

RCRA Inspection Report

1) Inspector and Author of Report

Tarin Tischler
Life Scientist
Phone: 404-562-9702
Tischler.tarin@epa.gov

U.S. Environmental Protection Agency, Region 4
Enforcement and Compliance Assurance Division
Chemical Safety and Land Enforcement Branch
RCRA Enforcement Section
61 Forsyth Street, S.W.
Atlanta, Georgia 30303

Alexis Wilson
Physical Scientist
Phone: 404-562-9072
Wilson.Alexis@epa.gov

2) Facility Information

University of Florida
3076 Longleaf Road Gainesville, Florida
32611

EPA ID#: FLD000823393
NAICS #: 611310 - Colleges, Universities, and
Professional Schools

3) Responsible Officials

Matthew Doty
Hazardous Material Program Manager
mdoty@ehs.ufl.edu

4) Inspection Participants

Matthew Doty, UF
Steven Ladendorf, UF
Shailendra Singh, UF
Artiom Chacon, UF
Larry Jones, UF
Brian Owens, UF
Jorge Gomez, UF

Cody Banner, UF
Megan Eide, UF
Suzanne Pereau, UF
Charles Baer, UF
Nick Keiser, UF
Bonnie Bradshaw, FDEP
Tarin Tischler, USEPA
Alexis Wilson, USEPA

5) Date of Inspection

9:15 AM March 5, 2025, and 9:00 AM March 6, 2025

6) Applicable Regulations¹

Resource Conservation and Recovery Act (RCRA) Sections 3002 (42 U.S. Code – Annotated U.S.C.A. 6925 and 6927), and 40 Code of Federal Regulation (C.F.R.) Parts 260 - 270, 273, 278, &

¹ As the State's authorized hazardous waste program operates in lieu of the federal RCRA program, the citations of those authorized provisions will be to the authorized State program. However, for ease of reference, the federal citations will follow in brackets.

279; Chapter 403 of the Florida Statutes, Fla. Stat. § 403.702 *et seq.*, and rules 62.710.210 -.901, and 62-730 *et seq.* of the Florida Administrative Code Annotated (Fla. Admin. Code Ann.)

Pursuant to Fla. Admin. Code Ann. r. 62-730.020(1) [40 C.F.R. § 262.10], a Large Quantity Generator (LQG) is a generator who generates greater than or equal to 1,000 kilograms (2200 lbs) of non-acute hazardous waste in a calendar month.

Pursuant to Fla. Admin. Code Ann. r. 62-730.160(1) [40 C.F.R. § 262.17], a LQG may accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status, as required by Section 403.722 of the Florida Statutes, Fla. Stat. § 403.722 [Section 3005 of RCRA, 42 U.S.C. § 6925], provided that the generator complies with the conditions listed in Fla. Admin. Code Ann. r. 62-730.160(1) [40 C.F.R. § 262.17] (hereinafter referred to as the “LQG Permit Exemption”).

Pursuant to Fla. Admin. Code Ann. r. 62-730.160(1) [40 C.F.R. § 262.15(a)], a generator may accumulate as much as 55 gallons of non-acute hazardous waste in containers at or near the point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without a permit or without having interim status, as required by Fla. Admin. Code Ann. r. 62-730.160(1) [Section 3005 of RCRA, 42 U.S.C. § 6925], and without complying with Fla. Admin. Code Ann. r. 62-730.160(1) [40 C.F.R. § 262.16(b) or §262.17(a)], except as required in Fla. Admin. Code Ann. r. 62-730.160(1) [40 C.F.R. § 262.15(a)(7) and (8)], provided that the generator complies with the satellite accumulation area conditions listed in Fla. Admin. Code Ann. r. 62-730.160(1) [40 C.F.R. § 262.15(a)] (hereinafter referred to as the “SAA Permit Exemption”).

