

FIU Hazardous Waste Management Plan

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1.0 Purpose

To provide guidance on hazardous wastes generation, storage, packaging, recordkeeping, and general management. This plan summarizes the steps Florida International University (FIU) follows to: effectively, efficiently, and safely manage hazardous waste, properly comply with applicable regulations to minimize liabilities, prevent releases to the environment, and prevent human exposure.

2.0 Scope

Anyone at FIU that generates, stores, and/or handles hazardous wastes are subject to complying with this plan. This plan does not cover management of biomedical or radioactive wastes.

3.0 Definitions

The following terms are used throughout this document:

Abandonment (Dumping): The term abandoned means thrown away. A material is abandoned if it is disposed of, burned, incinerated, or sham recycled.

Acutely Hazardous Waste: Solid wastes which the EPA has determined to be very dangerous even in small amounts. Wastes listed in 40 CFR 261.31 that are followed by the symbol "H" and all "P" wastes listed in 40 CFR 261.33 (e) are acutely hazardous. These listed wastes have been found to be fatal to humans in low doses.

Central Accumulation Area: A hazardous waste management area that is used to store or treat hazardous waste. Waste can only be stored for a specific amount of time before it must be shipped offsite. For this plan the term **CAA** (Central Accumulation Area) will be used. FIU maintains a CAA at each campus.

Code of Federal Regulations (CFR): The codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the Federal Government, divided into 50 titles that represent broad areas subject to Federal regulation, with each volume of the CFR updated once each calendar year and issued quarterly.

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA): The purpose of this act is to identify sites where hazardous materials threaten the environment and or public health because of leakage, spillage, or general mismanagement (particularly the lack of a good hazardous waste removal plan), and then to identify the responsible party.

Cradle-to-Grave: System designed by EPA, meant to protect the public health by: (1) defining what wastes are hazardous; (2) tracking wastes to the point of disposal; (3) assuring that treatment, storage, and disposal facilities meet minimum national standards; and (4) making certain TSD(s) are properly maintained after closure, and that facility owner/operators are financially responsible for hazardous waste releases that may occur at the facility.

E-Waste: "E-waste", "electronic waste", "e-scrap" and "end-of-life electronics" are terms often used to describe used electronics that are nearing the end of their useful life, and are discarded, donated or given to a recycler. Though "e-waste" is the commonly used term, EPA considers e-waste to be a subset of used electronics and recognizes the

inherent value of these materials that can be reused, refurbished or recycled to minimize the actual waste that might end up in a landfill or improperly disposed in an unprotected dump site either in the US or abroad.

EPCRA: Emergency Planning and Community Right-to-Know Act of 1986. The act requires certain reporting of chemicals stored onsite (Tier II reporting) as well as emergency plans relating to hazardous chemical releases.

Florida Administrative Code (FAC) – The codification of the general and permanent rules specific to the state of Florida.

Florida Department of Environmental Protection (FDEP): The Florida Department of Environmental Protection is the state's lead agency for environmental management and stewardship, protecting our air, water and land. DEP is divided into three primary areas: Land and Recreation, Regulatory, and Ecosystem Restoration.

Generator: The person who, by ownership, management, or control, is responsible for causing or allowing to be caused the creation of a hazardous waste.

Hazardous Waste: A solid waste that because of its quantity, concentration, or physical, chemical, or infectious characteristics may result in adverse effects on the health and safety of employees, and/or to the environment.

Inherently Waste-like Materials: Some materials pose such a threat to human health and the environment that they are always considered solid wastes; these materials are inherently waste-like. Examples of inherently waste-like materials include certain dioxin-containing wastes.

Lamp: the bulb or tube portion of an electric lighting device, specifically designed to produce radiant energy, most often in the ultraviolet, visible, and infra-red regions. Also referred to as "universal waste lamp". Examples of common universal waste electric lamps include, but are not limited to:

- Fluorescent
- High Intensity Discharge
- Neon
- Mercury Vapor
- High Pressure Sodium
- Metal Halide

Large Quantity Generator (LQG): A facility that generates greater than or equal to 2,200 pounds (1000 kilograms) of hazardous waste or more than 2.2 pounds (1 kilogram) of acutely hazardous waste per calendar month. Some states refer to this status as full quantity generator.

Mercury Containing Component: An enclosed component or part that contains elemental liquid mercury or compounds of mercury that once open may release mercury vapor, which is hazardous for both the environment and humans.

Primary containers: the containers received directly from the manufacturer/supplier which still has their original contents.

Resource Conservation and Recovery Act (RCRA): A 1976 amendment to the first federal solid waste legislation, the Solid Waste Disposal Act of 1965, where the US Congress established initial directives and guidelines for EPA to regulate and manage solid waste, including hazardous waste. RCRA established a regulatory system to track hazardous substances from the time of generation to final disposal. The law requires safe and secure procedures to be used in treating, transporting, storing and disposing of hazardous wastes. RCRA was designed to prevent new superfund sites.

Secondary containers: containers not from the manufacturer of the original chemical; does not have the original manufacturers label on or contents in them. Chemicals in secondary containers are transferred from the primary container by the user.

Solid Waste (statutory definition): Any garbage or refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, either liquid, solid, or gaseous, resulting from industrial, commercial, mining, and agricultural operations, and from community activities.

Small Quantity Handler of Universal Waste (SQHUW): - A generator or reverse distribution handler accumulating less than 5,000 kilograms of universal waste lamps or devices at any one time; or another handler that accumulates less than 2,000 kilograms of lamps or 100 kilograms of devices at any one time.

Treatment, Storage, Disposal, Recycling Facility (TSDF): Facilities that receive hazardous wastes for treatment, storage or disposal.

United States Department of Transportation (USDOT): - a Cabinet department of the United States government concerned with transport of hazardous waste among others. Waste is subject to DOT regulation when it is transported by motor vehicle.

United States Environmental Protection Agency (USEPA): –the department of the federal government charged with the oversight and development of environmental regulations and programs in the US. Its main goal is the protection of the environment by the systematic abatement and control of pollution, through integration of research monitoring, standard setting, and enforcement activities.

Universal Waste: This waste stream includes the following hazardous wastes and are subject to universal waste requirements:

- Batteries (§40 CFR 273.2)
- Pesticides (§40 CFR 273.3)
- Mercury containing equipment (§40 CFR 273.4)
- Lamps (§40 CFR 273.5)

Universal Waste Handler: The facility that accumulates universal waste and sends universal waste to a destination facility for treatment, disposal, or recycled. Does not mean a facility that treats, disposes, recycles, or transports universal waste.

4.0 Waste Generation Information

4.1 *Illegal Hazardous Waste Abandonment*

The abandonment (dumping) of hazardous waste without proper disposal or identification is a regulatory violation punishable by law, creates both a dangerous storage situation, and can lead to an expensive remediation process. All personnel at FIU who generate or interact with hazardous waste are responsible for ensuring its proper identification, storage, packing, handling, and disposal. Hazardous waste may not be disposed of down the sink.

4.2 *Generator Status*

Knowledge of the generator category enables FIU Environmental Compliance to ensure that the quantity of waste generated, accumulated and stored, etc. is well managed as per regulatory requirements. Florida International maintains compliance for the following locations:

- 4.2.1 FIU Modesto Maidique Campus: Large Quantity Generator (EPA ID FLD980839518)
- 4.2.2 FIU Biscayne Bay Campus: Small Quantity Generator (EPA ID FLR000031278)
- 4.2.3 FIU Engineering Campus: Small Quantity Generator (EPA ID FLD984223883)
- 4.2.4 FIU Center for Translational Science: Small Quantity Generator (EPA FLR000151266)

4.3 *General Waste Determination Process*

Determining whether a waste is hazardous or not is the first step in hazardous waste management. This determination is conducted by EH&S. With authorization from EH&S, an approved TSDRF or transporter may assist in or execute this process.

