

College Procedure: 403.11 – Hazard Communication Plan

Policy Reference: 403 – Workplace Safety
Responsible Department: Facilities and Public Safety
Approval Authority: Cabinet
Procedure Owner: Vice President, Facilities and Public Safety
Effective Date: 12/01/2023

Version Number: 1
Legal Counsel Reviewed (yes/no): No
Scope: College-wide

Reason for Procedure

This written Hazard Communication (HazCom) plan has been prepared in accordance with the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (HCS), 29 CFR 1910.1200.

The purpose of the HazCom plan is to inform employees of the hazards associated with chemicals in their workplace and provide guidance in the safe use and handling of hazardous materials used on campus. This document outlines departmental responsibilities, HazCom components, and the minimum employee training requirements.

This plan is intended to serve all faculty, staff, and other employees on campus using hazardous materials. Examples of hazardous materials include paints, cleaning solvents, photographic developing chemicals, art supplies, and adhesives.

The Procedure

Responsibilities

Environmental, Health, Safety Department

- Develop, implement, evaluate, and revise the HazCom plan to ensure compliance
- Assist supervisors and managers in identifying hazardous substances present in the work area and evaluating potential hazards
- Assist departments with employee training, as requested by departments
- Recommend appropriate engineering controls, administrative controls, and personal protective equipment (PPE)

Managers and Supervisors

- Notify all employees of the purpose and intent of the HazCom plan
- Identify hazardous materials in their work area that may pose a potential or physical risk to employees
- Provide specific hazard training to employees in department
- Ensure that affected employees are trained in general hazard communication
- Contact EHS when new chemical(s) are introduced to department
- Actively support and implement procedures in accordance to the HazCom plan within each department
- Ensure an environment where all employees are encouraged to follow this HazCom plan
- Ensure employees are aware of the HazCom plan, instructed on the details of implementation, and provided with equipment and methods of control
- Contact EHS for technical assistance and to evaluate health and safety concerns within their department

Kirkwood Employees

- Comply with the HazCom plan and any further safety recommendations provided by supervisors and/or EHS regarding Hazard Communication
- Know, recognize, and understand the hazards and precautionary procedures for the hazardous materials used in their work area
- Conduct assigned tasks in a safe manner, wear appropriate PPE, and obtain training and/or information prior to using unfamiliar chemicals
- Know the location and use the information provided by the SDS

Specifications for Contracted Work or Hiring Contractors

Inform contractors of any hazardous chemicals located in the contracted work area and the precautionary measures to be taken during normal operations and foreseeable emergencies

Inform contractors that they are required to maintain SDSs on-site for all hazardous materials that are brought onto Kirkwood property

Hazardous Chemicals

OSHA defines hazardous chemicals as any chemical that poses a physical hazard or health hazard. The descriptions below provide a brief explanation of hazardous chemicals. See OSHA 29 CFR 1910.1200 for additional information on hazardous chemicals.

Table 1 Hazardous Chemicals

Physical Hazard Characteristics	Health Hazard Characteristics
Combustible	Carcinogens
Compressed Gasses	Toxic of Highly Toxic Agents
Explosive	Reproductive Toxic
Flammable	Irritants
Organic Peroxide	Corrosives
Oxidizer	Sensitizers
Pyrophoric (spontaneous ignition, or exposure to air)	Toxic Agents or substances that damage or destroy bodily organs
Unstable	n/a
Water Reactive	n/a

Chemical Inventory List

A chemical inventory list is an OSHA requirement. A chemical inventory is a list of hazardous chemicals with information pertaining to the amount of the chemical and its location. A comprehensive inventory list of every on-site hazardous chemical is housed in Campus Optics, an online safety platform. The chemical inventory:

- Includes chemicals used in the course of business or academics, any chemicals used by ancillary departments (landscaping, maintenance, etc.), and chemicals that are not currently in use but still stored on-site
- Is updated whenever a new chemical is brought on-site
- Updated to account for chemicals in the existing inventory that are newly found to be hazardous or not hazardous according to manufacturer, distributor, or importer of HazCom chemical classifications

It is the responsibility of each department to conduct a chemical inventory in their area. Each department must designate and inform EHS of at least one contact person for chemical inventory verification.

Safety Data Sheets

Safety Data Sheets (SDS), formally referred to as Material Safety Data Sheets (MSDS) are considered to be a source for employee exposure records and must be maintained for at least 30 years, unless records of the chemical name, where and how it was used are maintained for at least 30 years. SDSs are maintained for all hazardous chemicals present at Kirkwood. SDS's must comply with government regulations and follow the standardized 16-section format. Kirkwood does have material no longer manufactured that follows the old MSDS format.

All employees have unobstructed access to the necessary SDS's in their work areas, during their work shifts, satisfying employee right-to-know-and-understand requirements. SDS's are managed through CampusOptics. Should an SDS link not work or the SDS does not appear to be the correct format, contact EHS.

When a new chemical is introduced to a department, the department is responsible for notifying EHS of the type of chemical, amount kept on hand, and the SDS sheet.

