GEOSCIENCES AND ENGINEERING DIVISION ADMINISTRATIVE PROCEDURE	Proc. AP–016 Revision 3 Chg 0 Page 1 of 9

Title: **HAZARD COMMUNICATION PROGRAM**

EFFECTIVITY

Revision 3 of this procedure became effective on TBD. This procedure consists of the pages and changes listed below.

Page No.	Change No.	Date Effective
All	0	10/21/2005

Supersedes Procedure No. AP–016, Revision 2, Chg 1 dated 09/09/2004

Approvals

Prepared by	Date	Approved by	Date
Bradley a Werling	10-21-05		10/21/05

HAZARD COMMUNICATION PROGRAM

1. PURPOSE

The purpose for the hazard communication program is to provide employees the necessary health and safety information regarding hazardous chemicals in the work place. Occupational Safety and Health Administration standards (29 CFR 1910.1200) require that information concerning chemical hazards in the workplace be transmitted to employees.

2. RESPONSIBILITIES

2.1 Managing of the hazard communication program for this cost center

- Bradley Werling—Building 57, 522-6565.

2.2 Providing training and information

- Supervisors
- Division Chemical Hygiene Officer
- Division Safety Representative
- Southwest Research Institute® (SwRI®) Department of Safety and Industrial Hygiene

2.3 Maintaining of the chemical inventory and material safety data sheets for each laboratory in Buildings 51 and 57:

- Don Bannon—Building 51 laboratories.
- Yi-Ming Pan—Building 57 laboratories: L101, L105, L111, and L113.
- Bradley Werling—Building 57 laboratories: L102, L104, and L106.

2.4 Ensuring proper labeling on containers

- Division Chemical Hygiene Officer

3. METHODS OF PROVIDING INFORMATION

Information about chemical hazards from routine tasks, nonroutine tasks, and unlabeled pipes will be provided by the following methods

- Training from Geosciences and Engineering Division (Division) supervisors, the Division Chemical Hygiene Officer, the Division Safety Representative, and the SwRI Safety Department
- Administrative procedures such as the Laboratory Chemical Hygiene Plan (AP–010) and the Hazardous Communication Program (AP–016).
- Material safety data sheets
- Warning signs

4. LABELING AND OTHER FORMS OF WARNING

A hazardous chemical poses a physical or health hazard. Examples of physical hazards include fire, explosion, and corrosion. Examples of health hazards include carcinogens, toxic agents, irritants, and reproductive toxins. Health hazards can be acute and/or chronic.

4.1 All hazardous chemical containers will be labeled, tagged, or marked with the following required information:

- Identity of the hazardous chemical(s)
- Hazard warnings
- Name of the manufacturer, importer, or other responsible party (optional on staff-labeled chemical containers).

4.2 Manufacturer's labels will be left intact and legible.

4.3 Containers received without appropriate forms of warning will be properly labeled. The receiving cost center or user will take action to either label the material, obtain a label from the manufacturer, or return the material.

4.4 The hazardous materials identification guide system will be used for hazardous chemicals that require labeling by the staff. The hazardous materials identification guide system was developed by Lab Safety Supply Inc. See Appendix A for an explanation of the hazardous materials identification guide labeling system.

4.5 Portable containers, such as those used to transfer or measure chemicals, do not require labels if intended for immediate use. Unlabeled containers will not be left unattended under any circumstances.

5. MATERIAL SAFETY DATA SHEETS

5.1 Material safety data sheets will be available to employees before or upon the arrival of hazardous chemicals at the workplace.

5.2 Material safety data sheets will be readily accessible to employees. They are available within the Department of Safety and Industrial Hygiene portion of the SwRI intranet <http://i2net.swri.edu/services/default.htm.> Each group of laboratories will maintain a material safety data sheet for each chemical on its chemical inventory. The Division laboratories are divided into the following four groups in the material safety data sheet database:

- Bldg. 51 (all)
- Bldg. 57 Labs 102 and 104
- Bldg. 57 Lab 106 (Geochemistry group labs)
- Bldg. 57 Lab 111 (Corrosion Science and Process Engineering group labs)

6. CHEMICAL INVENTORY

Each group of laboratories will maintain a current chemical inventory. The chemical inventories will be in the following locations.

- Building 57 laboratories L101, L105, L111, and L113
  Chemical inventory located in L111

- Building 57 laboratories L102, L104, and L106
  Chemical inventory located in L106

- Building 51 laboratories
  Chemical inventory located in the bookcase on the south side of the front lab

7. WRITTEN HAZARDOUS COMMUNICATIONS PROGRAM

7.1 The SwRI written hazardous communications program is located in Section 2.4 of the Safety Policies and Procedures Manual. The Safety Policies and Procedures Manual is available on the SwRI intranet (http://i2net/) in the Documents section.

7.2 The Division written hazardous communications program (AP–016) is available on the division's QA website (http://tuti/qa/) in the administrative procedure section.

7.3 Each group of laboratories will maintain a hard copy of the Division written hazardous communications program. The hard copies will be located in the following areas.