- 4.3.1 A material is a hazardous waste if the EPA specifically lists it as a hazardous waste or if it exhibits a hazardous characteristic and meets the definition of solid waste. Two methods may be used to determine if the waste exhibits hazardous characteristics: characteristic testing and application of generator's knowledge.

4.4 *Hazardous Waste Restrictions*

When a solid waste is deemed hazardous, it is subject to the following restrictions. Hazardous waste may not be disposed of or recycled with other forms of trash or waste, burned, or allowed to evaporate into the air, disposed or diluted in water (e.g. down the drain), or disposed on or buried in the land or bodies of water.

4.5 *Waste Exclusions*

The following wastes will not be managed under this plan:

- 4.5.1 Biomedical/biohazardous waste
- 4.5.2 Radioactive waste
- 4.5.3 Materials not classified as a solid waste
 - Domestic Sewage Exclusion
 - Secondary materials reclaimed
 - Petroleum refining materials
 - NPDES regulated point source discharges
 - **Note:** See §40 CFR 261.4(a)
- 4.5.4 Materials classified as a solid waste but not as a hazardous waste
 - Household wastes
 - Agriculture/farming wastes
 - Ash from coal or fossil fuel plants
 - Mining/exploration wastes
 - **Note:** See §40 CFR 261.4(b)

4.6 EPA Listed Waste Codes

The following codes may be assigned to waste produced by FIU:

- 4.6.1 F List: Wastes from common manufacturing and industrial processes, such as solvents that have been used in cleaning or degreasing operations. Because the processes producing these wastes can occur in different sectors of industry, the F-listed wastes are known as wastes from non-specific sources. Wastes included on the F-list can be found in the regulations at 40 CFR §261.31.
- 4.6.2 K List: Wastes from specific industries, such as petroleum refining or pesticide manufacturing. Certain sludges and wastewaters from treatment and production processes in these industries are examples of source-specific wastes. Wastes included on the K-list can be found in the regulations at 40 CFR §261.32.
- 4.6.3 P List: Acute hazardous wastes from discarded commercial chemical products. The P-list can be found at 40 CFR section 261.33. To be P listed waste, the chemical must be unused.
- 4.6.4 U List: hazardous wastes from discarded commercial chemical products. The U-list wastes can be found at 40 CFR section 261.33.

4.7 Waste Profiling

- 4.7.1 A waste analysis form or waste profile (developed by the disposal facility) is used to document the hazardous waste determination. After the waste has been classified as per guidelines previously described in this plan, a Waste Profile must be completed. EH&S may allow the approved transporter or the TSDRF to generate these waste profiles. Information regarding the waste and its process must be provided to the transporter or TSDRF by FIU EH&S. The Waste Profile must contain the following information:
 - Generator, transporter, and TSDRF Information (name, address, EPA identification number, contact information)
 - Waste common name and USDOT proper shipping name
 - Description of the waste generating process
 - Physical characteristic of the waste (solid, liquid, gaseous)
 - Composition of waste and percentage of each constituent
 - Copy of the Safety Data Sheet (SDS), provided by manufacturer
 - Waste analysis test data (when available)
 - Assigned waste codes
 - Land Disposal Notification (when required)
 - TSDRF or Transporter Approval Number
 - Certification Statement: *"I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR part 268 subpart D. I believe that the information I submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment."*
- 4.7.2 FIU EH&S shall be responsible for informing (by written communication) the transporter and the TSDRF of any changes in the constituents or generation process of the waste prior to off-site transportation of the waste. Changes in the waste profile shall be made by EH&S and approved by the transporter and the TSDRF before off-site transportation.
- 4.7.3 Waste Profiles shall be kept on-site at the EH&S offices for a minimum period of three (3) years.

5.0 Waste Labelling, Storage, and Transport

5.1 Container Selection

- 5.1.1 The selection of appropriate containers helps prevent leaks and spills that may result in human exposure or environmental release during waste handling, storage, and transport. EH&S is responsible for assisting in the selection of appropriate waste containers as per USDOT 40 CFR 173. Determination of waste container type is based on:
- The chemical characteristics of the waste contained
 - Waste generation rate
 - Accumulation area considerations
 - Disposal method
- 5.1.2 Wastes must be collected in sealable containers with secure closures (ex., screw top) that prevent spillage during transport. Non-acceptable containers include open beakers, cans, tubes, and tubs. Non-acceptable container closures include taping, rubber stoppers, glass stoppers, and corks.
- 5.1.3 The adequacy of container and closure will be determined by EH&S at the time of pick-up. If deficiencies are found, it will be the responsibility of the generator to correct any issues before pick-up of the wastes can proceed.
- 5.1.4 When a container of Hazardous Waste is full, the generator must immediately submit a *Hazardous Waste Pickup Request Form* to EH&S (see Appendix A for instructions).
- 5.1.5 Do not accumulate multiple full containers of Hazardous Waste in your lab, storage, or work area at any time without EH&S approval. If additional waste is likely to be generated before EH&S arrives, a second waste container, which meets all storage, labeling and filling requirements, may be started.
- 5.1.6 Do not fill smaller containers to the top. leave adequate headspace for liquid expansion (2 inches/bottle).
- 5.1.7 Biohazard, radioactive and chemical hazardous wastes shall not be mixed together.
- 5.1.8 The exterior of the waste container must be free of visible chemical contamination due to leaks, spillage or overfilling. Containers showing signs of surface stains or leakages will not be picked-up until the leak is stopped, spilled material is safely contained and neutralized (if applicable), and original container surface is clean and decontaminated.
- 5.1.9 Keep hazardous waste containers closed unless adding or removing waste. If a funnel is used to transfer waste, remove the funnel after the transfer and close the container.
- A closed container is one whose contents would not spill if the container were knocked over.
- 5.1.10 Use an over pack drum or container for containers that may leak or cannot be closed. Over pack containers must be compatible with the waste, sealable, and filled with vermiculite to occupy extra space.

5.2 Waste Segregation Requirements

Incompatible wastes shall not be placed in the same container or stored in the same secondary containment vessel. Incompatible materials must be segregated by means of barriers (dikes, beams, walls, or other devices). Do not place hazardous wastes in unwashed containers that previously held an incompatible material. When unsure whether a waste is incompatible with the waste in the container or with the container itself, consider it incompatible and contact EH&S. You may also refer to the following:

- 5.2.1 Acids
- Segregate acids from reactive metals such as sodium, potassium, magnesium, etc.
 - Segregate oxidizing acids (e.g., nitric acid) from organic acids, flammable and combustible materials.

- Segregate acids from chemicals which could generate toxic or flammable gases upon contact, such as sodium cyanide, iron sulfide, etc.
- Segregate acids from bases.
- 5.2.2 Bases
 - Segregate bases from acids, metals, organic peroxides and easily ignitable materials.
- 5.2.3 Solvents (Flammable and Halogenated Solvents)
 - Segregate from oxidizing acids and oxidizers.
 - Keep away from any source of ignition (heat, sparks, or open flames).
- 5.2.4 Oxidizers
 - Store in a cool, dry place.
 - Keep away from combustible and flammable materials.
 - Keep away from reducing agents such as zinc, alkali metals, and formic acid.
- 5.2.5 Water Reactive Chemicals
 - Store in a cool, dry place away from any water source, including sprinkler systems.
 - Make certain that a Class D fire extinguisher is available in case of fire.
- 5.2.6 Pyrophoric Substance (Materials which will react with the air to ignite when exposed, e.g., white phosphorus or tert-Butyl Lithium.)
 - Store in a cool, dry place making provisions for an airtight seal.
- 5.2.7 Peroxide Forming Chemicals
 - Store in airtight containers in a dark, cool, and dry place.
 - Label containers with receiving, opening, and disposal dates.
 - Periodically test for the presence of peroxides.
- 5.2.8 Organic Peroxides
 - Store in area such as a refrigerator where the temperature will remain below the self-accelerating decomposition temperature.

