

# HAZARDOUS WASTE PROGRAM

## POLICY MANUAL



CALIFORNIA STATE UNIVERSITY, FRESNO

OFFICE OF

ENVIRONMENTAL HEALTH AND SAFETY

April 2015

## TABLE OF CONTENTS

1.0	INTRODUCTION .....	1
2.0	FEDERAL AND STATE AUTHORITY .....	1
3.0	SCOPE .....	1
4.0	POLICY .....	2
5.0	DEFINITIONS.....	2
6.0	RESPONSIBILITIES .....	6
6.1	University Administration .....	6
6.2	Office of Environmental Health and Safety.....	7
6.3	Deans, Directors, Department Chairs, Department Heads .....	7
6.4	Principal Investigators and Supervisors.....	8
6.5	Laboratory Technicians .....	8
6.6	Other Hazardous Material Users.....	8
7.0	PROCEDURES.....	9
7.1	Introduction.....	9
7.2	Accumulation at the Point of Generation.....	9
7.3	Satellite Accumulation Areas .....	9
7.4	Hazardous Waste Minimization.....	10
7.5	Preparation of Hazardous Waste for On-site Transportation.....	11
7.6	Preparation of Hazardous Waste for Off-site Disposal.....	14
7.7	Emergency Response and Contingency Planning.....	16
7.8	Personnel Training.....	16
7.9	Record Management .....	16
8.0	TRAINING .....	17
8.1	Purpose.....	17
8.2	Training Structure .....	17
8.3	Training Content .....	18
8.4	Training Administration.....	18
8.5	Hazardous Waste Contractor Training.....	18

## APPENDICES

- A. Identification and Listing of Hazardous Waste (CCR Title 22, Ch. 11)
- B. Identifying and Handling Incompatible Wastes (40 CFR Part 265)
- C. Hazardous Waste Label
- D. Hazardous Waste Training Curricula

# HAZARDOUS WASTE PROGRAM POLICY MANUAL

## 1.0 INTRODUCTION

The Hazardous Waste Program is established to ensure that hazardous waste generated by California State University Fresno is managed in a responsible and timely manner that not just complies with all applicable federal, state, and local laws and regulations, but also exhibits a high standard of professional practices. The Hazardous Waste Program applies to the facilities, operations and employees of California State University, Fresno associated with the acquisition, handling, use and disposal of hazardous materials.

## 2.0 FEDERAL AND STATE AUTHORITY

In 1976, the U.S. Congress passed the Resource Conservation and Recovery Act (Public Law 94-580, commonly identified as RCRA). Subtitle C of this law mandated that the U.S. Environmental Protection Agency (EPA) establish a comprehensive federal program to protect human health and environment from the improper management of hazardous wastes.

Subtitle C also gave EPA the authority to authorize qualified states to operate their own hazardous waste programs instead of the federal program. Several years prior to the passage of RCRA, California had in place a comprehensive hazardous waste program which was similar in content and coverage to that proposed by RCRA. On June 4, 1981, EPA approved California's application, delegating certain regulatory and enforcement activities to the State.

Article 5, Chapter 6.5, Division 20, California Health and Safety Code sets minimum standards and regulations for the handling, processing, use, storage, and disposal of hazardous and extremely hazardous wastes to protect against hazards to the public health, to domestic livestock, to wildlife, or to the environment. Title 22, Division 4.5, California Code of Regulations specifies the minimum state standards for management of hazardous and extremely hazardous wastes.

## 3.0 SCOPE

All requirements of the Hazardous Materials Storage and Disposal Program will apply to the management of the following:

1. Any liquid, semi-solid, solid, or gaseous waste which conforms to the definition of hazardous waste in the definitions section.
2. Waste which consists of or contains a hazardous material.

3. Waste which consists of or contains a material listed in Appendix A. (CCR Title 22)
4. A waste mixture formed by mixing any waste or substance with a hazardous waste.
5. A hazardous sludge, residue, concentrate or ash originating from hazardous waste.
6. Hazardous material disposed of to land, accidentally discharged onto land or accidentally spilled onto land.

