

Facilities and Maintenance Operations

1.0 Purpose/Scope

The purpose of this document is to provide information on hazardous material environmental procedures for campus facility and maintenance operations.

2.0 Activities Affected

The following practices are applicable to all service personnel generating chemical waste.

The areas covered under this plan include those in the following departments: Athletics, Business Services, Campus Life Facilities and Physical Plant.

3.0 Forms Used

WP Form 003-01 Inventory
EMS Form-014-01 Training Courses

4.0 References

EMP Appendix B- Issues, Objectives, and Targets
EP-003 Environmental Management System and Regulatory Compliance Audits
EP-004 Nonconformance and Corrective and Preventive Action
EP-014 Environmental Training
Material Safety Data Sheets
40 CFR Parts 260-262

5.0 Definitions

Facilities and Maintenance Personnel: Full and part time staff performing duties or tasks physically situated in a UCF facility or grounds area.

Chemical Waste: A hazardous chemical that results from maintenance activities and includes the following: used or unused hazardous chemicals that may or may not be reused. These include cleaning products, petroleum products, paints, pesticides and maintenance products.

RCRA hazardous waste: Waste that meets the definitions of listed or characteristic hazardous wastes.

Non-regulated hazardous waste: Wastes that do not meet the definition of RCRA waste but still are considered toxic or environmentally unfriendly.

Satellite Accumulation Areas (SAA): Areas in individual departments where waste is collected for removal to the main accumulation area at Building 48. Wastes must stay in the area where they have been generated, be under control of the operator of the process which generated the

waste, and contain no more than 55-gallons of hazardous waste or 1-quart acutely hazardous waste.

6.0 Exclusions

Materials excluded from this plan include: radiological waste, biological waste and equipment containing hazardous materials.

7.0 Procedures

7.1 Hazardous Material Procurement

7.1.1 Procurement Methods

Prior to purchasing (or testing) new chemical products, a copy of that product's Material Safety Data Sheet (MSDS) must be submitted to Environmental Health & Safety for approval.

7.1.2 Quantity

Avoid overstocking chemical products. Purchase no more than what can be used in a year's time.

7.1.3 Environmental Management System Material Reduction Objectives

Purchases should conform to EMS objectives found in EMP Appendix B-Issues, Objectives, and Targets, specifically,

Thermometers, thermostats, manometers, and barometers must be non-mercury containing.

7.1.4 Container Labels

No container shall be accepted without an adequate identifying label. Labels on chemical containers must state the chemical name, the manufacturer name, and hazard information.

7.1.5 Material Safety Data Sheets (MSDS's)

Chemical manufacturers are required to send a Material Safety Data Sheet when a chemical shipment is ordered. Most of the major chemical companies send the MSDS's to EHS. EHS will forward the MSDS to the ordering department, when identifiable. Departments should have a system for routing incoming MSDS's to the chemical users or departmental files.

7.2 Inventory

All areas are required to:

Submit an annual inventory of hazardous materials to EHS.

Inventories can be listed using WP Form 003-01 or other format.

Perform a review for expired/unwanted/unlabeled chemicals at least annually. Unknowns and expired chemicals must be disposed through EHS and unwanted but usable chemical should be processed through the chemical redistribution system.

7.3 Waste Determination

7.3.1 A chemical product becomes a waste when it:

Has been used in a process and cannot be reused
Has expired or been contaminated to the point it cannot be used
Is clean-up material from a chemical spill

7.3.2 Initial waste determinations should be performed on all waste streams to determine whether need to be managed as regulated hazardous waste.

7.3.3 Common RCRA Hazardous Waste Streams

Ignitable Wastes

Gasoline, turpentine, mineral spirits, xylene, oil-based paints, flammable aerosols, some glues, solvents. Look on the label for “flammable”, “ignitable”, “keep away from heat and flames” and “inflammable”.

These must be labeled “hazardous waste” and disposed in accordance with section 7.5 of this document.

Corrosive Wastes

Bowl and drain cleaners, floor strippers, acid from a leaking car battery, sodium hydroxide, sulfuric acid and hydrochloric acid. Look on the label for “corrosive” and “causes burns”

These must be labeled “hazardous waste” and disposed in accordance with section 7.5 of this document.

Toxic Wastes

Brake, carburetor and other cleaners that contain chlorinated ingredients, mercury-containing products, lead containing chemicals, some pesticides.

These must be labeled “hazardous waste” and disposed in accordance with section 7.5 of this document.

Fluorescent Lamps and HID Lamps

These must be placed in the cardboard containers provided by Central Stores. Full containers are collected at Central Stores before pick up by a recycling vendor.

7.3.4 Common Non-RCRA Regulated Waste Streams

Oily Wastes

Used oil, used oil filters, transmission, brake and hydraulic fluid, pump oil, lubricating greases and sorbent waste from spill clean up of these materials.

Wastes should be labeled “Used Oil for Recycle” or “Oil Contaminated Absorbent/Soil” and taken Physical Plant Transportation area for disposal through a used oil vendor.

Note: if oily wastes are contaminated with any hazardous wastes in 7.3.3, follow procedures 7.3.3

Hazardous Batteries

Car batteries, radio and cell phone batteries, UPS power supplies and other nickel cadmium or lead acid batteries.