5.3 Grounding Requirements

Grounding of ignitable hazardous waste to prevent sparks from igniting flammable vapors is not required by FIU but is strongly recommended. Use a bonding wire when transferring flammable liquids into containers to prevent sparks caused by buildup of static electricity during pouring operations. Contact facilities to have waste grounded.

The image below in Figure 1 shows a common type of grounding wire used. One end is attached to the drum/container and the other is attached to a grounded surface in the lab (typically a metal object that is part of the building). Figure 2 shows a common way that FIU Facilities will ground objects. One end is drilled into the cabinet and the other is attached to a metal baseboard that is part of the wall.



Figure 1

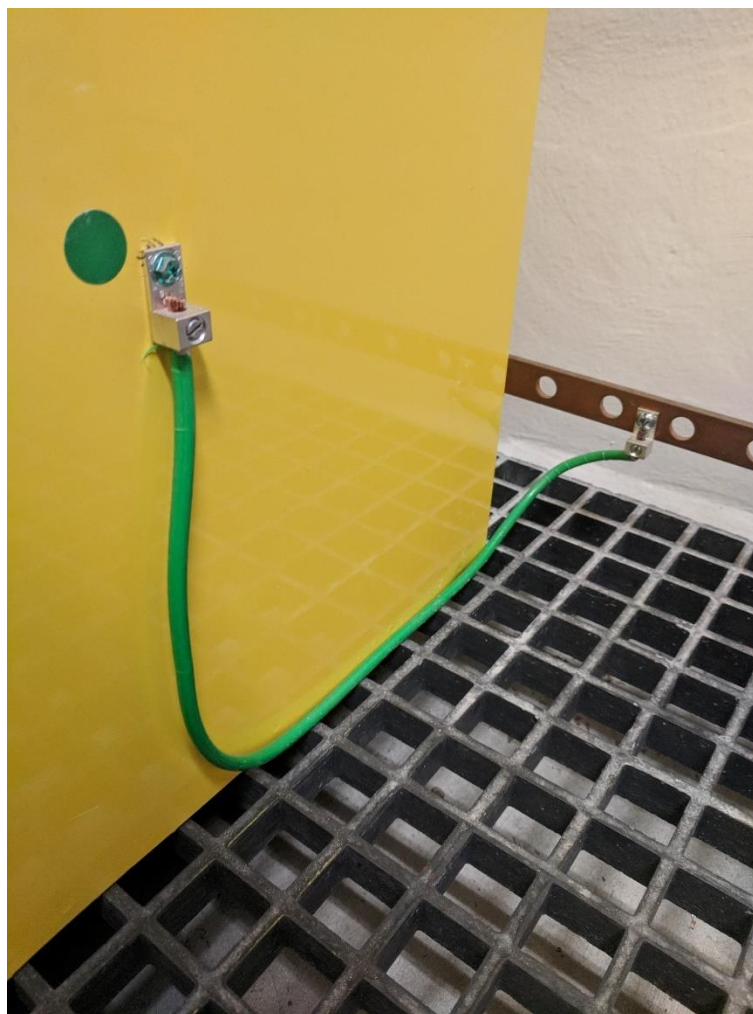


Figure 2

5.4 Secondary Containment

Additional containment is required for the storage of all hazardous wastes onsite. This backup containment prevents the uncontrolled release of wastes in the event a waste container leaks, ruptures, or opens for any reason.

- 5.4.1 Secondary containment must provide space to fill 110% of the volume of the waste it contains. For example, a 1-liter waste bottle must be stored in a container at least 1.1-liters in volume.
- 5.4.2 Acid must utilize high density polyethylene secondary containment.

5.5 Empty Container Requirements

- 5.5.1 A container that held a P-listed waste is empty if it has been triple-rinsed using a solvent capable of removing the waste. Any rinsate (wastes generated from the rinse process) must be collected as hazardous waste, but the container can be disposed as regular trash.
- 5.5.2 If the container never held a P-listed waste, it is empty when all contents have been removed that can be removed by using common practices such as pouring, pumping, or aspirating (mechanically). The container can be disposed of as regular trash when no more than one (1) inch of the residue remains on the bottom of the container or inner liner. For a 100-gallon container or less, no more than 3% of the total capacity of the container remains. For a container larger than 100 gallons, no more than 0.3% remains.

- 5.5.3 A compressed gas cylinder is empty when the pressure in the container approaches atmospheric pressure. When this occurs, contact the compressed cylinder manufacturer for exchange or pick up. Do not throw empty compressed gas cylinders in the trash.
- 5.5.4 Empty closed and open head metal drums (55 gallons or smaller) can be disposed as scrap metal (recycled). Contact EH&S if you have a 55-gallon metal drum destined for disposal.
- 5.5.5 Labelling of empty containers that never held P listed waste:
 - When a container is deemed empty (see 5.5.2) and you want to dispose of it, first deface the label. Cover all label information with a large, dark, permanent marker. It must be obvious that the container no longer holds the original manufacturer's contents.
 - Next, mark clearly with "Uncontaminated Empty Container" and dispose of container in a general trash dumpster. Housekeeping will not dispose of empty containers.
 - See "Empty Containers" fact sheet at <https://ehs.fiu.edu/assets/docs/environmental-compliance/empty-containers.pdf>

5.6 Hazardous Waste Container Labeling Requirements

All hazardous waste must comply with the following labelling requirements:

- 5.6.1 Labels must be durable, in English, printed on or affixed to the surface of the container, displayed on a background of sharply contrasting color, and contain the following information:
 - The words "Hazardous Waste"
 - Words that identify the contents of the container (no symbols or abbreviations permitted)
 - Generator EPA ID Number at the time of offsite transport
 - Accumulation Date (date when the container becomes full – must be left blank until container is deemed full)
 - Manifest Number (This is required just before transporting the waste off-site)
- 5.6.2 All labels must be affixed on one of the sides of the container (never on the top or bottom of the container), unobstructed by other labels or attachments, and must be located away from any other marking (such as advertising) that could substantially reduce its identification effectiveness.
- 5.6.3 At least one (1) label must be posted on each container. Complete this [form](#) to request standardized "Hazardous Waste" labels from EH&S (at no charge or call 7-6849).
- 5.6.4 Label waste containers accurately, identifying each constituent by printing out the full name in English with their percentages. (no chemical symbols). The quantity of all the constituents identified on the "Hazardous Waste" label must add up to 100%.
- 5.6.5 Hazardous Waste containers on which required labeling information is missing or illegible for any reason will not be picked-up by EH&S for disposal until all the requirements are fulfilled. The correction cannot take more than 72 hours. Such containers are problematic at the time of an emergency spill and when picked-up for treatment by off-site disposal facilities.
- 5.6.6 "Hazardous Waste" labels are not necessary on unused product if the original supplier's label is intact and legible. These items may be eligible for reuse by other lab areas. Check with your department first to see if anyone can use the product. For more information, contact EH&S at ehs@fiu.edu.

5.7 Satellite Accumulation Area Storage Requirements (SAA)

FIU is permitted to accumulate hazardous waste in specific approved areas, where hazardous waste may be maintained at or near the point of generation. This area is known as satellite storage, (SAA). The following section describes the proper management of the Satellite Accumulation Areas (SAA) to safely store hazardous waste and to minimize the risks to human exposure and environmental releases.