Pursuant to Fla. Admin. Code Ann. r. 62-730.185(1) [40 C.F.R. § 273.9], a “Small Quantity Handler of Universal Waste” (SQHUW) is a Universal Waste handler who does not accumulate 5,000 kilograms or more of Universal Waste (batteries, pesticides, mercury-containing equipment, or lamps, calculated collectively) at any time.

Resource Conservation and Recovery Act (RCRA) Sections 3002 (42 U.S. Code – Annotated U.S.C.A. 6925 and 6927), and 40 Code of Federal Regulation (C.F.R.) Parts 260 - 270, 273, 278, & 279; Chapter 403 of the Florida Statutes, Fla. Stat. § 403.702 *et seq.*, and rules 62.710.210 -.901, and 62-730 *et seq.* of the Florida Administrative Code Annotated (Fla. Admin. Code Ann.); and Hazardous Waste Permit 17756-HO-007.

7) Purpose of Inspection

The purpose of this inspection was to conduct an unannounced compliance evaluation inspection to determine UF’s compliance with the conditions of its RCRA Hazardous Waste Facility Operation Permit and Corrective Action Permit (Permit No. 17756-HO-007) and the applicable requirements of RCRA and the corresponding Florida Department of Environmental Protection (FDEP) regulations. This was an EPA lead inspection.

8) Facility Description

The University of Florida (hereinafter “UF” or “the facility”) is a state-supported, public, land-grant research university located in Gainesville, Florida. The property is owned by the State University system and consists of approximately 1,900 acres. UF operates approximately 2,700 teaching and research laboratories distributed through approximately 132 buildings and 20 colleges. The University covers all areas of engineering, biomedical, genetic, nuclear, medical, agricultural, and natural science research studies. Each laboratory is a potential satellite accumulation area (SAA) for hazardous waste generated within the laboratory. The UF operations also include several support services such as maintenance, grounds, motor pool and an athletic department. UF also provides all areas of liberal and performing arts studies. The UF was founded in 1858 and has been operating at its present location since September 26, 1906. UF now serves over 55,000 students.

UF is a large quantity generator (LQG) of hazardous waste, a hazardous waste pharmaceutical healthcare facility, a mixed waste generator, a transporter of hazardous waste, a small quantity generator of universal waste, and a generator of used oil.

FDEP issued permit # 17756-HO-007 to UF on July 2, 2024. This permit expires April 5, 2029. Permitted hazardous waste units and operations at the facility include Hazardous Waste Transfer areas, two Container Storage Areas, the Solvent Return/Fill Station, and the Aboveground Storage Tank Farm.

9) Previous Inspection History

Florida Department of Environmental Protection (FDEP) has conducted ten RCRA CEIs at the subject facility between 2015 and 2024 and found 50 violations during those inspections.

On January 22, 2024, FDEP conducted the most recent RCRA CEI at the subject facility and found 16 apparent violations of RCRA’s requirements for pharmaceutical waste, universal waste, and satellite and central accumulation area container management.

As a result, FDEP issued a Short Form Consent Order to UF, effective on November 15, 2024.

10) Opening Conference

On March 5, 2025, EPA inspectors Tarin Tischler and Alexis Wilson, accompanied by FDEP inspector Bonnie Bradshaw, arrived at The University of Florida at approximately 9:15 AM. Matthew Doty, UF Hazardous Materials Program Manager immediately received the inspectors. Matthew Doty and the inspectors were joined by Steven Ladendorf, Hazmat Coordinator, Shailendra Singh, EHFS Director, and Artiom Chacon, Associate Director, for the opening conference. The inspectors introduced themselves, showed their credentials to the facility representatives, and explained the purpose of the visit.

The inspectors described the anticipated use of equipment iPad during the inspection and provided a request for records. The EPA inspector explained that the Small Business Regulatory Enforcement Fairness Act’s classification of a “small business” is generally set by the Small Business Administration using the business’ SIC/NAICS code and annual receipts or number of employees. A copy of the EPA’s information sheet for small businesses can be found at

<https://www.epa.gov/sites/production/files/2017-06/documents/smallbusinessinfo.pdf>. The EPA inspector also discussed the company's ability, pursuant to 40 C.F.R. § 2.203, to assert a business confidentiality claim for information submitted to EPA. The company did not assert a business confidentiality claim.

