

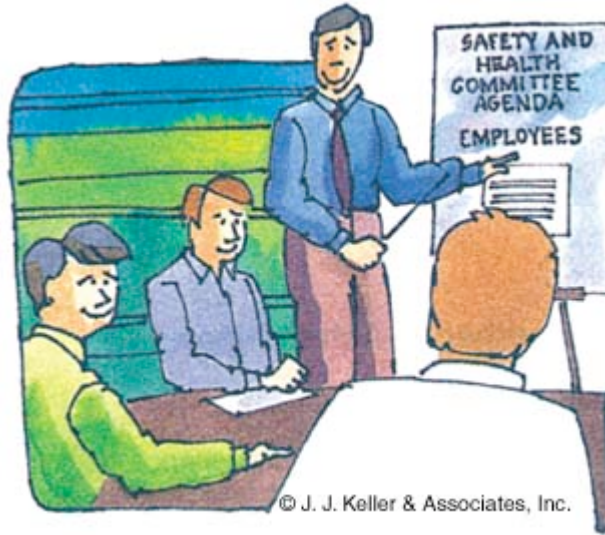
*“Know the Safety Culture”*

**EMBRY-RIDDLE AERONAUTICAL UNIVERSITY**

**COMPREHENSIVE SAFETY  
PLAN**

**7. INVENTORY CONTROL PROGRAM**

**“Working safely is a condition of employment at this university”**



**COMPREHENSIVE SAFETY  
PLAN**

*“Live the Safety Culture”*

7. SUBJECT: Hazard Chemical Inventory Control Program

**REGULATORY STANDARD:** OSHA - 29 CFR 1910

**BASIS:** About 32 million workers are potentially exposed to one or more chemical hazards on a daily basis. There are an estimated 575,000 existing chemical products, and hundreds of new ones being introduced annually. This poses a serious problem for exposed workers and their employer. The OSHA Hazard Communication Standard establishes uniform requirements to make sure that the hazards of all chemicals imported into, produced, or used in U.S. workplaces are evaluated, and that this hazard information is transmitted to all affected workers.

**DEFINITIONS:**

a. **EMPLOYEE:** Any person employed on or after the effective date of this procedure who is, has been, or may be exposed under normal operating conditions or foreseeable emergencies to any toxic substance in the employer's workplace.

b. **EXPOSE (OR) EXPOSURE:** Any situation arising from or related to the work operation of an employer in which an employee may inhale, absorb through the skin or eyes, accidentally ingest, or otherwise come into contact with a toxic substance.

c. **OSHA TOXIC AND HAZARDOUS SUBSTANCE LIST:** A compilation of toxic substances that are to be subject to the provisions of 29 CFR PART 1910 subpart Z.

d. **HAZARDOUS WASTE:** Waste materials generated as a byproduct of using toxic chemicals are classified as hazardous waste and must be disposed of in a prescribed manner. Common characteristics include:

(1) **Ignitability:** Materials with a flashpoint of less than 140 degrees F and/or be an aqueous (resemble water) solution with an alcohol solution content equal to or greater than 24 percent.

(2) **Corrosivity:** A liquid material with a pH of less than 2.0 or greater than 12.5.

(3) **Reactivity:** Materials that undergo rapid or violent reaction when mixed that may be harmful to individuals or the environment.

e. **MATERIAL SAFETY DATA SHEET (MSDS):** Written or printed material concerning a toxic substance that sets forth the following information:

(1) The chemical and common name of the toxic substance.

(2) The hazards or other risks in the use of the toxic substance, including:

(A) Potential for fire, explosion, corrosivity and reactivity.

(B) Known acute and chronic health effects of risks from exposure to the toxic substance, including those medical conditions which are generally recognized as being aggravated by exposure to the toxic substance.

(C) Primary routes of entry and symptoms of overexposure.

(3) The proper precautions, handling practices, necessary personal protective equipment, and other safety precautions in the use of or exposure to the toxic substances, including appropriate emergency treatment in case of overexposure.

(4) The emergency procedure for spills, fire, disposal, and first aid.

(5) A description of the known specific potential health risks posed by the toxic substance, which description is written in lay terms and is intended to alert and person who reads this information.

(6) The year and month, if available, that the information was compiled and the name address, and emergency telephone number of the manufacture responsible for preparing the information.

f. **POTENTIALLY HAZARDOUS MATERIAL (PHM):** All chemical compositions having the potential for harming individuals, property or the environment.

g. **PRINCIPLE OFFICE OF RESPONSIBILITY (POR):** The office exercising primary responsibility for the execution of this procedure.

h. **TOXIC SUBSTANCE:** Any chemical substance or mixture in a gaseous, liquid, or solid state, if such substance or mixture:

(1) Appears on any "Toxic Substance List" promulgated by the Department of Labor and Employment Security or any state agency authorized to publish it.

(2) Is manufactured, produced, used, applied, or stored in the work place.

(3) Causes a significant risk to safety or health during, or as a proximate result of, any customary or reasonable foreseen handling or use.

- i. **WORK AREA:** A room or defined space in a workplace where toxic substances are produced, used, or applied and where employees are present in the course of their employment.

**RESPONSIBILITY:** The University Safety Officer is Dan McCune. He is solely responsible for all facets of this program and has full authority to make necessary decisions to ensure success of the program. The Safety Officer will develop written detailed instructions covering each of the basic elements in this program and is the sole person authorized to amend these instructions. Embry-Riddle has expressly authorized the Safety Officer to halt any operation of the company where there is danger of serious personal injury.