- 5.7.1 SAA Storage Requirements
 - Containers are under the control of the Area SAA Responsible person (lab manager, PI or others)
 - Waste containers must be properly labeled, as per guidelines described in this procedure

- All containers must be kept closed except when adding or transferring waste
- Contents of the container must be compatible with the containers
- Hazardous waste must be segregated based on the hazards of the waste
- Separate secondary containment must be provided for each category of hazardous waste (ignitable, corrosive, toxic, and reactive)
- SAA's may accumulate waste in containers near the point of generation up to 55 gallons per waste stream of hazardous waste and up to one quart of acutely hazardous waste
- When a waste container is full, it must be dated and transported to the CAA within three (3) days (72 hours) or less
- All SAA locations must be equipped with a device capable of summoning emergency assistance (e.g. telephone, hand-held two-way radio), water at adequate volume and pressure to suppress a fire (except in the presence of water reactive chemicals/wastes), an internal communications or alarm capable of providing immediate emergency instruction to personnel who can be affected by the emergency incident, portable fire extinguishers rated for the waste type stored, spill control equipment (e.g. spill trays, bins, berms, rags, specific spill control kits) and secondary containment capable of holding 110% by volume of all the liquid stored in it

5.7.2 SAA locations must be clearly designated and easily visible. Always maintain a three (3) foot boundary for access of each SAA. EH&S will review and approve all SAA's prior to their use in accordance with EPA and NFPA standards. SAA's may be located:

- Inside manufacturing areas
- Inside fume hoods, if the fume hood is solely used for hazardous waste storage
- On the floor
- Inside chemical storage cabinets
- In specially designed chemical storage rooms

They may not be located:

- In an aisle
- Near electrical panels/equipment or emergency exits
- In a way that blocks emergency response equipment or exits
- Next to operations which are incompatible with the wastes (e.g., ovens & flammable wastes)
- Next to areas where incompatible chemicals or wastes are regularly used or stored.
- Inside laboratory fume hoods which have drains, do not have adequate secondary spill containment, or are used for operations other than hazardous waste storage
- Next to open floor drains or sinks
- On bench tops, tabletops, flammable or corrosive storage cabinet tops, or other precarious locations.

5.8 Waste Manifests

The following requirements shall be met in documenting the offsite transport of hazardous waste across all campuses:

- Individuals authorized to sign Hazardous Waste Manifest must completed DOT Hazardous Materials Training
- EH&S must receive a signed copy from the receiving TSDRF within 45 days from the date the transporter received the waste. After 30 days, if FIU EH&S has not received the signed TSDRF copy, EH&S will contact the TSDRF to determine the status of the shipment

- If the signed copy is not received in the remaining 15 days (of the total 45 days), EH&S must report to EPA.
- Manifests must be kept with applicable Land Disposal Notification/Certification forms.
- All manifests shall be stored onsite in AHC4-122. Waste manifests are also stored on the RCRA e-manifest system.

5.9 Disposal of Solvent Contaminated Wipes

The EPA has a separate set of rules for solvent contaminated wipes, given a few conditions are met, and the state of Florida has adopted these rules. Waste can be managed under the excluded solvent-contaminated wipe rule given it is contaminated with *only* the solvents listed below in 5.9.1 and carry no waste codes other than flammability (D001). Biologically, radioactive, or other chemically contaminated materials must be disposed of in a different waste stream.

- 5.9.1 Regulation under the solvent wipe exclusion applies to wipes contaminated with *only* the following solvents:

Acetone
Benzene
n-Butanol
Chlorobenzene
Creosols
Cyclohexane
1,2-Diclorobenzene
Ethyl acetate
Ethyl benzene
2-Ethoxyethanol
Isobutyl alcohol
Methanol
Methyl ethyl ketone
Methyl isobutyl ketone
Methylene chloride
Nitrobenzene
Pyridine
Tetrachloroethylene
Toluene
1,1,2-Trichloroethane
Trichloroethylene
Xylenes

- 5.9.2 Storage, Labeling, and Recordkeeping

- Wipes must be accumulated, stored, and transported in non-leaking, closed containers. Containers must be closed when not in use.
- Containers must be capable of holding free liquid, though no free liquids are permitted under the provisions of this rule.
- The container shall not be constructed of cardboard or fabric bags.
- Containers shall be labeled with the words: "Excluded Solvent-Contaminated Wipes" in addition to the accumulation start date.

- Accumulation start date shall be on the day in which the first piece of waste is placed in the container. Waste may be collected up to 180 days.
- EH&S shall maintain records of collection, storage, and shipment of solvent-contaminated wipes.

6.0 Inspections

6.1 Satellite Accumulation Area (SAA) Inspections

- 6.1.1 SAA's that have an accumulation of greater than or equal to 10 gallons of any hazardous waste must be inspected annually for all campuses.
- 6.1.2 The SAA responsible person shall inspect each SAA under their control on a regular basis using the SAA Inspection form located in Appendix B.
- 6.1.3 SAA original inspection records shall be maintained in the iAuditor (SafetyCulture) inspection platform.

6.2 Central Accumulation Area (CAA) Inspections

The following section describes the proper management of the CAA to safely store hazardous waste and to minimize the risk of human exposure and environmental releases.

- 6.2.1 EH&S will be responsible for ensuring that CAA requirements are met.
- 6.2.2 CAA's must provide the following preparedness and prevention equipment:
 - Spill control equipment and overpack container
 - Fire control equipment at or near the central waste storage area
 - Telephone or other means of external communication
- 6.2.3 Waste may be stored in CAA located at MMC AHC4-123B for a period no longer than 90 days.
- 6.2.4 Waste may be stored in CAA located at BBC MB for a period no longer than 180 days
- 6.2.5 Waste may be stored in CAA located in EC1590 for a period no longer than 180 days
- 6.2.6 Waste may be stored in CAA located CTS 154 for a period no longer than 180 days
- 6.2.7 CAA's must provide the following postings:
 - "NO SMOKING" sign near ignitable and/or reactive waste (in outside storage areas such as the CAA)
 - "DANGER – AUTHORIZED PERSONEL ONLY – KEEP OUT"
- 6.2.8 The following information must be posted near the telephone or other means of external communication:
 - Emergency Contact Information
 - Map or diagram showing location of the portable fire extinguisher, exits, spill control material, phone, and fire alarm (pull station)
 - Copies of both the Contingency Plan and this plan
- 6.2.9 EH&S is responsible for inspecting the CAA once a week and completing the Central Accumulation Area Inspection Form located in Appendix C.
- 6.2.10 Once completed, CAA Inspection Forms are archived in AHC4-122 and stored electronically on the EH&S Share Drive.

7.0 Other Types of Waste

7.1 Non-Hazardous Waste

If a waste is not listed as an EPA hazardous waste or does not exhibit any of the hazardous waste characteristics or any other hazard type (biohazardous, radioactive, etc.), it is a non-regulated (non-hazardous) waste. It is the responsibility of the generator to dispose of this kind of waste in the nonhazardous waste stream (trash cans, dumpsters). Contact the Custodial Manager at (305)-348-4558 for additional guidance in disposal of non-hazardous materials.

7.2 Universal Hazardous Waste (UW)

This waste stream includes lamps, batteries, pesticides, and mercury containing components. The EPA created a separate set of rules to address the management of these kinds of waste as they are commonly generated in any industry. All personnel handling or storing UW shall be trained to do so. UW becomes a waste on the date it is discarded. The container must be labeled with this accumulation start date and can be stored onsite for up to one year.

7.2.1 General Requirements for All Universal Waste Types

- The proper storage and handling of UW is critical to ensure personnel safety and compliance with appropriate regulations. Universal waste will not be improperly disposed, diluted or treated, except when responding to a release.
- UW containers shall be closed at all times (except when adding or removing waste), compatible with the UW stored, free of defects, design characteristics or damage that would lead to leakage, spillage or other environmental releases.
- There are three types of UW commonly generated at FIU – batteries, mercury -containing devices, and spent lamps. Disposal of each UW is handled by different FIU departments.