Matthew Doty provided an overview of the facility's history and current operations during the opening conference. The inspection participants also discussed health and safety protocols and required personal protective equipment before Facility representative led the inspectors on a tour of the Facility operations.

11) Inspection Observations

Permitted Waste Storage Area – Building 831

UF operates a permitted storage unit in a warehouse in Building 831 near the environmental health and safety offices. One half (Phase II) of the warehouse is designated for the storage of radioactive and mixed wastes generated in on site laboratories and medical facilities. The Phase II Area is separated into storage areas for radioactive waste, mixed waste exhibiting the hazardous characteristic of toxicity, mixed waste exhibiting the hazardous characteristic of corrosivity, and mixed waste exhibiting the hazardous characteristic of ignitability.

Phase II Permitted Storage Area

The majority of radioactive wastes generated at UF are carbon, hydrogen, phosphorous or iodine isotopes. Certain labs use tritium (hydrogen-3) or phosphorous-32 which may have longer or shorter half-lives and various energetic levels. All radioactive waste is containerized, and highly radioactive material is stored behind a concrete wall. Per the Nuclear Regulatory Commission, the facility can store radioactive material on site for 10 years prior to disposal, with the purpose of waiting out radioactive levels. Radioactive waste containers are marked with the storage start date as well as the removal date in the future. Certain radioactive material has a half-life of up to 1,000 years and must be shipped to a burial site after storage. Mixed waste is primarily transported for incineration. Facility representatives informed inspectors that personnel typically wear dosimeters in the radio waste storage area. At the time of the inspection, radioactive waste was stored in 9 rows of 55-gallon drums and boxes on pallets. Areas 7, 8, and 9 in the Phase II side are designated for mixed hazardous and radioactive wastes. These areas are segregated by concrete berms and containers are stored on secondary containment pallets.

Area 8

At the time of the inspection, inspectors observed the following containers in Area 8. Facility representatives informed inspectors that some of the corrosive mixed waste is neutralized before storage in Phase II so it remains only radioactive. All radioactive containers were marked with a tri-fold radiation warning symbol (Photo 1). Unless otherwise noted, these containers were closed, labeled with the words "Hazardous Waste, D022 and D002," marked with corrosive and toxic DOT labels, and an accumulation date (Photo 2):

- Four 2.5-gallon containers
- Five 5-gallon containers

- One 55-gallon container

Area 9

At the time of the inspection, inspectors observed the following containers in Area 9 (Photo 3). Unless otherwise noted, these containers were closed, labeled with the words “Hazardous Waste, D001,” marked with flammable DOT labels, and an accumulation date:

- Three 5-gallon containers
- Two 55-gallon containers
- Two empty 5-gallon containers

Area 7

At the time of the inspection, no waste was in area 7. This area is typically used to store toxic mixed toxic waste.

Inspectors observed eye-wash stations, fire extinguishers, sprinklers, and spills kits throughout the permitted storage area. Facility representatives informed inspectors that the area is equipped with audio and visual alarms, and when the alarm is triggered, it is automated to the Fire Department. Personnel are equipped with cell phones and the area is equipped with a PA system for internal communication.

Phase I Permitted Storage Area

Phase I of the permitted storage warehouse is located in a section separate from Phase II (Photo 4.) Phase I is in the north side of the building and is segregated by a concrete wall and a narrow hallway. Phase I consists of the designated 90-day accumulation area for hazardous waste generated on site, as well as five separate sections permitted for one year storage of hazardous waste. This unit is permitted to store D001 through D043, F001 through F005, F019, F022, F027 and numerous U and P listed hazardous wastes. Some permitted waste is stored in separate rooms in the Phase I area, as well as the middle of the main Phase I area between four columns in the area’s center. The columns are lined with a concrete berm around 3 sides. Waste stored in the main Phase I area outside of these columns is designated as 90-day CAA waste. Inspectors recommended designating a clear barrier or signage to clearly distinguish the areas different with accumulation time limits.