Radioactive waste and infectious waste are not subject to the requirements of this program. These wastes conform to the University Radiation Safety Program and the Medical Waste Program.

#### 4.0 POLICY

The policy of California State University, Fresno is to ensure that the sanitary sewer system is for the collection, treatment, and disposal of domestic sewage, and that the storm drain system is used primarily for the collection and disposal of storm water. The use of either of these systems for industrial waste discharge is prohibited unless approved by the Office of Environmental Health , Safety, Risk Management and Sustainability (EHS RMS) of California State University, Fresno.

No person shall discharge or cause to be discharged either directly or indirectly into the sanitary sewer system, or onto the ground any waste containing flammable, toxic, or poisonous solids, liquids, or gases in sufficient quantity to be injurious to humans or animals, or which may have an adverse or harmful effect on sewers, maintenance personnel, waste water treatment plant personnel or equipment, treatment plant effluent quality, public or private property, or which may otherwise endanger the public, local environment, or create a public nuisance. Prohibited waste shall not be discharged to any sump, tank, clarifier, interceptor, piping, or waste treatment system which normally drains or flows to the public sewer.

#### 5.0 DEFINITIONS

The following definitions for terms dealing with the handling of hazardous waste will be used in this manual.

Container	Any enclosure that is open or closed, and or stationary, in which a material can be stored, handled, treated, or disposed of.
Corrosive	Any substance which in contact with living tissue will cause destruction of tissue by chemical action, but shall not refer to action on inanimate surfaces.

Disposal	To abandon, deposit, inter or otherwise discard waste as a final action after use has been achieved or a use is no longer intended.
Disposal Site	The location where any final deposition of hazardous waste occurs.
Extremely Hazardous Material	Any substance or mixture of substances which, if human exposure should occur, may likely result in death, disabling personal injury or illness because of the quantity, concentration or chemical characteristics of the substance or mixture of substances.
Extremely Hazardous Waste	Any hazardous waste or mixture of hazardous wastes which, if human exposure should occur, may likely result in death, disabling personal injury or illness because of the quantity, concentration or chemical characteristics of the hazardous waste or mixture of hazardous wastes.
Generator	A person who generates a waste material.
Handling	The transporting from one place to another, loading, unloading, pumping or packaging of waste. Handling does not include the management of any substance before it becomes a waste or the storage of a hazardous waste on University property.
Hazardous Material	Any substance or mixture of substances which is toxic, corrosive, flammable, an irritant, a strong sensitizer or which generates pressure through decomposition, heat, or other means, if such a substance or mixture of substances may cause substantial injury, serious illness or harm to humans, domestic livestock or wildlife. Hazardous material includes extremely hazardous material.
Hazardous Waste	Any waste material or mixture of wastes which is toxic, corrosive, flammable, an irritant, a strong sensitizer or which generates pressure through decomposition, heat, or other means, if such a waste or mixture of wastes may cause substantial injury, serious illness or harm to humans, domestic livestock or wildlife. Hazardous waste includes extremely hazardous waste.
Hazardous Waste Area	Any area where hazardous wastes are stored, mixed, handled, treated, discarded or disposed of.

Hazardous Waste Manifest	The California Liquid Waste Hauler Record which has been approved by the State Department of Public Health and by the State Water Resources Control Board.
Ignitable	<ol style="list-style-type: none"> <li>1) A liquid which has a flash point at or below 60°C (140°F) as defined by procedures described in Section 173.115, Title 49, Code of Federal Regulations.</li> <li>2) A gas for which a mixture of 13% or less, by volume, with air forms a flammable mixture at atmospheric pressure or the flammable range with air at atmospheric pressure is wider than 12% regardless of the lower limits.</li> <li>3) A solid which is likely to cause fires due to friction, retain heat from processing or which can be ignited under normal temperature conditions and when ignited burns so as to create a serious threat to public health and safety. Normal temperature conditions means temperatures normally encountered in the handling, treatment, storage and disposal of hazardous wastes.</li> <li>4) A gas, liquid, sludge or solid which ignites spontaneously in dry or moist air at or below 54.3° C (130° F) or upon exposure to water.</li> <li>5) A strong oxidizer.</li> </ol>
Incompatible	Unsuitable for commingling with another waste or material, where the commingling might result in an explosion, violent chemical reaction, fire, extreme heat, formation of a toxic substance or other condition which might endanger the public health and safety, domestic livestock or wildlife.
Irritant	Any substance not corrosive which on immediate, prolonged or repeated contact with normal living tissue will induce a local inflammatory reaction.
Management	A program for controlling the generation, storage, collection, transportation, treatment, use, conversion or disposal of hazardous wastes. It includes administrative, financial, legal and planning activities as well as operational aspects of hazardous waste handling, disposal and resource recovery systems.
Nuisance	Anything which is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.