7.2.2 Management Requirements for Batteries

- *Disposal handled by Facilities Management.*
- Includes all types of rechargeable batteries (of any size), car batteries, batteries removed from uninterrupted power supplies (UPSs), batteries containing toxic heavy metals such as lead or cadmium, nickel metal hydride batteries, and lithium-ion batteries. **Does not include alkaline batteries, which may be disposed of as normal trash.**
- Place batteries in a compatible rigid container such as a box or bucket in a designated area. Make sure to segregate according to the type of battery.
- A "Universal Waste – Used Batteries" label shall be affixed to the container and the accumulation start date.
- Contact Facilities Work Management for pick up (348-4600) or drop off in-person at CSC 1132 (MMC and EC) or AC1 195 (BBC).

7.2.3 Management Requirements for Mercury-Containing Devices

- *Disposal handled by EH&S.*
- Includes mercury-containing thermometers, thermostats, manometers, sphygmomanometers, mercury switches, and mercury tube control devices.
- Do not place used mercury containing devices in the regular trash. Do not intentionally break, treat or dispose of any mercury-containing devices. Place device in a rigid container and store in a designated area that will reduce the probability of damage. If the device is broken, place in a

sealable plastic bag within the rigid container to prevent mercury spillage and contact EH&S (348-6849) for assistance.

- Label as “Universal Waste Mercury Devices” and date the waste the day it is deemed spent. Complete the [EH&S hazardous waste pickup request form](#).
- **IMPORTANT!** Non-device residues containing mercury which are generated as a result of a device cleanup shall be managed as hazardous waste.

7.2.4 Management Requirements for Spent Lamps

- *Disposal handled by Custodial Services*
- Includes all types of fluorescent bulbs (including compacts), high-intensity bulbs (HIDs), mercury lamps, UV bulbs, projector bulbs, and U-tube or circular bulbs. **Does not include incandescent bulbs, which may be disposed of as normal trash.**
- **DO NOT** place spent lamps in the regular trash or intentionally break, treat, or dispose of any spent lamps. Place only spent lamps in rigid containers that are structurally sound, adequate to prevent breakage, compatible with the contents, and closed. Do not tape spent lamps together. If devices are accidentally broken, immediately contain the breakage and store in a tightly sealed container.
- Label as “Universal Waste – Mercury Containing Spent Lamps”
- Write the accumulation start state and contact Custodial Services for pick up (348-4630), or you can drop off in-person at CSC 1132 (MMC and EC) or AC1 195 (BBC).
- **IMPORTANT!** Fluorescent and high intensity discharge (HID) ballasts contain a small capacitor which may contain high concentrations of PCBs (greater than 90% pure PCBs or 900,000 ppm). Ballasts not containing PCBs will be labeled “No PCBs.” If a ballast is not labeled “No PCBs,” or the label is illegible, it will be assumed it contains PCBs. Ballasts containing PCBs shall be disposed as a hazardous waste by EH&S.

7.2 Universal Waste Handler Classifications

7.2.1 There are two classifications for handling universal waste:

- SQHUW: a generator or reverse distribution handler accumulating less than 5,000 kilograms (11,000 pounds) of universal waste lamps or devices at any one time; or another handler that accumulates less than 2,000 kilograms of lamps or 100 kilograms of devices at any one time
- LQHUW: a generator or reverse distribution handler accumulating 5,000 kilograms or more of universal waste lamps or devices at any one time; or another handler, excluding a generator or reverse distribution handler that accumulates 2,000 kilograms or more of lamps or 100 kilograms or more of devices at any one time.

7.2.2 FIU is classified as a SQHUW and will report any changes in classification.

7.2.3 A small quantity handler of universal waste is not required to keep records of shipments of universal waste.

7.3 Required Inspections

7.3.1 EH&S will conduct inspections of universal waste storage areas to ensure:

- Containers are properly labeled (proper universal waste name and accumulation date)
- Universal waste materials have not been damaged during storage
- Containers are stored in a safe location
- Wastes have not been stored more than 1 calendar year

7.4 Biomedical Waste

Biomedical/biohazardous wastes are not managed under this plan. This includes any waste which may present a threat of infection to humans, including non-liquid tissue, body parts, blood, blood products, and body fluids from humans and other primates, laboratory and veterinary wastes which contain human disease-causing agents, and discarded sharps. Reference Biomedical Waste at <https://ehs.fiu.edu/safety-programs/biological/biomedical-waste/index.html>.

7.5 Used Oil

Used oil presents a threat to human life and the environment due to its combustible nature and the ability to cause harm to aquatic environments. Used oil is not managed under the same regulations as hazardous waste. Contact EH&S at ehs@fiu.edu for more information on the disposal of used oils.

- 7.5.1 Used oil shall be collected in the CAA. Submit a [EH&S hazardous waste pick-up request](#) for disposal.
- 7.5.2 Waste oil filters must be placed in a secondary containment drum with a closed top. The used oil filters shall be shipped off site by a hazardous waste vendor who shall provide a waste pickup manifest. Contact EH&S for assistance in the disposal of used oil filters.

7.6 Computer Monitors and Other Electronic Equipment (E-Waste)

Computer monitors and other related equipment shall first be sent to FIU Surplus so the determination can be made whether or not they are waste. If the items are not able to be reused, a licensed electronic waste vendor shall be contacted to remove the e-waste.

7.7 Ink Toners

Used ink toners shall be requested for waste disposal through facility services. Complete a work order form via [Facilities Management](#).

7.8 Aerosol Cans

Compressed aerosol cans shall be managed as hazardous waste and stored in a SAA when deemed spent. Submit a request for hazardous waste pickup for disposal of aerosol cans.

8.0 Waste Minimization

Florida International University shall employ source reduction and recycling to minimize the amount of waste generated across all campuses. This plan will reduce human exposure to toxic chemicals as well as decrease the amount of hazardous waste produced.

8.1 Chemical Redistribution Program

FIU shall employ a program to extend the life of unused, non-expired chemicals. When completing the hazardous waste pickup request, check to see if items are eligible for redistribution to other areas. Work with your department to determine if the items are needed or contact EH&S at ehs@fiu.edu. Individuals can also complete the [Laboratory Chemical Cleanout Request Form](#) and submit the list of eligible items there. The list will be shared by EH&S and redistributed to minimize waste and reduce cost.

8.2 Common Waste Minimization Techniques

- Maintain a limited inventory of chemicals on hand so those chemicals do not expire/deteriorate and necessitate disposal
- Only purchase what is needed
- Develop a running inventory of chemicals on hand
- Utilize the inter-departmental chemical exchange program
- Reduce or eliminate the use of highly toxic chemicals in experiments
- Establish reasonable waste minimization goals
- Perform experiments on a micro scale whenever feasible
- Reuse or recycle spent solvents
- Initiate procedures to reduce mercury use
- Polymerize epoxy waste to a safe solid
- Replace chromic acid cleaner solutions with Alconox or a similar detergent
- Recycle office equipment such as computer monitors through FIU Surplus
- Recycle paper and other recyclable materials

9.0 Training

Appropriate training is provided by EH&S to ensure that individuals involved in hazardous waste generation and disposal understand regulatory requirements and methods to minimize hazards and risks associated with the management of hazardous waste.

9.1 Employees who handle hazardous waste must be familiar with proper handling and emergency procedures (including Contingency Plan) relevant to their responsibilities, as per 40 CFR 265.16.