Three flammable cabinets in this area were designated for storage for the facility’s Chem Swap program. Facility representatives informed inspectors that this was used to store product chemicals that were no longer needed at their respective area but may still be used in one of the many other areas at the facility. When the EHS personnel picks up a new, sealed chemical container as part of a regular waste pickup, it is evaluated and products that can still be used are placed in the cabinet. EHS staff maintains a log of material stored here and laboratories can order the chemicals from EHS free of charge. This program began as part of the campus-wide “zero waste initiative.”

Area 1B

Inspectors observed hazardous waste pharmaceuticals stored on a secondary containment pallet in permitted storage Area 1B near the entrance of the Phase I storage area (Photo 5). All containers in this area were labeled with the words “Hazardous Waste Pharmaceuticals” and dated less than a year from the date of the inspection (Photo 6). At the time of the inspection, inspectors observed seven 2.5-gallon Rx destroyer containers, one 1-gallon container and eighteen 5-gallon black buckets holding hazardous waste in Area 1B. The oldest container in this area was dated May 1, 2024.

Area 5

Area 5 is a permitted storage area designated for reactive hazardous waste. This area is located in a separate, walled room from the rest of the Phase I waste area. Containers in this area are stored on secondary containment pallets and dated with an accumulation date as well as the date the container was brought to the permitted storage area. All containers were marked as moved to permitted storage less than one year from the date of the inspection. Unless otherwise noted, all containers in Area 5 were labeled as hazardous waste with an indication of the contents’ hazards. Inspectors observed the following containers in this area at the time of the inspection:

- One 30-gallon container
- Two 15-gallon containers
- Two 12-gallon containers
- Forty-eight 5-gallon containers

Of the above containers, four 5-gallon, one 12-gallon, and two 15-gallon containers did not include an indication of all the hazards of the contents on the label (Photos 7-8). These were corrected on site.

Pursuant to Permit number 17756-007-HO, Permit Condition I.24.c [40 C.F.R. § 268.50(a)(2)(i)], the following conditions apply to land disposal (placement) of hazardous wastes: The storage of hazardous wastes restricted from land disposal in 40 CFR Part 268 is prohibited unless the requirements of 40 CFR Part 268 Subpart E are met.

Area 2B

Area 2B was located in between the four columns in the center of the Phase I side of the waste storage warehouse and is designated as part of the one-year permitted waste storage unit (Photo 9). Containers in this area are stored on secondary containment pallets and dated with an accumulation date as well as the date the container was brought to the permitted storage area. All containers were marked as moved to permitted storage less than one year from the date of the inspection. Unless otherwise noted, all containers in Area 2B were labeled as hazardous waste with an indication of the contents’ hazards. Inspectors observed the following containers in three rows within this area at the time of the inspection:

Row 1

- Two 55-gallon containers

- Four 30-gallon containers
- Five 15-gallon containers
- Twelve 5-gallon containers

Row 2

- Three 55-gallon containers
- Three 30-gallon containers
- Eighteen 5-gallon containers

Row 3

- Four 55-gallon containers
- One 30-gallon container
- Six 15-gallon containers
- Fifteen 5-gallon containers
- Two small boxes

Of the containers listed above, one 55-gallon, one 30-gallon, one 15-gallon, and two 5-gallon containers were not properly marked with an indication of their contents' hazards (Photo 10). These labels were corrected on site.

Pursuant to Permit number 17756-007-HO, Permit Condition I.24.c [40 C.F.R. § 268.50(a)(2)(i)], the following conditions apply to land disposal (placement) of hazardous wastes: (c) The storage of hazardous wastes restricted from land disposal in 40 CFR Part 268 is prohibited unless the requirements of 40 CFR Part 268 Subpart E are met.

