

EMBRY-RIDDLE AERONAUTICAL UNIVERSITY

COMPREHENSIVE SAFETY
PLAN

6. SUBJECT: Hazard Communication Program/ Right To Know

"Make Safety an integral part of your work and your life"



6. SUBJECT: Hazard Communication Program

REGULATORY STANDARD: OSHA - 29 CFR 1910.1200

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.

GENERAL: Embry-Riddle Aeronautical University will ensure that the hazards of all chemicals used within our facility are evaluated, and that information concerning their hazards is transmitted to all employees. This standard practice instruction is intended to address comprehensively the issues of evaluating the potential hazards of chemicals, communicating information concerning these hazards, and establishing appropriate protective measures for employees.

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. This company has expressly authorized the Safety Officer to halt any operation of the company where there is danger of serious personal injury.

Contents of the Hazard Communication Program

- 1. Written Program.**
- 2. Training Program.**
- 3. Labeling Program.**
- 4. Evaluation and distribution of Material Safety Data Sheets.**
- 5. Non-Company Employees Program.**
- 6. Non Routine Tasks.**

Embry-Riddle Aeronautical University Hazard Communication Program

1. Written Program. This standard practice instruction will be maintained in accordance with 29 CFR 1910.1200 and updated as required. Where no update is required, this document will be reviewed annually. Effective implementation of this program requires support from all levels of management in this company. This written program will be communicated to all personnel that are affected by it. It encompasses the total workplace, regardless of number of workers employed or the number of work shifts. It is designed to establish clear goals. Embry-Riddle Aeronautical University shall:

1.1 Annually review and revise this written hazard communication program based on company operational requirements or as required by the OSHA Hazard Communication Standard.

1.2 Provide a program for proper labeling of containers, describe other needed forms of warning, and detail the use and purpose of material safety data sheets (MSDS). Describe how employee information and training requirements will be met, to include the following:

1.2.1 Generate a list of the hazardous chemicals known to be present in each department using an identity that is referenced from the appropriate material safety data sheet. This list will be available to all employees in the facility and located as a minimum in the facility's "Worker Right-To-Know Center".

1.2.2 Detail the method Embry-Riddle Aeronautical University will use to inform employees of the hazards of non-routine tasks. Immediate supervisors of affected employees will oversee this requirement. The Safety Officer may be consulted and can perform a task hazard analysis on request.

1.2.3 immediate supervisors of affected employees will be responsible for the hazards associated with chemicals contained in process or facility piping routed through their work area. The Safety Officer may be consulted to provide any hazard analysis if assistance required.

1.2.4 Embry-Riddle Aeronautical University shall make the written hazard communication program available to all employees during each work shift.

2. Training Program. The University shall provide employees with information and training on hazardous chemicals in their work area at the time of their initial assignment, annually, and whenever a new chemical is introduced into their work area that could present a potential hazard.

2.1 Information. Staff and students shall be informed of:

2.1.1 Any operations in there work area where hazardous chemicals are present.

2.1.2 The location and availability of the written hazard communication program, including a list of hazardous chemicals used in their department and the associated material safety data sheet (MSDS). This information will be located in individual departments. All employees will have access to this location and materials during each shift. All employees will have convenient access to this location and materials during each shift. A chemical list will be provided and broken down by department.

2.2 Training. Employee hazard communication training at Embry-Riddle Aeronautical University shall be conducted annually by each department. This training will be conducted by an approved training instructor. Newly hired personnel will be briefed on the general requirements of the OSHA hazard communication standard, as well as duty specific hazards by their immediate supervisor before they begin any duties within the department. Intradepartmental transferred personnel will also be briefed on the duty specific hazards by their immediate supervisor before they begin any duties within the department. This training will include at least the following:

2.2.1 Methods that may be used to detect the presence or release of a hazardous chemical in the work area.

2.2.2 The physical and health hazards of the chemicals present in the work area (MSDS).

2.2.3 The measures employees can take to protect themselves from these hazards. Specific procedures Embry-Riddle Aeronautical University has implemented to protect employees from exposure to hazardous chemicals, to include; appropriate work practices, Standard Practice Instructions, emergency procedures, and personal protective equipment.

2.2.4 An explanation of the labeling system used at Embry-Riddle Aeronautical University, the material safety data sheet, and how employees can obtain and use the appropriate hazard information.