9.1.1 Train persons working in the lab shall know the location of:

- emergency chemical spill kit(s)
- safety shower
- eyewash
- fire extinguisher(s)
- room exit(s)
- primary and secondary emergency routes of travel
- designated safe area of refuge

9.2 All persons who work in the laboratory must have current certificates (renewed annually) indicating successful completion of the following FIU on-line training courses: Environmental Awareness, Small Spills and Leaks, and EPA Hazardous Waste Handling.

9.2.1 Employees who have not received this training shall not handle hazardous waste. These courses are accessible on FIU Develop.

9.2.2 All current laboratory related safety training certificates must be readily available for inspection and review by university, county, state and federal officials upon request. Copies of all current training certificates should be kept on file in the lab.

9.2.3 Students and employees (working in the lab) must know the lab's hazardous waste accumulation site requirements.

9.2.4 Review the labs written emergency spill procedures with lab workers new to the area and at least annually thereafter.

9.3 EH&S personnel responsible for administering this program must be certified in the USDOT regulations as well as the OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) course.

10.0 Reporting

Florida International University is subject to the following reporting requirements. More information on each program can be found in Appendix D.

10.1 Emergency Release Notification (EPCRA §304)

- 10.1.1 Applies to any release of a reportable quantity of any OSHA hazardous or CERCLA hazardous substance.
- 10.1.2 The following releases are exempt from emergency release notification requirements of 40 CFR 355.40 and 40 CFR 302.6:
 - Releases which result in exposure to persons solely within the facility boundary
 - Releases made in accordance with a federal National Pollutant Discharge Elimination System (NPDES) permit, industrial wastewater discharge or pretreatment permit from a publicly owned treatment works (POTW), RCRA (Resource Conservation and Recovery Act) treatment, storage and disposal permit, or Atomic Energy Act permit
 - Continuous releases that are stable in quantity and rate;
 - Application of pesticides registered under Federal Insecticide and Fungicide Act (FIFRA)
 - Radionuclide releases due to naturally occurring radionuclides or land disturbances
- 10.1.3 Employees learning of an on-site hazardous substance release shall report to 7-5911 and then EH&S at x2621. Upon notification of an on-site release of a reportable quantity, the Emergency Response Coordinator shall provide immediate telephonic notice to the SERC and LEPC of any area likely to be affected by calling the State Warning Point.
 - The Emergency Response Coordinator shall prepare and submit written follow-up notification within 7-days

10.2 Tier II Inventory Reporting (EPCRA §312)

FIU is required to complete and submit a Florida-specific annual Emergency and Hazardous Chemical Inventory Tier II Form for each campus. Tier II forms are for unused chemicals only (not waste) stored on site based on the following condition(s):

- 10.2.1 Any extremely hazardous substances stored in a quantity of > 500 pounds or the threshold planning quantity, whichever is lower
- 10.2.2 Any OSHA hazardous chemical stored in an amount > 10,000 pounds.

EH&S will determine which OSHA hazardous and extremely hazardous substances are onsite and report any chemicals that exceed the above threshold limits via a Tier II form approved by the SERC. This form shall be submitted to the SERC, LEPC, Kendall Regional Medical Center, and Miami-Dade fire department by March 1 each year. A record of reports and all supporting documentation shall be kept onsite for a minimum of 3 years.

Additionally, FIU, as required by the OSHA Hazard Communication Standard (29 CFR 1910.1200), shall prepare or have available an SDS for any hazardous chemical on-site. The Facility Emergency Coordinator shall submit either an SDS or a list of SDS-covered chemicals for each hazardous chemical present at the facility in the threshold amounts noted above to the SERC, LEPC, Kendall Regional Medical Center, and Miami-Dade fire department. Submission must be made within 90-days after the facility has any hazardous chemical on-site above the threshold amounts for which a SDS must be prepared or made available

10.3 Storm Water Reporting

Florida International University complies with the EPA in managing a storm water management plan. FIU has a NPDES permit for runoff into municipal separate sewer systems. The permit is resubmitted for approval every 5 years. Documentation regarding the storm water plan and associated permits are stored in CSC 146.

10.4 Biennial Report

All large quantity generators of hazardous waste must comply with these reporting requirements.

- 10.4.1 FIU must prepare and submit a Biennial Report to the Regional Administrator by March 1 every 2 years after initial report is submitted (Reports must be submitted on even years).
- 10.4.2 Biennial reports, required by EPA for LQG, will be developed from the hazardous waste activities conducted in the previous two years.
- 10.4.3 EH&S will be responsible for collecting all required documentation to complete the report requirements.

Appendix A: Hazardous Waste Pick Up Request Process

Refer to the following guide to submit a hazardous waste pickup request. Any browser can be used to complete a request. Mobile devices may also be used to complete a request.

Step 1: To submit a waste pickup request, visit the [EH&S Environmental Compliance – Hazardous Waste Section](#).

[On this page](#) [Stormwater](#) [Hazardous Waste](#) [Universal Waste](#) [Contact a Team Member](#)

Hazardous Waste

Protect the university community and the environment from the dangers of improper handling and disposal of hazardous waste by ensuring compliance with federal, state and local regulations. These resources will help you learn how to set up a safe accumulation area, respond to an emergency and request pickup of hazardous waste.

- [Hazardous Waste Management Plan](#)

Satellite Accumulation Areas

Maintaining a safe satellite accumulation area near any point of hazardous waste generation is central to proper disposal of waste. Learn how to set up and manage your area:

- [Laboratory Hazardous Waste Satellite Accumulation Area Requirements](#)
- [Satellite Accumulation Sign](#)
- [Solvent Rags Management](#)
- [How Do I Dispose of This Waste?](#)
- [Empty Container Management Reference Guide](#)

Emergency Response

Don't get caught off guard; be ready for a hazardous-waste related emergency:

- [Spill Response Plan/Procedure](#)
- [Waste Contingency Plan - MMC](#)

Figure 3

Step 2: When you have reached the Hazardous Waste Section, Click the link “Hazardous Waste Pick-Up Request”, as shown below in Figure 4.

[On this page](#) [Stormwater](#) [Hazardous Waste](#) [Universal Waste](#) [Contact a Team Member](#)

waste. Learn how to set up and manage your area:

- [Laboratory Hazardous Waste Satellite Accumulation Area Requirements](#)
- [Satellite Accumulation Sign](#)
- [Solvent Rags Management](#)
- [How Do I Dispose of This Waste?](#)
- [Empty Container Management Reference Guide](#)

Emergency Response

Don't get caught off guard; be ready for a hazardous-waste related emergency:

- [Spill Response Plan/Procedure](#)
- [Waste Contingency Plan - MMC](#)

Hazardous Waste Pick-Up

Ready for waste pick up? Environmental Health & Safety can help you safely remove hazardous waste.

- [Hazardous Waste Pick-Up Request](#)

Need a quick tutorial on how to request a pick-up?

- [Hazardous Waste Pick-Up Tutorial](#)

Figure 4

Step 3: The link shown in Step 2 will open a new tab with the request form, as shown below in Figure 5. Each section is required to be filled out; failure to do so will result in an error and the request will not be processed. The first page contains basic contact information.

The screenshot shows a web browser window with the URL <https://webforms.fiu.edu/view.php?id=1106186>. The page header includes the FIU logo and the text "Environmental Health & Safety" and "FLORIDA INTERNATIONAL UNIVERSITY". The main heading is "Hazardous Waste Pick-Up Request" with a subtext: "Complete one form for each container of waste. You may use a single form for multiple containers with the same chemical constituents." Below this is a progress bar indicating "Page 1 of 3 - Personal Information" with a 33% completion status.