CAA

The facility stores 90- day central accumulation area waste in Building 831 (Photos 11-14). This waste is stored in areas outside the areas permitted for one year storage. Unless otherwise noted, the containers in the 90-Day CAA were marked with the words "Hazardous Waste," an indication of the contents' hazards was check marked on the label or was written out in marker, and the container was dated less than 90-days from the date of the inspection.

The containers below are listed in the order they were recorded. Inspectors observed the following containers stored on containment pallets throughout the 90-Day storage area:

- Three Cubic Yard Boxes (CYB) dated 2/25/25, 2/27/25 and 2/17/25.
- One 5-gallon container
- Three 55-gallons containers
- One 30 -gallon containers
- Two 15-gallon containers

The oldest container listed above was dated 12/15/24.

- Four 55-gallon containers
- One 55-gallon nonhazardous container
- Two 5-gallon containers
- Two 30-gallon nonhazardous containers

The oldest container listed above was dated 1/10/2025.

- Twenty-four containers consisting of 2x2 or 4-ft boxes of universal waste lamps.

Two of these boxes had been accumulating for more than one year (Photos 15-16). Both were shipped off-site the following day during the CEI.

Pursuant to Fla. Admin. Code Ann. r. 62-730.185(1) [40 C.F.R. § 273.15(a)], a SQHUW may accumulate universal waste no longer than one year.

- One 55-gallon container of PCB Ballasts
- Thirty-four 15-gallon oxidizer containers
- Eleven 5-gallon oxidizer containers

The oldest container listed above was dated 12/13/2024.

- Eight 15-gallon containers
- Four 5-gallon bucket containers
- Seven 5-gallon carboy containers
- One 1x1.5ft Box

The above containers were labeled as oxidizer hazardous waste and the oldest container was dated 12/19/2024.

- Twenty-one 15-gallon containers
- Three 7-gallon containers

The above containers were labeled as toxic hazardous waste, and the oldest container was dated 12/20/2024.

- Four 55-gallon containers
- One 15-gallon container

The above containers were labeled as flammable hazardous waste, and the oldest container was dated 2/11/2025.

- Twenty 15-gallon containers
- One 30-gallon container

The above containers were labeled as toxic hazardous waste, and the oldest container was dated 1/09/2025.

- Three 55-gallon containers
- Seven 15-gallon contains
- Two 5-gallon containers

The above containers were labeled as flammable lab pack or toxic, flammable, corrosive hazardous waste. Two containers were marked as unknown waste sent for sampling and had all hazardous characteristics marked on the label pending further analysis. The oldest container was dated 2/6/2025.

- Five 55-gallon containers
- Three 30-gallon containers
- Thirteen 15-gallon containers
- Four 5-gallon containers

The above containers were labeled as flammable hazardous waste aerosols or nonhazardous. The oldest container was dated 1/03/2025.

- Five 15-gallon mercury containers
- Seven 5-gallon battery containers
- One 5-gallon battery containers

The above containers were labeled as universal waste, and the oldest container was dated July 2024.

- One 5-gallon container labeled as nonhazardous mercury for recycle (Photo 17).

This container was dated 11/26/2024. Facility representatives informed inspectors that this was elemental mercury sent for recycling and is therefore not a solid waste.

- One 30-gallon container
- Fifty-six 15-gallon containers
- Fifteen 5-gallon containers
- One 2.5-gallon container
- 1.5 x 2 Ft nonhazardous box
- Two 55-gallon nonhazardous containers

Unless otherwise noted, the above containers were labeled as toxic hazardous waste, and the oldest container was dated 1/13/2025.

- Forty-three 15-gallon containers
- Sixteen 5-gallon containers
- One 30-gallon container

The above containers were labeled as flammable lab pack hazardous waste, and the oldest container was dated 12/19/2025.