Batteries should be turned over to EHS or taken to storage areas in the Physical Plant Central Stores area.

Lighting Ballasts

PCB and Non-PCB containing ballasts are collected in the Central Stores area for disposal through a recycling vendor.

Computer Monitors/TV's/Electronics

These are collected through Surplus Property or EHS and stored for recycling through the Surplus Vendor.

Antifreeze

Antifreeze is collected for recycling in the Physical Plant Transportation Area.

7.4 Satellite Accumulation Area Requirements

Chemical waste should be stored in the area where it was generated. EHS will pick the waste up from this location unless other arrangements are made. Under no circumstances should chemical waste be dropped off at Bldg 48 without prior approval from EHS.

7.4.1 Waste Accumulation Limits

Each area may temporarily hold a total of 55 gallons of chemical waste.

EHS should be notified when the quantity of waste stored in one area exceed this limit.

7.4.2 Container Management

7.4.2.1 Labeling Requirements

All chemical waste must be labeled with:

A hazardous waste or non-regulated waste label
Chemical name(s) of all hazardous compounds
Date the container begins to collect waste or
when unused chemical is determined to be
waste.

Printed labels can be obtained from the Department of
EH&S

7.4.2.2 Container Requirements.

1. Chemical waste must be in a sealed container that shows no sign of leakage or damage.
2. Broken caps or stoppers are not allowed.
3. Containers of waste must be securely closed at all times except when wastes are being added to or removed from the container
4. Store containers of incompatible wastes in separate areas or use chemically resistant trays for segregation.

It is the individual department responsibility to provide waste collection containers. EHS does not stock empty containers for SAA waste collection.

7.5 Disposal of Waste from the SAA

Waste is ready to be removed from the area if the containers are full, the waste accumulation limits as described in Section 7.4.1 of this plan have been reached, or the department requests removal.

7.5.1 Disposal Procedures

Attach a waste sticker to a container when first adding waste or when a container of hazardous material is no longer wanted.

Fill out label as indicated.

Complete the online or fax-back form found at <http://www.ehs.ucf.edu/wastag> or contact EHS at 823-0071

7.5.6 Disposal of Unknowns

Containers with unidentified contents present potential hazards and are expensive to dispose.

EH&S will accept unknowns only during scheduled campus pick ups by our hazardous waste contractors. You will be notified when the contractor will be on campus. When labeling unknowns for disposal list as much information about the chemical as possible.

7.5.7 Empty Containers

A container is considered empty and not a RCRA hazardous waste if:

All wastes have been removed that can be removed using conventional methods (pouring, scraping. e.g.) and

No more than 2.5 centimeters remain on the bottom of the container or

No more than 3 percent of the capacity of a container equal to or less than 110 gallons remain or

No more than 0.3 percent of the capacities of a container greater than 110 gallons remain

Empty containers should be allowed to air dry, marked "EMPTY" then disposed into a solid waste dumpster. Containers that have contained pesticides or corrosive materials should be rinsed (rinse water can be used for future product dilution) or triple rinsed if the label indicates.

Aerosol cans are considered empty when the contents have been used and they are completely depressurized.

7.5.8 Sewer Disposal

More than residual amounts of hazardous waste are restricted from sanitary sewer drain disposal.

Chemical products (including latex paints and diluted cleaning products) are not to be disposed on the ground or into storm water drains.

7.6 Emergency Preparedness and Response Procedures

7.6.1 Hazardous Chemicals

7.6.1.1 Facility and maintenance personnel are expected to clean up small spills of chemical products that he/she routinely works with.

Spill materials should be collected in proper containment and labeled. Contact EHS for disposal as outlined in 7.5.1

7.6.1.2 Call 911 for any chemical release:

Involving fire, explosion or injury.

From unattended laboratory operations detected after hours.
Or from uncontrollable releases of chemical products that you are working with.

7.6.1.3 Notify EHS for any hazardous chemical release:

To storm water or outdoor environment.

From leaking packages delivered to Central Receiving.

7.6.2 Oil and Petroleum Product Spills

7.6.2.1 Facility and maintenance personnel are expected to clean up small spills (less than 25 gallons) of petroleum product spills that do not cause an oily sheen on water surfaces.

All dirt, clay and other sorbent materials contaminated with petroleum products are to be collected in closeable containers and labeled "Oil Contaminated Absorbent/Soil".

The centralized collection point for these containers is Physical Plant Vehicle Maintenance

7.6.2.2 The following petroleum spills must be reported to EHS immediately:

Spills that result in an oily sheen on lake, stream, retention pond or wetland water surfaces. This does not include water that is contained in enclosed sump pits, etc. that do not empty into other water sources.

Spills that involve petroleum products over 25 gallons.

8.0 General Rules

8.1 Training

Anyone working with hazardous materials must attend, within 6 months of hire, a Chemical Safety/Hazardous Waste Awareness session and

Complete a Hazardous Waste Awareness refresher program annually

8.2 Audits

Audit to be performed in accordance with EP-003

8.3 Non-Conformance and Corrective Action

Corrective Actions to be performed in accordance with EP-004

9.0 Records

Records shall be retained consistent with EMS Procedures-013.

Record of Revisions



Revision {PRIVATE }Date	Description	Sections Affected