The form fields are as follows:

- Date ***: MM / DD / YYYY (5 / 7 / 2018)
- Campus ***: Modesto A. Maidique (M)
- Building (initials) ***: AHC-4
- Room Number ***: 122
- Requestor Name ***: First (Michael), Last (Rupinski)
- Panther ID ***: 4450290
- Requestor Email ***: mrupinsk@fiu.edu
- Phone ***: (305) - (348) - 2622
- Waste Generating Department ***: EHS
- Lab Manager/PI Name ***: Tamece Knowles
- Lab Manager/PI Email Address ***: knowles@fiu.edu

At the bottom, there is a checkbox for "Save my progress and resume later" and a "Continue" button.

Figure 5

Step 4: After completing all contact information, the next page to be completed includes waste information (what chemical, container size, etc.) and is shown below in Figures 6 and 7. Again, all sections must be completed to the best of your knowledge. It is required that all chemical constituents be spelled out (no abbreviations) and the total percent adds up to 100. Additionally, this section includes an option to add your waste to the interdepartmental chemical exchange program; this includes unused, non-expired chemicals that can be redistributed throughout FIU labs. This will lower disposal costs and minimize waste.

← → ↻ https://webforms.fiu.edu/view.php?id=1106186&mf_page=2 🔍 ☆

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FLORIDA INTERNATIONAL UNIVERSITY

Hazardous Waste Pick-Up Request

Complete one form for each container of waste. You may use a single form for multiple containers with the same chemical constituents.

Page 2 of 3 - Waste Information 67%

Chemical Waste Constituents
Please list the chemical constituents and their corresponding percent (%) by volume.
The sum of all percentages must equal 100%.

Chemical: *

Percent (%) *

Must be a number less than or equal to 100.

Chemical:

Percent (%)

Must be a number less than or equal to 100.

Container and Hazard Class Information

Container Sizes (check all that apply): *

- ☐ < 1 Liter
- ☐ 1 Liter
- ☒ 2.5 Liters
- ☐ 5 Gallons
- ☐ 15 Gallons
- ☐ > 15 Gallons
- ☐ Other

Figure 6

After filling out all the personal and chemical information, you must sign the form with your mouse (in the case of touch screen devices, your finger may be used). The form can then be reviewed for final submittal.

← → ↻ https://webforms.fiu.edu/view.php?id=1106186&mf_page=2 🔍 ☆

☐ > 15 Gallons
☐ Other

Hazard Class (check all that apply): *

☒ Corrosive
☐ Flammable
☐ Reactive
☐ Toxic
☐ Other

Please Answer The Following Questions: *

| | Yes | No |
|---|----------------------------------|----------------------------------|
| Are all containers labeled and sealed? | <input checked="" type="radio"/> | <input type="radio"/> |
| Is item(s) eligible for Inter Departmental Chemical Exchange Program (IDCEP)? | <input type="radio"/> | <input checked="" type="radio"/> |

Acknowledgement And Signature
 You must check the statements below and sign your name in the signature box.

☐ I certify that the information provided above is accurate to the best of my knowledge.

☐ I am aware, as a generator of hazardous waste, I am required to complete annual training on proper handling/disposal of hazardous waste. I am also responsible for environmental compliance for my lab/operation.

Requestor Signature *

[Clear](#)

☐ Save my progress and resume later

[Previous](#)

Figure 7

Step 5: Once you have signed and submitted the form, page 3 allows you to review all information and confirm waste pickup request submittal. After doing so, a confirmation screen will appear (shown below in Figure 8) and EH&S will dispose of your waste. This may take anywhere from 1 to 5 business days. You do not need to maintain waste pick-up requests for your lab; EH&S will maintain copies of each request. **IMPORTANT! EH&S will not dispose of the waste if the containers are compromised or not labeled properly. You will receive a notification to correct these items. Once corrected, EH&S will complete the pickup request.**

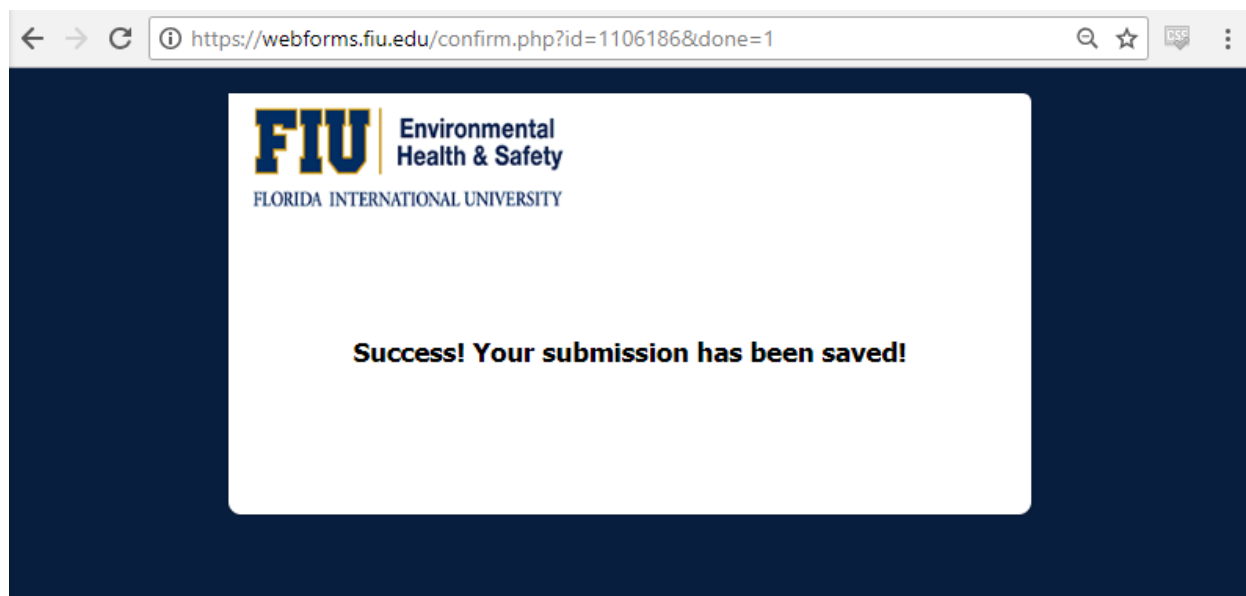


Figure 8

Appendix B: Satellite Accumulation Area Inspection Form

Satellite Hazardous Waste Accumulation Checklist


Inspection
By (Print): _____ Date of
Inspection: _____
PI Name & Time of _____
Room: _____ Inspection: _____ ☐ A.M.
☐ P.M.

Indicate by a checkmark if conditions are satisfactory. Otherwise, explain in the COMMENTS section in the right column and/or at bottom of the form. Indicate location and item at fault, describe corrective actions taken, and date of completion.

| INSPECTION ITEMS | YES | N O | N/A | COMMENTS |
|---|--------------------------|--------------------------|--------------------------|----------|
| SAA posted/labeled as Hazardous Waste Satellite | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Are SAA's located near or at point of generation? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Is waste being transported between rooms to a SAA? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Is SAA in an appropriate location, away from sinks and | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Are there more than 55 gallons of waste stored in the | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Is there more than 1 quart of P-listed waste stored in | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Is the SAA located in an appropriate area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Are the containers in the SAA marked with a | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Is the date filled out on the hazardous waste label? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Are waste containers tightly closed? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Are the containers in the SAA in good condition? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Is all the waste in the SAA compatible with each other? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Are all containers in the SAA closed when they are not | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Are waste bottles filled to a safe level? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Emergency spill response supplies available & | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Are all posted signs in the SAA intact and legible (no | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Is hazardous waste kept in a secondary container? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| If applicable, are chemical and broken glass containers | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Is necessary Personal Protective Equipment available in | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| COMMENTS AND OBSERVATIONS | | | | |
| | | | | |

Appendix C: Weekly Central Accumulation Area Inspection Form

The following form shall be used for weekly inspections performed at each campus (Figure 9).



