardous chemicals are labeled and that MSDS's are requested for each chemical;
- Communicate hazard information to employees through labels, MSDS's and formal training programs, and
- Provide an up-to-date written Hazard Communication Program.

This document, developed by the Office of Regulatory Compliance (ORC), serves as NAU's written Hazard Communication Program. It provides guidance for reducing chemically-related illnesses and injuries at work and achieving compliance with OSHA's Hazard Communication standard, and will be updated annually and/or as needed.

### **3.1 Written Program**

All NAU employees must be made aware of the NAU Written Hazard Communication Program and its contents through their immediate Supervisor. An electronic version of this program is available online: [www.orc.nau.edu/manuals\\_policies.html](http://www.orc.nau.edu/manuals_policies.html)

### **3.2 Labeling and Other Forms of Warning**

Every container of hazardous chemicals is labeled by the manufacturer. The actual format may differ, but the labels must contain similar types of information. This makes it easy to find out at a glance about the chemical's possible hazards, and the basic steps you can take to protect yourself against those risks.

The label may use words or symbols to tell you:

1. Common name of the chemical.
2. Name, address, and emergency phone number of the company that made or imported the chemical.
3. A signal word. In order of seriousness, signal words are: Danger, Warning, and Caution.
4. Principal hazards:
  - a. Physical hazards such as explosiveness, reactivity, etc., (Will it explode, catch fire, reactive?).
  - b. Health hazards such as toxicity, etc., (Is it toxic? Could it cause cancer? Is it an irritant?).
5. Recommended precautionary measures. Basic protective clothing, equipment, and procedures that are recommended when working with this chemical.
6. First-aid instructions.
7. Proper handling and storage instructions.

### **3.3 Secondary Labeling System**

When transferring a chemical from one container to another, NAU employees are required to label the new container properly to include:

- identity of the chemical,
- appropriate hazard warnings

Various methods exist for labeling secondary containers, or re-labeling defaced containers. These methods are based on identifying hazard class. In order to promote consistency and ease of training in labeling, NAU has adopted the NFPA (National Fire Protection Association) Hazard Warning Diamond labeling system.

The NFPA Hazard Warning Diamond is based on the NFPA standard 704 rating system. This standard provides a readily recognized, easily understood system for identifying hazards and their severity using spatial, visual, and numerical methods to describe the relative hazards of a material. It addresses the health, flammability, instability and other relative hazards of a material which may be present short-term, acute exposures that are mostly like to occur as a result of fire, spill, or similar emergency.

If you are creating a label for a secondary container, or relabeling a defaced container, see Appendix A for further guidance. Much of the information needed to create a label can be found on the Material Safety Data Sheets (MSDS). If you have questions, ask your supervisor or consult with ORC (see Departmental Contacts in the front of this manual).

Empty containers which may be reused for other purposes must have their original labels removed or obliterated and relabeled as detailed above.

### **3.4 Material Safety Data Sheets (MSDS)**

Material Safety Data Sheets (MSDS's) are documents which provide more in-depth information regarding the chemical's potential hazards and information on how one should protect themselves from these hazards. Federal law requires that they be produced by chemical manufacturers, distributors, importers or other responsible parties, and supplied to their chemical users.

MSDS's are typically divided into nine sections which include the following details: product identification, ingredient information, physical data, fire and explosion hazard data, health hazard data, reactivity data, spill or leak procedures, special protection information, and special precautions.

MSDS's can be requested from the manufacturer or distributor by phone, FAX or on the internet. Many internet sites also have available collections of MSDSs. A list or inventory of hazardous chemicals must be maintained for all work areas. MSDS for all

the chemicals on the list must be readily available to chemical users (within an 8-hour work shift). Contact ORC if you have trouble obtaining an MSDS.

MSDS's are usually considerably more informative than labels and they are a valuable source of hazard information, but it is important to mention that the quality and depth of information on MSDS's varies widely. One should not assume that everything needed to be known is included in an MSDS. Searching for further hazard information may be advisable.

Employees are responsible for reading the MSDS before using a chemical substance.

