

## Laboratory Hazardous Waste Satellite Accumulation Requirements

For guidance on hazardous waste pick-up requests, please follow [this tutorial](#).

For general information on hazardous waste, go to <https://ehs.fiu.edu> > Safety Programs > Environmental Compliance > Hazardous Waste

### 1.0 Setting up a SAA for Hazardous Waste Storage

#### 1.1 Signage

- 1.1.1 The accumulation area must be labeled: "Hazardous Waste Satellite Accumulation Area", as written on SAA signage provided by EHS
- 1.1.2 The following documents must be posted near the accumulation area: SAA Requirements document, SAA contact information signage (pink paper), Empty Container Quick Reference Guide, Solvent Rag Quick Reference Guide, Assorted Wastes guide, SAA Inspection Form, and Waste Pick-Up Request Instructions

#### 1.2 Physical Setup

- 1.2.1 A perimeter shall be created that encompasses the area where hazardous waste will be stored so no other objects or materials are stored in the SAA zone
- 1.2.2 Area must be of adequate size to store all wastes being generated
  - The volume of waste stored in each SAA must be limited to 55 total gallons at any one time
  - If acutely hazardous waste is generated, no more than 1 gallon may be stored
- 1.2.3 Hazardous waste SAA's must be located at or near the process that is generating the waste
- 1.2.4 SAA's shall not:
  - Protrude into aisle ways
  - Block access to emergency equipment, exits, or electrical panels
  - Be located near incompatible operations (i.e. heat sources)
  - Be near open floor drains or sinks
  - Be located inside fume hoods (exception – if fume hood is used solely for hazardous waste storage, and there is no sink drain inside the hood, then it can be used as a SAA)
  - Be located in an elevated location (tables, benches, chemical cabinets)

1.3 Refer to the SAA Step by Step guide found on the EHS website for visual guidance on setting up a SAA

### 2.0 Container Management

#### 2.1 Supplies

- 2.1.1 Any department producing hazardous waste is responsible for supplying proper containers

and secondary containment to store the waste

- It is highly recommended that empty chemical containers are utilized for liquid hazardous waste storage (see Section 2.5)

2.1.2 Spill kits shall be readily available and appropriate for the chemicals used and waste produced in the lab/shop area

## 2.2 Waste Storage Containers

2.2.1 Hazardous waste must be collected in sealable, non-leaking, chemically compatible containers

- Containers must be free of surface stains and signs of leakage
- Acids shall be stored in either high density polyethylene (HDPE) or glass containers
- Biohazardous, radioactive, and chemical hazardous waste shall not be stored near each other or mixed together
- When filling bottles or drums with liquid hazardous waste, leave 1-2 inches of headspace for liquid expansion

2.2.2 To employ a container for hazardous waste storage, all previous labels on the container must be properly defaced

- To deface, use a dark marker and be sure all previous chemical and hazard identification is illegible

2.2.3 Improper waste storage practices include using: open beakers/tubes, taped lids, rubber stoppers/corks

2.2.4 Hazardous waste storage containers must be tightly sealed unless material is being added

2.2.5 EHS shall review containers used to store waste upon pickup and determine compliance

## 2.3 Secondary Containment

2.3.1 In the case of a release of hazardous waste stored in a SAA, proper secondary containment will prevent further transport of the waste

2.3.2 Flammable, corrosive, reactive, and toxic wastes each must have separate secondary containment vessels provided

2.3.3 A secondary containment vessel must provide storage for 110% of the total volume of waste stored

2.3.4 Appropriate secondary containers include buckets, tubs, spill trays, containment tray with grating

- Glass may not be used for secondary containment
- Acid waste must utilize HDPE secondary containment

## 2.4 Waste Container Labeling

- 2.4.1 All hazardous waste storage containers must be labeled with the standard yellow “Hazardous Waste” sticker
  - These are provided by EHS; call extension x72622 to obtain more if needed
- 2.4.2 Each constituent of the waste and the percent volume must be legibly identified in English on the sticker
  - Waste percentages must add up to 100%
  - No chemical symbols or trade names
- 2.4.3 Generator, generating department, waste stream (acid, solvent, etc.), and hazard type (flammable, toxic, reactive, or corrosive) must be identified
- 2.4.4 THE DATE SECTION MUST BE LEFT BLANK
  - EHS will mark the date when waste is picked up for disposal

## 2.5 Empty Container Management

- 2.5.1 A container is considered empty if all contents have been removed by pouring/pumping/aspirating and no more than 1 inch of residue remains at the bottom of the container
  - The empty container shall be air dried in a ventilated area (ex. a chemical fume hood)
- 2.5.2 Once a container is designated as empty, it can either be disposed of in the regular trash or used for storage of hazardous waste
- 2.5.3 The container needs to be disposed of in a dumpster. The custodial staff will not pick up this waste. To dispose of an empty container in a nearby dumpster, usually located in loading dock areas:
  - Be sure the labels are properly defaced, caps/lids/closures are removed, and contained has been air dried in a well-ventilated area
  - It is clearly marked with the following: “Uncontaminated Empty Container”
- 2.5.4 To employ an empty container for hazardous waste storage:
  - Deface all previous manufacture’s labels (contents, hazards, company information, etc.)
  - Follow secondary containment provisions found in section 2.3 and labeling instructions found in section 2.4

## 2.6 Empty Container Management for Acutely Hazardous Chemicals

- 2.6.1 If a container at any time held an acutely hazardous chemical (P listed products), the container shall be disposed of as hazardous
- 2.6.2 If you are unsure whether you are using P listed products, please contact EHS at extension x72622

### 3.0 Waste Pickup

3.1 A “Hazardous Waste Pick-Up Request” must immediately be submitted via [Waste Pick-Up Request](#) when a container of waste is deemed full

3.1.1 For guidance on pick-up requests, refer to the beginning of this document

3.2 Do not accumulate full containers of hazardous waste in your lab/work area at any time

3.3 If additional waste is likely to be generated before EHS is able to dispose of the waste, a second waste container may be started

3.4 All labeling and storage requirements must be met for waste to be disposed

3.5 Individual forms must be completed for each waste stream to be disposed of

3.5.1 A single form may be completed for multiple containers in the same waste stream

### 4.0 Training

4.1 All persons who work in facilities or oversee operations which generate hazardous waste shall receive annual training

4.1.1 This includes principle investigators, lab managers, visiting professors, and laboratory employees working in or having a desk space within labs that generate hazardous waste

4.1.2 Students and employees working in the lab shall be knowledgeable in:

- SAA locations/requirements
- Chemical spill procedures and spill kit usage
- Eyewash/safety shower location and operation
- Primary and secondary emergency evacuation routes
- Fire extinguisher location and operation

4.2 Location of designated safe area of refuge required training classes shall include: Hazardous Waste Awareness and Handling; Environmental Awareness Part I & II; Small Spills and Leaks

4.2.1 This URL is the access point for online training courses: <https://fiumdl.fiu.edu>

4.3 All current training records must be up to date, printed, and readily available in each lab for review at all times