- Building 57 laboratories L101, L105, L111, and L113.
  Written hazardous communications program located in L111

- Building 57 laboratories L102, L104, and L106
  Written hazardous communications program located in L106

- Building 51 laboratories (all)
  Written hazardous communications program located in the bookcase on the south side of the front lab.

8 EMPLOYEE TRAINING AND INFORMATION

8.1 Training will be conducted at the time of an employee's initial assignment. Initial training will be conducted in two parts. The first part will be conducted via the computer based course Right-to-Know—Course Number 6700050. The second part will consist of a training session conducted by the Chemical Hygiene Officer or designee.

8.2 Additional training will be provided by the immediate supervisor, the principal investigator, the Chemical Hygiene Officer or the safety representative whenever a new chemical that poses a significantly greater hazard or a different type of hazard is introduced into the work area.

8.3 Employees will receive training in the following:

- Methods that may be used to detect the presence or release of hazardous chemicals

- Physical and health hazards of chemicals

- Employee protection measures

- Details of the hazard communication program

8.4 Employees will be provided the following information:

- Operations where hazardous chemicals are present
- Location and availability of the written hazard communications program
- Location and availability of chemical inventory lists
- Location and availability of material safety data sheets

9. RECORD KEEPING

9.1 Hazard communication programs will be updated annually or as new hazards enter the workplace.

9.2 A copy of the Division hazard communications program (as updated) will be forwarded to the SwRI Safety Department.

9.3 Hazard communication training records will be maintained by the Division Director of QA.

APPENDIX: EXPLANATION OF THE HAZARDOUS MATERIALS IDENTIFICATION GUIDE LABELING SYSTEM

The hazardous materials identification guide label consists of four color-coded categories. The blue color represents the health hazard of the material. The red color represents the flammability of the material. The yellow color represents the reactivity of the material. The white color represents the protective equipment to be used when handling the material.

Figure 1 contains an example of a blank hazardous materials identification guide label. The first three categories use a numbering system to rank the hazard level of the material. The numbers range from zero to four and represent minimal, slight, moderate, serious, and extreme levels, respectively. Table 1 contains a detailed definition of each hazard level for each of the three categories. The fourth category uses a letter to indicate the protective equipment required for handling the material. Table 2 identifies the protective equipment associated with each letter. The information required for a hazardous materials identification guide label can be found in the material safety data sheets. In some cases, the material safety data sheets will explicitly give the hazardous materials identification guide ranking information. However, in other cases, the hazardous materials identification guide ranking information is not explicitly given and must be derived from information within the material safety data sheets.

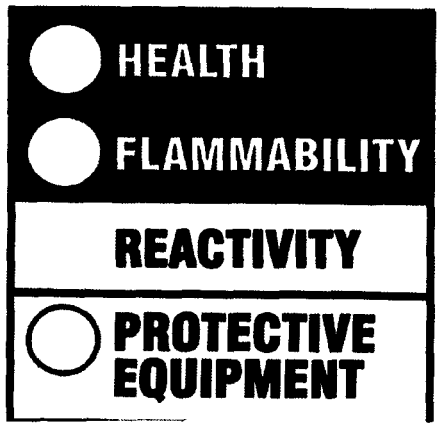

Figure 1. Blank Hazardous Materials Identification Guide Label From Lab Safety Supply Inc.

Table 1. Hazardous Materials Identification Guide Hazard Levels for the Health, Flammability, and Reactivity Categories.

Hazard Level	Health	Flammability	Reactivity
Extreme–4	Highly toxic—May be fatal on short term exposure. Special protective equipment required.	Extremely flammable gas or liquid. Flash point below 73 °F.	Explosive at room temperature.
Serious–3	Toxic—Avoid inhalation or skin contact.	Flammable–Flash point 73 °F to 100 °F.	May explode if shocked, heated under confinement, or mixed with water.
Moderate–2	Moderately toxic—May be harmful if inhaled or absorbed.	Combustible–Requires moderate heating to ignite. Flash point 100 °F to 200 °F.	Unstable, may react with water.
Slight–1	Slightly toxic—May cause slight irritation.	Slightly combustible–Requires strong heating to ignite.	May react if heated or mixed with water.
Minimal–0	All chemicals have some degree of toxicity.	Will not burn under normal conditions.	Normally stable, does not react with water.

Source: Lab Safety Supply Inc.

Table 2. Hazardous Materials Identification Guide Protective Equipment Guide. Each Letter Represents a Specific Level of Protective Equipment as Identified in This Table.

	A	B	C	D	E	F	G	H	I	J	K	X*
Safety Eyewear	✔	✔	✔		✔	✔	✔	✔	✔	✔		
Gloves		✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	
Apron			✔	✔		✔		✔		✔		
Face Shield				✔								
Dust/Mist Respirator					✔	✔						
Vapor Respirator							✔	✔				
Boots											✔	
Dust & Vapor Respirator									✔	✔		
Full Suit											✔	
Supplied-Air Respirator											✔	

*Ask your supervisor for special handling instructions
Source: Lab Safety Supply Inc.