Off-site Hazardous Facility	An operation involving handling, treatment, Waste storage or disposal of a hazardous waste at a site which is not owned by, or leased to, the generator of the waste.
On-site Hazardous Facility	An operation involving handling, treatment, Waste storage or disposal of a hazardous waste on land owned by, or leased to, the University, and which receives hazardous waste generated only by campus personnel.
Operator	The person within the State who operates a hazardous waste facility.
Person	An individual, trust, firm, joint stock company, corporation (including a government corporation), partnership, association, municipality, commission or political subdivision.
Producer	Any person who generates a waste material.
Recyclable Hazardous Waste	Any hazardous waste for which recycling is both economically and technologically feasible.
Recycle	To redirect or utilize a waste or a substance from a waste in a manner that, in the judgment of the State Department of Public Health, will not result in a substantial hazard to the health and safety of persons or to livestock, wildlife or the environment.
Resource Recovery	The salvage of discarded hazardous materials or their conversions into a reusable, saleable or valuable form. Salvaged or converted materials shall not be considered waste.
Reuse	Reutilization of material in a manner that will not result in a hazard to the health or safety or persons or harm to wildlife or domestic livestock.
Salvaging	The controlled removal of hazardous materials from a hazardous waste facility for use.
Storage	The containment of hazardous waste at an off-site hazardous waste facility for periods greater than 72 hours or the containment at an on-site hazardous waste facility for periods greater than 60 days in such a manner as not to constitute disposal.

Strong Oxidizer	A substance that can supply oxygen to a reaction and cause a violent reaction, or sustain a fire when in contact with a flammable or combustible material in the absence of air.
Strong Sensitizer	A substance which will cause on normal living tissue, through an allergic or photodynamic process, a hypersensitivity which becomes evident on reapplication of the same substance.
Toxic	Capable of producing injury, illness, or damage to humans, domestic livestock or wildlife through ingestion, inhalation or absorption through any body surface.
Treatment	Any method, technique or process designed to change the physical, chemical or biological character or composition of any hazardous waste.
Treatment Facility	Any facility at which hazardous waste is subjected to treatment or where a resource is recovered from a hazardous waste.
Use	Utilization of a material in a manner that will not result in a hazard to the health or safety of persons or harm to wildlife or domestic livestock.
Waste	Any material for which no use or reuse is intended and which is to be discarded.
Water Reactive	A waste which when contacted by water, may react violently, generate extreme heat, burn, explode or rapidly react to produce a flammable, toxic or corrosive mist, vapor or gas.

## 6.0 RESPONSIBILITIES

All California State University Fresno employees, including students hired by the University, who use or handle hazardous materials are responsible to acquire, handle, use and dispose of hazardous materials in accordance with this program. The roles and responsibilities, as a function of job position, are summarized below.