- One 30-gallon container
- Twenty-Seven 15-gallon containers
- Six 5-gallon containers
- One 15-gallon nonhazardous container
- One 15-gallon reactive toxic container

Unless otherwise noted, the above containers were labeled as corrosive hazardous waste, and the oldest container was dated 1/09/2025.

- Three 5-gallon nonhazardous containers
- Nine 5-gallon corrosive oxidizer containers
- One 30-gallon flammable container
- Four 15-gallon flammable toxic containers
- Six 55-gallon flammable toxic containers
- One 55-gallon corrosive flammable toxic container
- Two 55-gallon nonhazardous containers
- Two 55-gallon containers
- Four 5-gallon containers
- Three 55-gallon containers

The above containers were labeled as toxic hazardous waste, and the oldest container was dated 12/19/2025.

Inspectors also observed the staging area for shipping in Phase I. Facility representatives informed inspectors that SAA containers throughout the facility are brought here by EHS personnel when they are notified the SAA container is full and ready for pickup. SAA containers are consolidated here into 55-gallon containers and shipped if full. If they are partially full after consolidation, containers are moved to the permitted storage area.

At the time of the inspection, inspectors observed the following hazardous waste containers in the shipment staging area of the CAA:

- Two 55-gallon containers
- Five 5-gallon containers
- One 30-gallon container

Inspectors observed the following excluded x-ray film waste sent for recycling containers in the shipment staging area (Photo 18):

- Three 55-gallon containers
- Three 30-gallon containers
- Two 15-gallon containers
- Three 5-gallon containers
- Three 1.5x2ft boxes

Compound Area

The facility's compound area was located across the parking lot from the permitted storage building (Photo 19). This area consisted of flammable cabinets and storage sheds surrounded by a chain link fence. Personnel also perform elementary neutralization on corrosive material in this area using sodium carbonate. Inspectors observed a shower and eye wash station in this area.

At the time of the inspection, inspectors observed the following waste containers stored in the compound area:

- A poly-material clamshell unit storing a lead acid battery and empty containers. The battery was dated 2/25/2025 (Photo 20)
- Twenty-six 5-gallon containers labeled "used oil"
- Four five gallons containers labeled "used oil filters"
- One 3-gallon container labeled "used oil"
- Nine 55-gallon containers labeled "used oil"
- Three 55-gallon containers labeled "used oil filters"
- Nine 30-gallon containers labeled "used oil"
- One empty 30-gallon container
- Seven 15-gallon containers labeled "used oil"
- One empty 15-gallon container

Inspectors observed the following containers staged for neutralization in the compound area:

- Three 30-gallon containers

- Fifteen 15-gallon containers
- Eleven 5-gallon containers

Institute of Food and Agricultural Sciences (IFAS) Warehouse - Building 665

The IFAS warehouse is located in Building 665. Building 665 is used primarily to store waste generated in various Institute of Food and Agricultural Sciences (IFAS) departments. The IFAS staff store universal waste in a cage surrounding by a chain link fence in the back of the IFAS warehouse. Inspectors were greeted in this area by Larry Jones, Facility Operations Specialist. This area employs approximately 50 staff who conduct building maintenance and plumbing work throughout IFAS.

At the time of the inspection, inspectors observed the following universal waste containers stored in the IFAS warehouse:

- Nine boxes of universal waste lamps (Photos 21-28)

Of the nine boxes of lamps in the IFAS warehouse, all 9 were open. Eight out of the nine were not properly labeled, and all nine boxes were marked with an accumulation date greater than one year from the time of the inspection. Two were marked with a date in 2023 and seven boxes were marked with a date in 2022. The boxes were closed on site to record pictures of the labels on the top.

Pursuant to Fla. Admin. Code Ann. r. 62-730.185(1) [40 C.F.R. § 273.13(d)(1)], a SQHUW must manage lamps in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows: A small quantity handler of universal waste must contain any lamp in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers and packages must remain closed and must lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.