Should departments desire physical SDS binders, it is up to the department to maintain the binder, ensuring the most recent SDS's are included and old versions are properly archived.

Container Labeling

Each employee is responsible for ensuring containers in their work area are accurately labeled in accordance with the requirements of 1910.1200(f) of OSHA's Hazard Communication Standard. Questions can be directed to EHS.

Labels must be prominently and clearly displayed in English – supplemental information in other languages can be provided as needed to account for multilingual needs of our diverse workforce. Container labels must be kept legible and are capable of being seen without additional visual aid (excluding corrective lenses and contacts). Original labeling on containers cannot be removed, defaced, covered, or altered in any way unless labeling has become illegible.

Secondary Labeling

Secondary container labels are required to be affixed to every container:

- Where manufacturer-original shipped labels have become illegible
- Removed and no replacement shipped labels are available
- Where hazardous chemicals are decanted or otherwise transferred from an original manufacturer-provided container into an approved alternative container.

Secondary labeling must be labeled with the same label shipped on containers or with a product identifier and words, pictures, symbols, or combination thereof, which provide at least general

information regarding the physical and health hazards of the chemicals. Alternative labeling systems such as the Hazardous Material Information System (HMIS) and the National Fire Protection Association (NFPA) 704 Hazard Rating may be used. However, the information supplied on these labels must be consistent with the revised HCS.

Secondary container labels are not needed if contents to be used immediately by an individual performing the transfer, with no possibility of other employees encountering the unlabeled containers while hazardous chemicals are present inside. Any chemicals transferred from original shipped containers to secondary containers will be labeled in accordance with the secondary container labeling procedures previously described in this plan.

Training

All employees who work in areas where hazardous chemicals are used or maintained must receive HazCom training. Employees will be trained on all required elements of OSHA's Hazard Communication Standard, Written HazCom Program, SDS's, workplace labels, and in the proper storage, handling, and use of chemicals in their environments.

Training must occur at initial employment and whenever a new hazardous chemical is introduced to the work area. Department specific training will be the responsibility of the department. Training must be documented and records retained for a minimum of three years. Training (at a minimum) shall include:

- Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area (i.e. air monitoring devices, visual appearance, or odor)
- The physical and health hazards of chemicals present in the work area
- The measures employees can take to protect themselves from the hazards (i.e. appropriate work practices, emergency procedures, PPE)
- Details of the HazCom Program include identifying operations where hazardous chemicals are present, the location and availability of the written program with the list of hazardous chemicals

Definitions

Chemical: ANY SUBSTANCE OR MIXTURE OF SUBSTANCE. CHEMICALS CAN COME IN A VARIETY OF FORMS: SOLIDS, LIQUID, GASES, DUSTS, MISTS, FUMES.

Container: ANY BAG, BARREL, BOTTLE, BOX, CAN, CYLINDER, DRUM, REACTION VESSEL, STORAGE TANK, OR THE LIKE THAT CONTAINS A HAZARDOUS CHEMICAL.

Exposure or Exposed: ANY SITUATION WHERE IN THE COURSE OF EMPLOYMENT AN EMPLOYEE IS SUBJECTED TO, OR POTENTIALLY SUBJECTED TO, A CHEMICAL THAT IS A PHYSICAL OR HEALTH HAZARD. THIS CAN OCCUR BY INGESTION, INHALATION, ABSORPTION OR OTHER CONTACT.

Global Harmonized System (GHS): AN INTERNATIONAL HAZARD COMMUNICATION SYSTEM ADOPTED BY THE UNITED NATIONS (UN).

Hazard Category: THE DIVISION OF CRITERIA WITHIN EACH HAZARD CLASS. THESE CATEGORIES COMPARE HAZARD SEVERITY WITHIN A HAZARD CLASS AND SHOULD NOT BE TAKEN AS A COMPARISON OF HAZARD CATEGORIES MORE GENERALLY.

Hazard Class: THE NATURE OF THE PHYSICAL OR HEALTH HAZARDS (I.E. FLAMMABLE SOLID, CARCINOGEN).

Hazard not otherwise classified (HNOC): AN ADVERSE PHYSICAL OR HEALTH EFFECT IDENTIFIED THAT DOES NOT MEET THE SPECIFIED CRITERIA FOR THE PHYSICAL AND HEALTH HAZARD CLASSES ADDRESSED IN THIS SECTION.

Hazard Statement: A STATEMENT ASSIGNED TO A HAZARD CLASS AND CATEGORY THAT DESCRIBES THE NATURE OF THE HAZARD(S) OF A CHEMICAL, INCLUDING, WHERE APPROPRIATE, THE DEGREE OF HAZARD.

Hazardous Chemical: ANY CHEMICAL/SUBSTANCE/MIXTURE WHICH IS CLASSIFIED AS A PHYSICAL HAZARD OR A HEALTH HAZARD, A SIMPLE ASPHYXIANT, COMBUSTIBLE DUST, PYROPHORIC GAS, OR HNOC.