### 6.1 University Administration

1. The University President is ultimately responsible for compliance with hazardous waste control laws.

2. The University President will provide overall policy direction for environmental compliance and occupational safety.

## 6.2 Office of Environmental Health, Safety, Risk Management and Sustainability

The responsibility of the EHS RMS Office is to:

1. Provide overall program management including development and implementation of procedures, practices, and policies which ensure that campus hazardous wastes are managed in accordance with applicable laws and regulations.
2. Provide consultation, direction, and training to hazardous waste generators regarding proper procedures for identifying, handling and minimizing hazardous waste.
3. Advise the President and the Vice President for Administration of the status of the Hazardous Waste Program, of significant changes to hazardous waste control laws or regulations as they occur, and changes in resources and/or policies and procedures as necessary to ensure University compliance.
4. Provide liaison with off-campus regulatory agencies.
5. Obtain and maintain appropriate permits.
6. Coordinate contracting for hazardous waste pickup with the chemical disposal hauler, the Accounting Office, and the Procurement and Support Services.
7. Make appropriate verification and notify the appropriate state agencies of disposal in approved sites as required.

## 6.3 Deans, Directors, Department Chairs, Department Heads

The responsibility of the Deans, Directors, Department Chairs, and Department Heads is to:

1. Ensure excess chemicals are being properly handled, segregated and stored (excess chemicals are those which are no longer needed by a given user and may be transferred to some other area for use).
2. Ensure that all supervisors understand and follow proper hazardous waste handling procedures.
3. Coordinate with the Manager of EHS RMS to ensure that all faculty and staff receive the required level of hazard communication and hazardous waste operations information and training.

#### 6.4 Principal Investigators and Supervisors

This category includes: faculty responsible for laboratory employees/students, laboratory supervisors. The responsibility of the Principal Investigators and Supervisors is to:

1. Ensure that all employees understand and follow proper hazardous waste handling procedures.
2. Contact the EHS RMS Office (8-7422) for assistance in handling hazardous materials/waste.
3. Inform department management of resources necessary to comply with the hazardous waste handling procedures.

#### 6.5 Laboratory Technicians

This category includes: laboratory, chemical storeroom and shop technicians and assistants, art studio staff. The responsibility of the Laboratory Technicians is to:

1. Receive excess chemicals from department and maintain records.
2. Segregate chemicals according to compatibility as required.
3. Check out excess chemicals to others in department and maintain records.
4. Maintain inventory of excess chemicals, copying EHS RMS Office.
5. Arrange for chemical disposal through EHS RMS Office.

#### 6.6 Other Hazardous Material Users

This category includes: painters, artists, custodians, plumbers, groundskeepers, building maintenance engineers, and photography darkroom users. The responsibility of Other Hazardous Material Users is to:

1. Label all containers of hazardous materials/wastes.
2. Minimize the quantity of hazardous waste generated.
3. Dispose of hazardous waste legally and properly, do not dispose of hazardous waste into sink drains, trash cans or fume hoods

(note: any person found guilty of illegally disposing of hazardous waste is potentially subject to criminal penalties)

## 7.0 PROCEDURES

### 7.1 Introduction

Hazardous waste, by definition, can cause serious injury to human health and to the environment. Everyone connected with hazardous waste accumulation must exercise great care to ensure that hazardous wastes are safely and correctly handled at all times.

A casual attitude toward environmental pollution is no longer socially or legally acceptable. Environmental regulators are beginning to use criminal prosecutions against polluters, and the courts are subjecting convicted polluters to heavy fines and even prison terms. Thus, it is vitally important that everyone concerned with hazardous waste understand his/her responsibilities with regard to that waste.

The employees and organizations who are concerned with the various functions of waste accumulation and storage, are to follow the listed procedures so that California State University, Fresno will have a consistent and environmentally sound approach to hazardous waste disposal.

### 7.2 Accumulation at the Point of Generation

Individual waste generators may accumulate hazardous waste at the point of generation in appropriate containers. The University as a hazardous waste generator can accumulate hazardous waste for no more than 90 days. It is, therefore, necessary to limit the accumulation of hazardous wastes at the point of generation, e.g. laboratory, art studio, etc. to 30 days or less. Near the end of the 30 day accumulation period, the hazardous material user/waste generator should contact EHS RMS. The 30 day period can be extended to 270 days, if your location fits the satellite storage definition. In any case, weekly pick-ups will be scheduled.