2.2.5 The chemical (formal) and common names of products used, and all ingredients that have been determined to be health hazards.

2.2.6 Physical and chemical characteristics of the hazardous chemical, including vapor pressure and flash point.

2.2.7 The physical hazards of the hazardous chemical, including the potential for fire, explosion, and reactivity.

2.2.8 The health hazards of the hazardous chemical, including signs and symptoms of exposure, and any medical conditions that are generally recognized as being aggravated by exposure to the chemical.

2.2.9 The primary routes of entry; inhalation, absorption, ingestion, injection, and target organs.

2.2.10 The OSHA permissible exposure limit, ACGIH Threshold Limit Value, including any other exposure limit used or recommended by the chemical manufacturer.

2.2.11 Whether the hazardous chemical has been found to be a potential carcinogen by the International Agency for Research on Cancer (IARC).

2.2.12 Any generally applicable precautions for safe handling and use that are known, including appropriate hygienic practices, protective measures during repair and maintenance of contaminated equipment, and procedures for clean-up of spills and leaks.

2.2.13 Any generally applicable control measures that are known appropriate engineering controls, work practices, or personal protective equipment.

2.2.14 Emergency and first aid procedures.

2.3 Documentation. All training will be documented using a standard company attendance roster.

3. Labeling Requirements. Labeling requirements of containers of chemicals used at Embry-Riddle Aeronautical University, as well as of containers of chemicals and hazardous materials being shipped off site. The following procedures apply:

3.1 Unmarked Containers. No unmarked container containing chemicals may be used in conjunction with any duties or operations at Embry-Riddle Aeronautical University. Unless the container is a **portable** container in the control of a specific person for their immediate use. **Container** means any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a hazardous chemical. For purposes of this standard practice instruction, pipes or piping systems, and engines, fuel tanks, or other operating systems in a vehicle, are not considered to be containers. **Immediate use** means that the hazardous chemical will be under the control of and used only by the person who transfers it from a labeled container and only within the work shift in which it is transferred.

3.2 Container Labeling. The chemical name **as reflected on the MSDS**. The normal operational use of the chemical. Name, address, and emergency phone number of the chemical manufacturer, importer, or other responsible party.

3.3 Where Labels are not required. Questions concerning any of the exceptions listed below should be directed to the Safety Administrator for clarification. Embry-Riddle Aeronautical

University generally should not be affected by these requirements; however, they are provided for information and because they are included in the Hazard Communication Standard.

4. Evaluation and Distribution of Material Safety Data Sheets

4.1 The University shall maintain copies of any material safety data sheets that are received with incoming shipments of the sealed containers of hazardous chemicals, shall obtain a material safety data sheet for sealed containers of hazardous chemicals received without a material safety data sheet if an employee requests the material safety data sheet, and shall ensure that the material safety data sheets are readily accessible during each work shift.

4.2 MSDS copies will be maintained for all chemicals abandoned for use for a period of 30 years.

4.3 MSDS requests. A request letter will be forwarded to any vender who does not provide an MSDS with a product received by this company.

4.4 Employees must be familiar with the various sections of the MSDS.

<u>Section</u>	<u>Contents</u>
Section I	- Product Identity
Section II	- Hazardous Ingredients
Section III	- Physical/Chemical Characteristics
Section IV	- Fire and Explosion Hazard Data
Section V	- Reactivity Data
Section VI	- Health Hazards Data
Section VII	- Precautions for Safe Handling and Use
Section VIII	- Control Measures/Protection Info
Section IX	- Additional Information

5. Non-Company Employees Program. Visitors, Contract Employees, Contractor Personnel, and In-House Representatives. The principal company escort or contact will advise visitors, contract employees, contractor personnel, and in-house representatives of any chemical hazards that may be encountered in the normal course of their work on the premises, the labeling system in use, the protective measures to be taken, the safe handling procedures to be used, and availability of MSDSs. Any contractor bringing chemicals on-site must provide Embry-Riddle Aeronautical University with the appropriate hazard information on these substances, including the labels used and the precautionary measures to be taken in working with these chemicals.

5.Non Routine Tasks. No employee will be allowed to perform tasks that they are not fully trained to accomplish. Non routine tasks will be evaluated before accomplishment

Purpose and Scope of Right to Know Policy

Embry-Riddle Aeronautical University seeks to provide all students, faculty, staff and visitors with a safe environment in which to study, accomplish research, provide community service, and work.