Health Hazard: A SUBSTANCE FOR WHICH THERE IS STATISTICALLY SIGNIFICANT EVIDENCE BASED ON AT LEAST ONE STUDY CONDUCTED IN ACCORDANCE WITH ESTABLISHED SCIENTIFIC PRINCIPLES THAT ACUTE OR CHRONIC HEALTH EFFECTS MAY OCCUR IN EXPOSED EMPLOYEES.

Label: AN APPROPRIATE GROUP OF WRITTEN, PRINTED OR GRAPHIC MATERIAL DISPLAYED ON OR AFFIXED TO CONTAINERS OF HAZARDOUS CHEMICALS OR THE OUTSIDE PACKAGING.

Mixture: A COMBINATION OR A SOLUTION COMPOSED OF TWO OR MORE SUBSTANCES IN WHICH THEY DO NOT REACT.

OSHA: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

Personal Protective Equipment (PPE): DEVICES WORN BY THE WORKER TO PROTECT AGAINST HAZARDS IN THE ENVIRONMENT. EXAMPLES: SAFETY GLASSES, RESPIRATORS, STEEL-TOED SHOES.

Physical Hazard: A CHEMICAL THAT IS CLASSIFIED AS POSING ONE OF THE FOLLOWING HAZARDOUS EFFECTS: EXPLOSIVE; FLAMMABLE (GASSES, AEROSOLS, LIQUID, OR SOLIDS); OXIDIZER (LIQUID, SOLID, OR GAS); SELF-REACTIVE; PYROPHORIC (LIQUID OR SOLID); SELFHEATING; ORGANIC PEROXIDE; CORROSIVE TO METAL; GAS UNDER PRESSURE; OR IN CONTACT WITH WATER EMITS FLAMMABLE GAS.

Pictogram: A COMPOSITION THAT MAY INCLUDE A SYMBOL PLUS OTHER GRAPHIC ELEMENTS INTENDED TO CONVEY SPECIFIC INFORMATION ABOUT THE HAZARDS OF A CHEMICAL. OSHA 29 CFR 1910.1200 HAS EIGHT MANDATORY AND ONE NON-MANDATORY PICTOGRAMS (APPENDIX 1.1).

Precautionary Statement: A PHRASE THAT DESCRIBES RECOMMENDED MEASURES THAT SHOULD BE TAKEN TO MINIMIZE OR PREVENT ADVERSE EFFECTS RESULTING FROM EXPOSURE TO A HAZARDOUS CHEMICAL OR IMPROPER STORAGE OR HANDLING.










Safety Data Sheet (SDS): A WRITTEN OR PRINTED MATERIAL CONCERNING A HAZARDOUS CHEMICAL THAT IS PREPARED IN ACCORDANCE WITH THE GHS. SDSs ARE A STANDARDIZED, 16-SECTION FORMAT (APPENDIX 1.2).

Signal Word: A WORD USED TO INDICATE THE RELATIVE LEVEL OF SEVERITY OF HAZARD AND ALERT THE READER TO A POTENTIAL HAZARD ON THE LABEL. ACCEPTABLE SIGNAL WORDS: “WARNING” AND “DANGER”.

Use: TO PACKAGE, HANDLE, REACT, EMIT, EXTRACT, GENERATE AS A BYPRODUCT, OR TRANSFER

Work Area: A ROOM OR DEFINED SPACE IN A WORKPLACE WHERE HAZARDOUS CHEMICALS ARE PRODUCED OR USED, AND WHERE EMPLOYEES ARE PRESENT

Workplace: AN ESTABLISHMENT, JOB SITE, OR PROJECT AT ONE GEOGRAPHICAL LOCATION CONTAINING ONE OR MORE WORK AREAS

HCS PICTOGRAMS AND HAZARDS			
Health Hazard  <ul style="list-style-type: none"> • Carcinogen • Mutagenicity • Reproductive Toxicity • Respiratory Sensitizer • Target Organ Toxicity • Aspiration Toxicity 	Flame  <ul style="list-style-type: none"> • Flammables • Pyrophorics • Self-Heating • Emits Flammable Gas • Self-Reactives • Organic Peroxides 	Exclamation Mark  <ul style="list-style-type: none"> • Irritant (skin and eye) • Skin Sensitizer • Acute Toxicity (harmful) • Narcotic Effects • Respiratory Tract Irritant • Hazardous to Ozone Layer (Non Mandatory) 	
Gas Cylinder  <ul style="list-style-type: none"> • Gases Under Pressure 	Corrosion  <ul style="list-style-type: none"> • Skin Corrosion/Burns • Eye Damage • Corrosive to Metals 	Exploding Bomb  <ul style="list-style-type: none"> • Explosives • Self-Reactives • Organic Peroxides 	
Flame Over Circle  <ul style="list-style-type: none"> • Oxidizers 	Environment (Non Mandatory)  <ul style="list-style-type: none"> • Aquatic Toxicity 	Skull and Crossbones  <ul style="list-style-type: none"> • Acute Toxicity (fatal or toxic) 	

Revision Log

Table 2 Revision Log

Version Number	Date Approved	Approved by	Description of Change
1	11/28/2023	Cabinet	New procedure