### 7.3 Satellite Accumulation Areas

Satellite accumulation areas are typically used to increase the efficiency of waste collection and to reduce the costs of waste disposal. Wastes collected for satellite accumulation areas are collected at or near the point where the wastes are generated so it is not necessary to immediately transfer wastes to a central collection area or accumulation point. In addition, wastes may be collected at that area until 55 gallons of hazardous waste, or 1 quart of extremely hazardous waste are accumulated. There is no need to ship partially full drums of waste off-site at full cost due to accumulation time restrictions.

All waste at satellite accumulation areas must be under the control of the operator of the process generating the waste. For example, the container at a satellite accumulation area must be placed right next to or near the process which generates the hazardous waste and the person who operates that process or area must control the hazardous waste placed in that container.

The EPA has set the following management standards for wastes collected at satellite accumulation areas:

1. Hazardous waste at satellite accumulation areas must be collected in containers.
2. No more than 55 gallons of hazardous waste or 1 quart of extremely hazardous waste may be accumulated.
3. If the 55 gallon limit is exceeded at a satellite accumulation area, you must mark the container holding the excess waste to either an accumulation point or to a permitted treatment, storage or disposal facility.
4. Containers must be marked either with the words "Hazardous Waste" or with other words which identify the contents of the container.
5. The waste being placed in the container must be compatible with the container.
6. A container holding hazardous waste must always be kept closed during accumulation except when it is necessary to add or remove waste.
7. Heat reactive chemicals that can become unstable at temperatures above room temperature must be stored at a safe temperature within the generator's satellite accumulation area.

#### 7.4 Hazardous Waste Minimization

The University is required to minimize to the extent practicable the volume and/or toxicity of hazardous waste that is generated. This section gives some general guidelines for the minimization of waste.

The quantity of hazardous waste generated may be minimized by:

1. Purchasing the smallest practical volumes; do not purchase excess volumes based on volumetric price incentives.
2. Using the smallest container available to package waste for pick up; California State University, Fresno is charged for waste disposal based on container volume, not on the actual volume of waste in the individual containers.
3. Labeling all containers of hazardous materials. (see Appendix C)
4. Disposing of materials which are not used, i.e. do not be a "pack rat".

## 7.5 Preparation of Hazardous Waste for On-site Transportation

### 7.51 Recognition of Hazardous Materials as Hazardous Waste

A hazardous material becomes a hazardous waste when any one of the following occurs:

- the material has no intended use or reuse
- the material has become retrograde, unusable
- the material cannot be recycled
- the container is mislabeled or not adequately labeled
- the container is deteriorated or damaged
- the material has been spilled

Examples of how materials become hazardous wastes include:

- solvents become too dirty for reuse
- paint has solidified or separated and is no longer useful
- powder or granular products have lumped together
- undissolved or unreacted material is removed from a process
- original or secondary container labels are absent or illegible
- a material has been abandoned

Hazardous material users must recognize that at some point they no longer have a use for the hazardous materials under their control, and at that point they must notify EHS RMS, that the material is ready to be picked up for disposal or recycling.

Once hazardous materials are transported to the campus Hazardous Waste Storage Building, then the staff of EHS RMS will classify the material and make a determination of what materials are hazardous wastes for disposal, which are recyclable, and which are usable product.

### 7.52 Labeling

Chemical containers holding hazardous waste must be labeled with the following minimum information (see Appendix C):

1. The words: Hazardous Waste - California State University, Fresno.
2. Campus address.
3. Generating department.
4. A detailed description of the contents of the container spelled out completely with out the use of acronyms.
5. The accumulation start date.
6. The accumulation end date.
7. Chemical state (solid, liquid, gas).
8. Hazard (ignitable, corrosive, toxic, reactive, etc.).