### **3.5 Training**

Supervisors must provide or facilitate Hazard Communication training for their employees before they are assigned to work in areas where the possibility of exposure to hazardous chemicals exists, and whenever a new hazardous material is introduced into their workplace. ORC is available to assist supervisors with this task (see Departmental Contacts in the front of this manual). Under the Hazard Communication Standard, affected employees must receive training on the following:

- Location of the written Hazard Communication Program, list of hazardous materials and location of material safety data sheets
- Description of the jobs where these hazards are present and special instruction for non-routine tasks (see Section 3.5.1).
- The physical and health hazards of chemicals they are exposed to in the workplace.
- Personal protection requirements for chemicals in the workplace.
- Ways to observe and detect the presence of hazardous chemicals in the workplace.
- Labeling requirements and explanation of the NFPA labeling system.

Training must be easy to understand and communicated orally, either in person or through audio or audiovisual means.

Additional employee training concerning workplace hazards when:

- Chemicals with new hazards are introduced into the workplace.
- Equipment changes are made which could cause new or increased employee exposure.
- Procedures and work practices are introduced or changed which could cause new or increased employee exposure.

- Employees are transferred from one work area to another where different hazards may be present.

### **3.5.1 Hazardous, Non-Routine Tasks**

Supervisors planning to do non-routine tasks involving the use of hazardous chemicals (jobs that are not routine for an employee because of infrequency, location, or type, for example, the cleaning of tanks) must consult with ORC prior to initiating work to discuss the hazards associated with the performance of these tasks. **Supervisors** must ensure that employees are informed of the hazards and required control measures, including safe work practices and proper personal protective equipment.

### **3.6 Documentation**

Supervisors must keep adequate documentation to show that Hazard Communication information and training has been provided. Meeting minutes, training evaluations, certification sheets, memoranda, training sign-in sheets all constitute training documentation. NAU uses the Hazard Communication Sign-Off Sheet, form F:NAU:CHM:4 (Appendix B).

### **4.0 Responsibilities**

The responsibility for an effective Hazard Communication Program requires the cooperation of multiple departments at NAU.

#### **4.1 NAU**

As an employer, NAU must:

- Provide a written Hazard Communication Program.
- Inform employees about the Hazard Communication Standard.
- Explain how it's being put into effect in their workplace.
- Provide information and training on hazardous chemicals in the workplace

These requirements are met by the assignments of responsibility detailed in the following subsections.

#### **4.2 Supervisors**

Supervisors are most familiar with the tasks performed and products used within their departments. Therefore, they are responsible for:

- providing employees with hazard communication training
- documenting that training
- working with the ORC during periodic departmental compliance reviews
- maintaining a list of hazardous chemicals used by their employees

- maintaining an MSDS collection for every hazardous chemical on their departmental list

### **4.3 Employees**

NAU Employees who work with hazardous chemicals are responsible for:

- Attending required training
- Reading MSDSs prior to using hazardous chemicals
- Following safety instructions contained in MSDSs
- Following NAU chemical labeling procedures
- Informing their Supervisor when adequate labeling or MSDSs are missing

### **4.4 Office of Regulatory Compliance (ORC)**

The ORC is responsible for:

- Development and revision of the Hazard Communication Program
- Compliance review of NAU Departments
- Consultation as needed in matters of Hazard Communication Training, MSDS interpretation, labeling, and non-routine tasks.

### **5.0 Locations of the lists of Hazardous Chemicals on Campus**

List of hazardous chemicals known to be present in the NAU workplace are maintained on-site by individual Departments.