1. MAJOR OBJECTIVE

The Embry-Riddle Aeronautical University Right-to-Know (RTK) procedure is established to reduce the probability of inadvertent mishandling of potentially hazardous materials (PHM) and to reduce the consequences of an event should it occur. Additionally, this procedure defines requirements for training in safe handling practices and emergency procedures and defines responsibility within the University system for implementation of the procedure. Direction and guidance to accomplish this within the ethical, moral, legal, and regulatory systems that govern toxic chemicals and hazardous waste are provided.

2. 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. This policy defines distribution of duties and responsibilities.

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.

3. RESPONSIBILITIES

Safety is everyone's responsibility. This policy identifies specific responsibilities for implementing various actions required to accomplish the desired objectives. It is expected that University department managers at all levels will take necessary steps to control, or guard against injury and damage.

4. UNIVERSITY ADMINISTRATIVE REQUIREMENTS

a. Have a viable written Right-To-Know (RTK) program that describes how the RTK regulations will be implemented, and the department(s) within the University that are responsible for maintenance of the various aspects of the program.

b. Insure current Material Safety Data Sheets (MSDS) are on file in the workplace and available to all employees.

c. Have all chemical products in the workplace properly labeled.

d. Provide employees with initial and follow-up training and information about the overall program and the specific chemicals encountered in the workplace.

e. Maintain records essential for compliance with federal, state and local regulations.

5. RIGHTS OF EMBRY-RIDDLE EMPLOYEES UNDER THIS LAW

a. The right to know of the listed toxic substances present in the employees' assigned workplace.

b. The right to obtain a copy of the Material Safety Data Sheet (MSDS) for each listed toxic substance present.

c. The right to instruction and training on hazardous chemicals in their work area at the time of their initial assignment, and at least annually thereafter, on how to use each substance safely, the adverse health effects of each listed substance with which they work and what to do in case of an emergency.

d. The right to obtain further information on the properties and hazards of listed toxic substances from the Toxic Substances Information Center.

e. The right to refuse to work with a listed toxic substance under specified circumstances.

f. The right to protection against discharge, discipline, or discrimination for having exercised any of these rights.

6. INSTRUCTION TO BE PROVIDED EMBRY-RIDDLE EMPLOYEES

Training will be provided to new employees during orientation and will include:

- a. An overview of the University RTK procedure.
- b. Understanding of the Material Safety Data Sheet (MSDS).
- c. Employee rights under RTK.
- d. Where to obtain additional RTK information.
- e. Additionally, each employee will receive annual refresher training as required.

7. WRITTEN DOCUMENTATION OF COMPLIANCE WITH THE HAZARD COMMUNICATION PROGRAM

The Principal Office of Responsibility is the University Safety Office at the Daytona Beach campus. This office will ensure that the hazards of all chemicals imported into, produced, or used by Embry-Riddle are evaluated, and that this hazard information is transmitted to all affected employees. Departmental responsibilities will be assigned within all campuses.

View the University Comprehensive Safety Plan: <http://www.erau.edu/er/president/safety-office.html>

8. RESPONSIBILITIES, DIRECTOR, BUSINESS AND PHYSICAL PLANT

The Directors of Physical Plant and Safety of the Daytona Beach and Prescott campuses are designated as the Principal Offices of Responsibility (POR) for their respective campuses. This procedure will be incorporated into various locations of the College of Continuing Education as determined by the Provost of that college.

Responsibilities include:

- a. Research, interpret and disseminate federal, state and local guidelines pertaining to RTK and PHM within the University system.
- b. 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.
- c. Respond to correspondence from outside agencies for information pertaining to RTK and PHM compliance (not including reports indicated under responsibilities of the Risk Manager).
- d. Formulate budget estimates for submission with request for repair and/or removal of PHM.
- e. Provide notices of changes to this procedure to all applicable departments.