The labels should be directly affixed to the container or, in the case of containers too small to which a label may be directly applied, attached to a tag that is then wired or tied by string to the container. Multiple small containers, e.g. < 10 ml each, may be placed into a plastic zip-lock bag with the hazardous waste label affixed to the bag. The language on the label must be in English; no abbreviations, chemical formulas or molecular structures may be used. Hazardous waste labels are available from EHS RMS, or hazardous materials users can generate their own labels or write the required information on the container. (see Appendix C)

### 7.53 Segregation of Hazardous Waste Prior to Pick Up

It is essential that hazardous waste be segregated into separate containers in order to avoid the mixing of incompatible chemicals which could result in a fire, explosion or generation of toxic gases (see Appendix B). In addition, the final disposition of different hazardous waste categories varies, e.g. incineration vs. treatment vs. burial, and the improper mixing of different waste categories can result in exceptionally high disposal costs and delays. Therefore, hazardous materials users must segregate their hazardous wastes according to the following scheme:

#### Laboratories:

- halogenated solvents
- non-halogenated solvents
- bases
- inorganic acids
- inorganic acids w/metals
- organic acids
- oxidizers
- mercury (elemental)
- mercury compounds
- organic solids

#### Plant Operations:

- paints
- oils
- solvents, flammable
- solvents, non-flammable
- acid cleaners
- caustic/base cleaners

#### Art Studios:

- flammable/combustible solvents or cleaners

- water-based paints
- oil-based paints
- ceramic glazes

Photographic Darkrooms:

- fixers
- developers
- stop baths

NOTE: refer to Appendix B concerning the compatibility of hazardous waste.

#### 7.54 Packaging

Hazardous waste must be properly containerized prior to a request for pick up. The following guidelines should be used for the selection of containers:

1. Containers must be in good condition, non-leaking and chemically compatible with the waste.
2. Screw on lids or caps; no open containers, e.g. beakers, coffee cans.
3. Containers are one-way, i.e. you won't get it returned.
4. Closely matched for the volume of waste; however, do not fill completely full, leave 1 inch of head space above liquid waste.
5. Extremely hazardous waste with a high risk of creating an inhalation hazard must be placed within secured secondary containment compatible with the chemical.

Containers of hazardous wastes are to be kept closed at all times except when hazardous waste is actually being added to the container.

#### 7.55 Request For Hazardous Waste Pick Up

Once the hazardous waste has been placed in an appropriate container and labeled, it needs to be placed in the satellite storage area. The EHS RMS Office may be contacted when the hazardous waste is ready to be transferred to the satellite storage area. Once at the satellite storage area, the EHS RMS staff will pick up waste on a weekly schedule.

Heat reactive chemicals that can become unstable at temperatures above room temperature must be stored at a safe temperature within the generator's satellite accumulation area. The EHS RMS Office does not have suitable storage for heat reactive chemicals, and will therefore pick up the chemicals on the day that the outside hazardous waste contractor is on-site to transport the chemicals for

proper disposal. Contact the EHS RMS Office if suitable temperature controlled storage at the satellite accumulation area is not available.

#### 7.56 Transportation

The EHS RMS staff will be responsible for the on-site transportation of hazardous waste from the various buildings to the campus Hazardous Waste Storage Building. Other University employees and students should not attempt to transport hazardous waste either between campus buildings or from campus buildings to the Hazardous Waste Storage Building. The EHS RMS staff will follow the safe work practices below during the on-site transportation of hazardous waste.

1. All containers will be inspected for:
  - leakage or potential leakage
  - adequate labeling of contents
2. Each container must be labeled with an identification number; the ID number is recorded on the waste log next to the corresponding chemical name
3. Containers of incompatible chemicals shall be segregated
4. Inert absorbent material shall be used as a packing/cushioning material between containers of waste chemicals
5. Emergency response equipment will be carried on the vehicle as listed below:
  - fire extinguisher
  - spill absorbent/pads
  - hand-held two-way radio
  - PPE
6. Emergency response will be limited to the level of training possessed by the individuals responding in accordance with Cal-OSHA regulations. (See Section 8.0)

#### 7.6 Preparation of Hazardous Waste for Off-site Disposal

##### 7.61 Classification of Hazardous Waste

The staff of the EHS RMS Office shall evaluate the hazardous materials which are transported to the Hazardous Waste Storage Building for the purpose of classifying and segregating. Materials which may have further use will be

identified and segregated from those materials which have met their end use and thus are declared as hazardous waste.