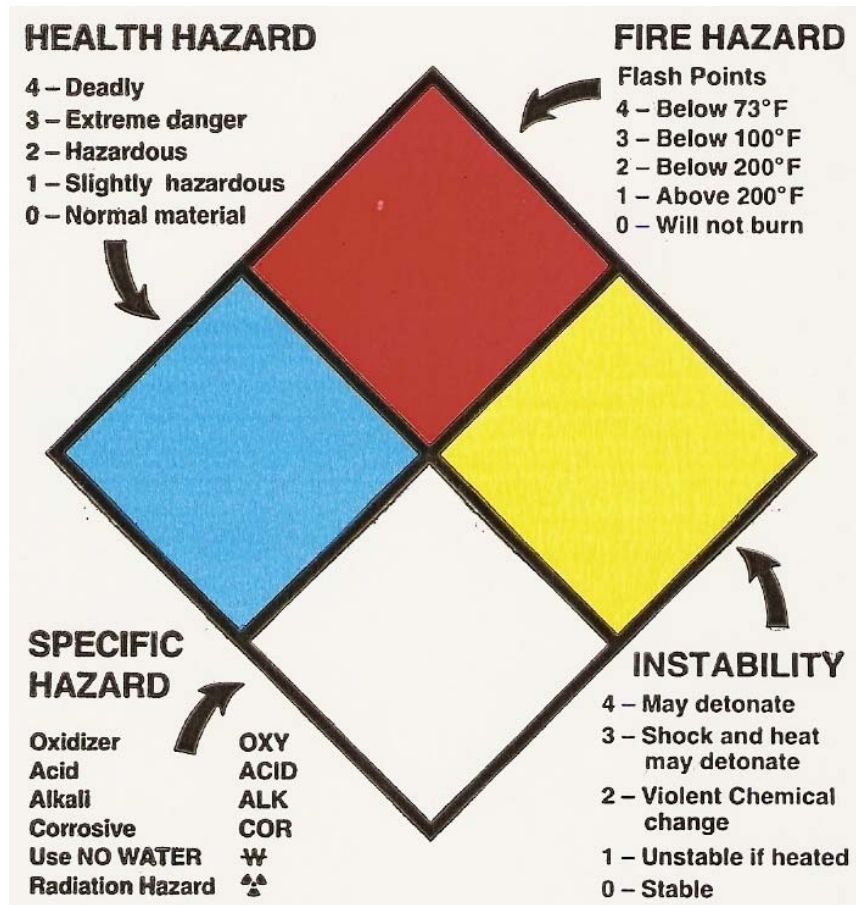
### **6.0 Contractors**

All contractor coordination with respect to health and safety programs is conducted through NAU Facility Operations (see departmental contacts in the front of this manual). Contractors bringing hazardous chemicals on site are responsible for providing MSDS's with appropriate hazard information. NAU employees working in the vicinity of the contractor's work site may review the contractor's MSDS's. In turn, MSDS's of NAU's chemicals used at the work site may be reviewed by the contractor's employees.

## Appendix A: NFPA Hazard Warning Diamond

The National Fire Protection Association (NFPA) Hazard Warning Diamond is based on the NFPA standard 704 rating system. This standard provides a readily recognized, easily understood system for identifying hazards and their severity using spatial, visual, and numerical methods to describe the relative hazards of a material. It addresses the health, flammability, instability and other relative hazards of a material which may be present short-term, acute exposures that are mostly like to occur as a result of fire, spill, or similar emergency.

NAU has adopted this system of labeling chemicals. Many chemicals will arrive on campus with an NFPA Hazard Warning Diamond. In the event that a chemical is transferred to a secondary container, this system of labeling must also be used. MSDSs are a good source of information when determining hazard ratings for a chemical. Blank NFPA Hazard Warning Diamond labels are available through ORC and various vendors.



Appendix B: Hazard Communication Sign-off



F:NAU:CHM:4  
Date: 4/28/09  
Supersedes: None  
Page 1 of 1

### Hazard Communication Signoff 29 CFR 1910.1200

Name: \_\_\_\_\_ Date: \_\_\_\_\_  
(Please print legibly)

ID Number: \_\_\_\_\_

I hereby acknowledge receipt of training on Northern Arizona University (NAU) Hazard Communication Program. I understand that I am responsible to comply with NAU policies on Hazard Communication and I also understand that ANY problem with the Hazardous Chemicals must be reported immediately to my supervisor and/or to the Office of Regulatory Compliance.

\_\_\_\_\_  
Employee Date

\_\_\_\_\_  
Supervisor Date  
(Person responsible for training)

Training included the following material:

- Location of the written Hazard Communication Program (orc.nau.edu), list of hazardous materials and location of material safety data sheets
- Description of the jobs where these hazards are present and special instruction for non-routine tasks.
- The physical and health hazards of chemicals they are exposed to in the workplace.
- Personal protection requirements for chemicals in the workplace.
- Ways to observe and detect the presence of hazardous chemicals in the workplace.
- Labeling requirements and explanation of the NFPA labeling system.