**PLAN RESPONSIBILITY:** **The Laboratory Chemical Hygiene Officer for the Prescott Campus Chemical Laboratory is Dr. Nordstrom and for Daytona Beach Chemical Laboratory is Marlene Coslow. He/she is solely responsible for all facets of this Plan and has full authority to make necessary decisions to ensure success of the Plan.** The Chemical Hygiene Officers working with the University Safety Officer are authorized to amend these instructions and is authorized to halt any operation of the university where there is danger of serious personal injury.

Responsibilities include:

- a. Coordinating Plan requirements with administrators and other employees to develop and implement appropriate chemical inventory policies and practices.
- b. Assist in monitoring the procurement and use of chemicals by Embry-Riddle, including determining that facilities and training levels are adequate for the chemicals in use.
- c. Research, interpret and disseminate federal, state and local guidelines pertaining to RTK and PHM within the University system.
- d. Review, at least annually on the anniversary of this procedure, applicable federal, state and local regulations to modify, update and/or delete appropriate sections of the University procedure.
- e. Provide notices of changes to this procedure to all applicable departments.

**The Director of Purchasing will:**

- a. Ensure all purchase orders for PHM specifically request a MSDS accompany the shipment.
- b. Ensure purchase orders are coordinated with ordering departments for the minimum quantity needed to meet known demands. Chemicals and other PHM are not to be purchased in bulk quantity where the purpose is to save money.

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- c. Ensure that all cardholders (purchasing agents) adhere to the Chemical Inventory Control Program.
- d. Ensure that all departments with direct purchasing, shipping and receiving adhere to the Chemical Inventory Control Program.
- e. Ensure the POR is notified of all chemical and other PHM purchases.

**Shipping and Receiving:**

- a. Ensure that any package / container that is shipped or received by the University is in good condition and that the package / container is properly labeled.
- b. Ensure that any package / container that has PHM is documented and the POR notified.

**The Director of Internal Audit will:**

- a. Prepare and include as part of departmental audit procedure the verification of appropriate chemical storage.
- b. Provide reports, as necessary, to the POR.

**All Department Directors will:**

- a. Ensure that chemical storage is kept as small as practical. Flammable liquids will be stored in flammable storage cabinets with self-closing doors and proper ventilation according to NFPA standards. Storage in office desk or cabinets or closets may cause potential exposure to fire and spills and is therefore prohibited. Only ventilated flammable storage cabinets are to be used for chemical storage. No food is permitted in these areas. Ensure chemical orders are for the minimum quantity needed to meet known demands.
- b. Ensure that received chemicals will be immediately moved to the designated storage area.
- c. Ensure that all personnel are oriented to the RTK procedure and all appropriate employees are trained in the handling, storage and disposal of PHM.
- d. Conduct periodic inspections of materials outside the storage area to determine if items should be properly discarded or returned to the storage area.
- e. Ensure all PHM containers are intact and properly labeled.
- f. Purchase and maintain appropriate hazardous materials handling equipment. Coordinate for training and use as appropriate.
- g. Coordinate with the Physical Plant Department for the disposal of hazardous waste.

- h. Ensure notices required by various regulatory agencies such as "Caution: Asbestos Hazard" and "Do Not Disturb-Potentially Hazardous Material" are posted on all equipment and room locations.
- i. Provide necessary training for all assigned personnel in compliance with this procedure.
- j. Ensure that all employees comply with the provisions of this procedure.
- k. Establish and maintain official records pertaining to all RTK compliance.
- l. Provide reports, as required, to the POR.

**Director of Risk Management will:**

- a. In conjunction with the Safety Department, conduct necessary investigations to meet Risk Management, legal and OSHA requirements.
- b. Maintain inventory records, by type of material, of all PHM routinely used on the campus. Records will be maintained by building and room number to assist the University Safety Department and outside agencies that may be involved in medical and/or cleanup operations.
- b. Maintain records of all incidents and accidents involving PHM, including pictorial documentation.
- c. Provide reports, as necessary, to the POR.

**THE DIRECTOR OF PHYSICAL PLANT WILL:**

- a. Will work with the Director of Safety to ensure that all chemical materials transported or shipped to the contractor worksites are identified, properly labeled and stored.
- b. Ensure that all contractors / vendors having access to university facilities and that have the potential to become involved with PHM are aware of the RTK requirements.
- c. Obtain copies of all MSDSs of chemicals stored by contractors / vendors.
- d. Maintain certification from appropriate contractors / vendors that their employees have been trained in handling PHM.
- e. Ensure that contractors / vendors maintain a trained and equipped quick reaction team to assist in the clean up of accidental chemical and other PHM spills.

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- f. Ensure that contractors / vendors maintain worksites and clean up all accidental chemical and other PHM spills.
- g. Provide reports, as necessary, to the POR.

**The Director of Safety will:**

Work with the Director of Physical Plant in making safety inspections of contractor / vendor operations to identify unsafe conditions, material, equipment and procedures.

Maintain current copies of MSDS for all toxic chemicals used by contractors / vendors.

Ensure notices describing the location of PHM on all University worksites are posted and updated.

- a. Investigate all accidents / incidents involving hazardous materials. Provide written recommendations for solving PHM problems to the POR for dissemination to all parties affected.
- b. Maintain pertinent data of accidents and incidents involving hazardous material.
- c. Provide reports, as necessary, to the POR.

**All Employees will:**

- a. Seek information and advice about hazards, plan appropriate protective procedures, and avoid unnecessary exposure to chemicals
- b. Be aware of and practice PHM safe handling procedures at all times.
- c. Be aware that penalties may be assessed for knowingly and deliberately violating safety procedures.
- d. Report all safety hazards to your supervisor immediately.