Usable surplus materials will be offered to potential users by the EHS RMS Office on campus in lieu of being disposed of as hazardous wastes.

As a means of minimizing the volume of hazardous wastes shipped for disposal, unusable materials will be evaluated by the EHS RMS Office to identify any non-hazardous wastes. This procedure will involve checking to see if the waste material contains a regulatory listed waste or exhibits any characteristics of a hazardous waste.

#### 7.62 Segregation

The materials in storage at the Hazardous Waste Storage Building will be segregated by the staff of the EHS RMS Office so as to prevent any commingling of incompatible materials. Segregation will be accomplished by utilization of secondary containment tubs, trays or drums, plus separation by distance. Absorbent socks or blankets shall be placed around the base of containers of bulk liquids to prevent any migration and/or commingling of materials in the event of a leak. The following standard chemical references, in conjunction with personnel training and experience, will be utilized to identify compatible storage groups:

1. The Merck Index
2. Hazardous Chemicals SDSs
3. Hazardous Chemicals in the Workplace

#### 7.63 Identification and Labeling

Each container of material at the Hazardous Waste Storage Building shall be labeled by the EHS RMS Office with:

- name of contents
- physical state (solid, liquid, gas)
- the words "Hazardous Waste"
- date of initial accumulation
- heading California State University, Fresno and address
- indication of hazards

#### 7.64 Packaging

The hazardous waste contractor shall package the wastes for transportation to the various TSD facilities. The containers shall be inspected by EHS RMS staff to ensure that each container is DOT approved and meets the requirements for labeling and marking.

### 7.65 Manifesting

The hazardous waste contractor shall prepare the manifests for large waste shipments. These manifests will be reviewed and signed by the Manager of EHS RMS on behalf of California State University, Fresno. The Manager or his/her designee is the only California State University, Fresno employee or representative authorized to perform this function.

### 7.7 Emergency Response and Contingency Planning

The response to emergencies involving the release or threatened release of a hazardous material will be in accordance with the University Hazardous Chemical Contingency Plan. Specifically, any response to an emergency at the Hazardous Waste Storage Building will be directed by the emergency contingency plan for that facility.

### 7.8 Personnel Training

California State University, Fresno employees whose primary job responsibilities include the handling, characterization, packaging and transformation of hazardous wastes will receive the appropriate amount of hazardous waste operations training.

California State University, Fresno employees who in the course of other duties generate waste or coordinate for collection and pick up of the wastes near the point of generation shall receive information and training, in adjunct to other related hazard communication training, pertaining to the correct labeling and segregation procedures for hazardous wastes.

Additional details of the University's hazardous waste training procedures are presented in Section 8.0 of this manual.

### 7.9 Record Management

The EHS RMS Office shall be responsible for maintaining hazardous waste management compliance documents, including, but not limited to:

1. Uniform Hazardous Waste Manifest
2. Biennial Reports of Hazardous Waste Activity
3. Hazardous Waste Tax Records
4. California State University, Fresno Hazardous Waste Log
5. Training records for EHS RMS employees

Departments are responsible for maintaining training records on their employees and assuring that copies of those training records are kept on file in their respective Departmental offices.

## 8.0 TRAINING

### 8.1 Purpose

The purpose of this training plan is to ensure that employees of the University who handle hazardous waste receive the appropriate information and training to protect their health and the environment. This training shall be administered to employees and students who generate or otherwise handle and manage hazardous waste, and shall be commensurate with the degree to which an individual routinely handles hazardous waste and is otherwise qualified to do so.

Furthermore, this plan presents the procedures whereby the University shall ensure that hazardous waste consulting/service firms contracted by the University to package and transport for disposal campus-generated hazardous wastes shall provide verification that their employees have received the required level of training. In addition, these employees will be briefed on the Hazardous Waste Storage Building Emergency Contingency procedures prior to their commencing work on-site.

### 8.2 Training Structure

University employees shall, for the purposes of this training, be classified into one of three tiers of training. Employees shall receive the training commensurate with the tier level they fall into.