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Health & Safety
FLORIDA INTERNATIONAL UNIVERSITY

Inspection completed by: PRINT _____ Date of Inspection: ____/____/____

SIGN _____ Time of Inspection: _____ AM / PM

Area Inspected: _____ Number of Containers: _____

| INSPECTION ITEMS | YES | NO | IF NO, PLEASE EXPLAIN |
|---|-----|----|-----------------------|
| Was the facility properly closed at the time of arrival? (Door was closed and locked) | | | |
| Are appropriate warning signs posted outside the door? | | | |
| Is a current inventory of all waste being stored available? | | | |
| Are all containers in good condition? | | | |
| Is there any evidence of leaks or spills? | | | |
| Are all containers closed? | | | |
| Are all containers labeled properly as "Hazardous Waste" with their appropriate accumulation date? | | | |
| Are the dates on all containers within the allowable time limit per regulation (≤90 days, ≤180 days)? | | | |
| Are all incompatible wastes properly separated by classification? | | | |
| Is there adequate aisle space between rows of drums? | | | |
| Is secondary containment present for all waste containers being stored? | | | |
| Are Spill Response supplies adequate for any potential room emergencies? | | | |
| Is there adequate room lighting? | | | |
| Are there an adequate amount of fire sprinklers for the types of materials being stored? | | | |
| Is the general housekeeping of the accumulation area satisfactory? | | | |
| Is the fire extinguisher easily accessible and up-to-date? | | | |

Please complete this form in entirety. If anything unsatisfactory is found during an inspection, note the action taken and its date of completion below.

Repairs or Remedial action

Revised: 04/04/2017

Figure 9

Appendix D: Applicable Reporting Information

| EPCRA SECTION | SCHEDULE | DESCRIPTION | DOCUMENT | REQUIRED INFORMATION | SEND TO | FEES |
|-------------------|--|---|---|--|--|---|
| 302 and 303 | Initially and as change in identity of the owner/operator occur | Chemical notification and facility representative designation | Either Section 302/303 Form or business letterhead | Include the following if using business letterhead: 1. Name of business; 2. Business address or mailing address; 3. Physical address, if different from mailing address; and 4. Name and telephone number of a facility representative | SERC: 2555 Shumard Oak Blvd. Tallahassee, FL 32399-2100 800-635-7179 or 850-413-9970 LEPC District 11: 3440 Hollywood Blvd. Suite 140 Hollywood, FL 33021 Attn: Carlos Gonzalez (954) 985-4416 | \$50 per facility (one-time payment) ¹ |
| 311 | Initially and within 90-days of discovering significant new information on a chemical, or upon acquiring a new chemical that: 1. Meets or exceeds the TPQ, or 500 lbs at any one time (which ever is less); and 2. Any hazardous chemical that meets or exceeds 10,000 lbs | SDS submittal | Either: 1. SDS; 2. A list; or 3. Section 311 Reporting Form Note: SERC prefers anything BUT SDS | Include the following information if using a list: fire hazard, sudden release of pressure hazard, reactive hazard, immediate (acute) health hazards, and delayed (chronic) health hazard for each chemical | SERC: 2555 Shumard Oak Blvd. Tallahassee, FL 32399-2100 800-635-7179 or 850-413-9970 LEPC District 11: 3440 Hollywood Blvd. Suite 140 Hollywood, FL 33021 Attn: Carlos Gonzalez 954-985-4416 Miami-Dade Fire Rescue: 9300 N.W. 41st Street Miami, Florida 33178-2414 Attn: Herminio Lorenzo Fire Chief 786-331-5122 | N/A |
| 302, 303, 311-313 | Annually (received by the reporting agency depending on what section is being reported (e.g. 303, 312, 313)) | To indicate reporting status | Statement of Determination Form | Refer to Form | SERC: 2555 Shumard Oak Blvd. Tallahassee, FL 32399-2100 800-635-7179 or 850-413-9970 LEPC District 11: 3440 Hollywood Blvd. Suite 140 Hollywood, FL 33021 Attn: Carlos Gonzalez (954) 985-4416 | N/A |

| EPCRA SECTION | SCHEDULE | DESCRIPTION | DOCUMENT | REQUIRED INFORMATION | SEND TO | FEES |
|---------------|--|---|---|----------------------|--|--|
| 312 | Annually – Received by the reporting agency by March 1 | Tier II Emergency and Hazardous Chemical Inventory (for previous calendar year) | Florida-specific Annual Emergency and Hazardous Chemical Inventory Tier II Form NOTE: This form may be submitted electronically. Contact SERC at 800-635-7179 for more information | Refer to Form | SERC: 2555 Shumard Oak Blvd. Tallahassee, FL 32399-2100 800-635-7179 or 850-413-9970 LEPC District 11: 3440 Hollywood Blvd. Suite 140 Hollywood, FL 33021 Attn: Carlos Gonzalez 954-985-4416 Miami-Dade Fire Rescue: 9300 N.W. 41st Street Miami, Florida 33178-2414 Attn: Herminio Lorenzo Fire Chief: 786-331-5122 | Fee based on # of employees: \$10 per employee, \$25 minimum, or \$2,000 maximum ¹ OR Facility with registered ASTs which do not have EH&S = or in excess of TPQ: \$2.50 per employee, \$25 minimum, or \$500 maximum ¹ Due March 1 |
| 313 | Annually received by the reporting agency by July 1 | Toxic chemical releases that occur during a preceding calendar year for each toxic chemical above the threshold amount (cross reference consolidated List of Chemicals) | Toxic Chemical Release Form R, or Form A (abbreviated form) for each toxic chemical | Refer to Form(s) | SERC: 2555 Shumard Oak Blvd. Tallahassee, FL 32399-2100 800-635-7179 or 850-413-9970 U.S. Environmental Protection Agency EPCRA Reporting Center P. O. Box 3348 Merrifield, VA 22116-3348 Attn: Toxic Chemical Release Inventory | \$150 per Form R report ¹ \$75 per chemical listed on Form A report ¹ |

| EPCRA SECTION | SCHEDULE | DESCRIPTION | DOCUMENT | REQUIRED INFORMATION | SEND TO | FEES |
|---------------|-------------|---|--|--|--|------|
| 304 | Event-based | Emergency Release Notification if a release is meets or exceeds the RQ | Section 304 Reporting Form NOTE: THIS IS A GUIDANCE DOCUMENT TO PROVIDE INFORMATION TO THE STATE WARNING POINT – NOT TO BE MAILED | Initial notification: Refer to Section 304 Reporting Form Follow-up notification: 1. Information setting forth and updating the information required for the initial emergency notification; 2. Actions taken to respond to and contain the release; 3. Any known or anticipated acute or chronic health risks associated with the release; and 4. Advice regarding medical attention necessary for exposed individuals. | INITIAL NOTIFICATION – NOTIFY THE FOLLOWING WITHIN 15 MINUTES OF EVENT 1. State Warning Point (SWP): 850-413-9911 or 800-320-0519 (this telephone is answered 24 hours a day and is an emergency number only). SWP will contact your SERC and LEPC. 2. National Response Center (for CERCLA spills): 800-424-8802. 3. Miami-Dade Fire Rescue: 911 for emergency, (786) 331-5000, non-emergency FOLLOW-UP NOTIFICATION – NOTIFY THE FOLLOWING WITHIN 7-DAYS: 1. SERC: 2555 Shumard Oak Blvd. Tallahassee, FL 32399-2100 800-635-7179 or 850-413-9970 2. LEPC District 11: 3440 Hollywood Blvd. Suite 140 Hollywood, FL 33021 Attn: Carlos Gonzalez (954) 985-4416 | N/A |