THE DIRECTOR OF PHYSICAL PLANT WILL:

- a. Formulate specifications of sufficient scope to enable the University to solicit bid proposals for work to be accomplished in compliance with abatement of PHM.
- b. Formulate internal procedures for maintenance employees routinely exposed to PHM.
- c. Ensure that all vendors having access to university buildings that have the potential to become involved with PHM are aware of the RTK requirements. Maintain certification from appropriate vendors that their employees have been trained in handling PHM.
- d. Coordinate PHM abatement work projects to ensure minimum interruption to academic and staff work schedules.
- e. Formulate an emergency response plan to respond to accidental chemical spills.
- f. Maintain a trained and equipped quick reaction team to assist in the clean up of accidental chemical and other PHM spills.
- g. Provide appropriate training to various University departments for emergency hazardous waste clean up.
- h. Recommend materials and equipment to be maintained at work areas to neutralize and/or clean up hazardous waste spills.
- i. Contract for packaging, transportation and disposal of hazardous materials.
- j. Assist and advise all University departments regarding the handling of hazardous waste.

The Director of Safety will:

- a. Work with the Director of Physical Plant to coordinate hazardous material spills and emergency clean up of PHM. Responsibilities include, but are not limited to, the following:
- b. Assist departments in making safety inspections of their operations to identify unsafe conditions, material, equipment and procedures. Make recommendations for training as appropriate. Formulate and maintain a current location diagram of all known PHM to assist maintenance personnel and direct outside vendors requiring access to University facilities.
- c. Conduct courtesy evaluations of departmental compliance with RTK and handling of PHM.
- d. Ensure notices describing the location of PHM in each University building are posted and updated.

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- e. Investigate all accidents/incidents involving hazardous materials. Provide written recommendations for solving PHM problems to the department and POR for dissemination to all parties affected.
- f. Conduct building safety and code compliance evaluations. Report all findings to the departmental director concerned and, where applicable, the Physical Plant for correction. Conduct follow up evaluations on all safety related deficiencies with information copies provided to the POR.
- g. Maintain current copies of MSDSs for all toxic chemicals used by the University. Provide each department a current file for MSDSs on all substances used in the work place.

Where MSDSs contain the phrase "comply with all federal, state and local regulations," it is the responsibility of Safety and the POR to research appropriate regulations and have the specific information printed on each MSDS.

- h. Maintain pertinent data of accidents and incidents involving hazardous material. Prepare trend data and make recommendations to departments for implementation of corrective action plans.
- i. Provide reports, as necessary, to the POR.

The Director of Health Services will:

- a. Determine the level of, and arrange for appropriate emergency first aid training to individuals selected by department directors.

The Director of Purchasing will:

- a. 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.
- b. Ensure all purchase orders for PHM specifically request a MSDS accompany the shipment.
- c. Ensure the POR is notified of all chemical and other PHM purchases.
- d. Ensure that all cardholders (purchasing agents) adhere to the chemical inventory control program.

The Director of Human Resources will:

- a. Provide initial orientation to all new employees pertaining to the University RTK program.
- b. Assist all departmental directors in the preparation and presentation of instruction to be provided to employees.
- c. Maintain records reflecting completion of RTK training on all appropriate University employees.

- d. Conduct technical training that is beyond the scope of individual departments. (Training may be contracted through appropriate outside agencies.)

The Director of Internal Audit will:

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

All Department Directors will:

- a. Ensure that all personnel are oriented to the RTK procedure and all appropriate employees are trained in the handling, storage and disposal of PHM.
- b. Ensure all PHM containers are intact and properly labeled.
- c. Coordinate with the Physical Plant Department for the disposal of hazardous waste.
- b. Coordinate with the Director of Health Services for first aid training.
- c. Purchase and maintain appropriate hazardous materials handling equipment. Coordinate for training and use as appropriate.
- d. 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.
- e. Provide reports, as required, to the POR.
- f. Ensure that all employees comply with the provisions of this procedure.
- g. Provide necessary training for all assigned personnel in compliance with this procedure.
- h. Establish and maintain official records pertaining to all RTK compliance.

Director of Risk Management will:

- a. Prepare correspondence appropriate to the resolution of Risk Management activities involved in accidents or incidents pertaining to PHM.
- b. In conjunction with the Safety Department, conduct necessary investigations to meet Risk Management, legal and OSHA requirements.

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- c. Maintain records of all incidents and accidents involving PHM, including pictorial documentation.
- d. 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.
- e. Provide reports, as necessary, to the POR.

All Employees will:

- a. Be aware of and practice PHM safe handling procedures at all times.
- b. Report all safety hazards to your supervisor immediately.
- c. Ensure that all safety precautions are taken prior to starting the job.
- d. Be aware that penalties may be assessed for knowingly and deliberately violating safety procedures.