1. Tier one is for those employees who in the course of their primary duties spend a significant quantity of time handling and managing hazardous waste. This tier will predominantly be composed of the staff of EHS RMS, e.g. manager, hazardous waste coordinator, hazardous waste technician.
2. Tier two is for employees who in the course of secondary responsibilities handle wastes at a departmental level for the purpose of coordinating the collection by staff members of EHS RMS. Tier two employees would typically be functioning in positions such as:
  - instructional support technician
  - instructional support assistant
  - stockroom attendant
3. Tier three is for employees or students who in the course of their work or classes generate hazardous wastes but do not have any further responsibilities in the preparation for collection of hazardous wastes. Faculty and graduate students involved in research and undergraduate students in instructional laboratories, and plant operations employees would be typical of individuals within tier three.

### 8.3 Training Content

Tier one employees shall receive at least 40 hours of hazardous waste operations training consistent with 29 CFR 1910.120(e). Tier two employees shall receive at least 24 hours of training. Tier three employees or students shall receive a level of information and training consistent with their hazardous waste related activities.

### 8.4 Training Administration

University departments are responsible to ensure that their employees and/or students as appropriate receive the required hazardous waste training, and other hazard communication training as required. EHS RMS shall provide consultation, coordination, and as feasible, perform training to assist the departments in meeting the training requirements. All training must be documented for [??] years.

### 8.5 Hazardous Waste Contractor Training

The specification of the contract between the University and the hazardous waste service firm shall require that the firm provide to the University, specifically to the EHS RMS Manager, documentation that the firm's employees have received at least 40 hours of hazardous waste operations training as specified in 29 CFR 1910.120(e).

Furthermore, the contract package provided to the hazardous waste service firm shall include a copy of the University's Emergency Response Contingency Plan for the Hazardous Waste Storage Building. The Manager shall provide an on-site orientation of the waste handling building and related emergency procedures to the firm's employees prior to the commencement of any work by the employees.

APPENDIX A

Identification and Listing of Hazardous Waste  
(CCR Title 22, Ch. 11)

APPENDIX B

Identifying and Handling Incompatible Wastes  
(40 CFR Part 265)

## APPENDIX C

### Hazardous Waste Label

# HAZARDOUS WASTE

Contents:

Accumulation Start Date: \_\_\_\_\_ Fill Date \_\_\_\_\_

Generator \_\_\_\_\_ Exp. \_\_\_\_\_

Physical State:      Solid       Liquid

Hazard Category: Flammable  Corrosive  Toxic  Reactive   
Other \_\_\_\_\_

**California State University, Fresno. (559) 278-7422**  
**2351 E Barstow Ave., Fresno, CA 93740-8004**



APPENDIX D

Hazardous Waste Training Curricula

**Remove all references to Appendix D (old)**

**Change all references from Appendix E to Appendix D**

## HAZARDOUS WASTE TRAINING CURRICULA

Training Topic	TIER		
	1	2	3
a. Hazard Communication (CCR 8-5194)			
b. HAZWOPER (CCR 8-5192)			
c. Overview of hazardous waste regulations, including: <ul style="list-style-type: none"> <li>• definition &amp; criteria of hazardous waste</li> <li>• labeling requirements</li> <li>• proper containerization and segregation</li> <li>• accumulation limits</li> </ul>			
d. CSUF hazardous waste handling procedures: <ul style="list-style-type: none"> <li>• identifying hazardous waste</li> <li>• proper collection &amp; containerization</li> <li>• segregation of incompatible</li> <li>• labeling procedures</li> <li>• procedure to request hazardous waste pick up</li> <li>• CSUF point-of-generation accumulation limits</li> </ul>			
e. Safe Work Practices <ul style="list-style-type: none"> <li>• use of personal protective equipment</li> <li>• decontamination procedures</li> <li>• safe handling techniques</li> <li>• use of ventilation and safety equipment</li> </ul>			
f. Emergency Response <ul style="list-style-type: none"> <li>• personal decontamination</li> <li>• release/threatened release</li> <li>• response to fire</li> </ul>			