Pursuant to Fla. Admin. Code Ann. r. 62-730.185(1) [40 C.F.R. § 273.14(e)], a SQHUW must label or mark each lamp or container of lamps clearly with one of the following phrases: "Universal Waste-Lamp(s)," or "Waste Lamp(s)," or "Used Lamps."

Pursuant to Fla. Admin. Code Ann. r. 62-730.185(1) [40 C.F.R. § 273.15(a)], a SQHUW may accumulate universal waste no longer than one year.

- Two 30-gallon containers of universal waste lamps (Photo 29)

These containers were not marked with an accumulation date.

Pursuant to Fla. Admin. Code Ann. r. 62-730.185(1) [40 C.F.R. § 273.15(a) and (c)], a SQHUW may accumulate universal waste no longer than one year and must to be able to demonstrate the length of time that the universal waste has accumulated from the date that it became a waste or was received.

- 13 boxes of universal waste batteries (Photo 30)

Only one of the boxes was properly marked with the words “universal waste batteries,” and the other 12 were not labeled. All 13 boxes of batteries were missing an accumulation date.

Pursuant to Fla. Admin. Code Ann. r. 62-730.185(1) [40 C.F.R. § 273.14(a)], a SQHUW must label or mark each Universal Waste battery or container or tank in which the batteries are contained clearly with one of the following phrases: “Universal Waste - Battery(ies),” or “Waste Battery(ies),” or “Used Battery(ies).”

Pursuant to Fla. Admin. Code Ann. r. 62-730.185(1) [40 C.F.R. § 273.15(a) and (c)], a SQHUW may accumulate universal waste no longer than one year and must to be able to demonstrate the length of time that the universal waste has accumulated from the date that it became a waste or was received.

- Four universal waste mercury devices (Photo 31)

The universal waste mercury devices were placed in an open cardboard box and dated 2/1/24. The box was not labeled, but the devices were marked with the words “mercury equipment.”

Pursuant to Fla. Admin. Code Ann. r. 62-730.185(1) [40 C.F.R. § 273.14(d)(1)], a universal waste mercury-containing equipment (i.e., each device), or a container in which the equipment is contained, must be labeled or marked clearly with any of the following phrases: “Universal Waste—Mercury Containing Equipment,” “Waste Mercury-Containing Equipment,” or “Used Mercury-Containing Equipment.”

Pursuant to Fla. Admin. Code Ann. r. 62-730.185(1) [40 CFR 273.13(c)(1)] A small quantity handler of universal waste must place in a container any universal waste mercury-containing equipment with non-contained elemental mercury or that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The container must be closed, structurally sound, compatible with the contents of the device, must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions, and must be reasonably designed to prevent the escape of mercury into the environment by volatilization or any other means.

Pursuant to Fla. Admin. Code Ann. r. 62-730.185(1) [40 C.F.R. § 273.15(a)], a SQHUW may accumulate universal waste no longer than one year.

- One universal waste thermostat

The thermostat was open, not labeled, and not marked with an accumulation date.

Pursuant to Fla. Admin. Code Ann. r. 62-730.185(1) [40 CFR 273.13(c)(1)] A small quantity handler of universal waste must place in a container any universal waste mercury-containing equipment with non-contained elemental mercury or that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The container must be closed, structurally sound, compatible with the contents of the device, must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions, and must be reasonably designed to prevent the escape of mercury into the environment by volatilization or any other means.

Pursuant to Fla. Admin. Code Ann. r. 62-730.185(1) [40 CFR 273.14(d)(2)] A universal waste mercury-containing thermostat or container containing only universal waste mercury-containing thermostats may be labeled or marked clearly with any of the following phrases: “Universal Waste—Mercury Thermostat(s),” “Waste Mercury Thermostat(s),” or “Used Mercury Thermostat(s).”

Pursuant to Fla. Admin. Code Ann. r. 62-730.185(1) [40 C.F.R. § 273.15(a) and (c)], a SQHUW may accumulate universal waste no longer than one year and must be able to demonstrate the length of time that the universal waste has accumulated from the date that it became a waste or was received.

- Three smoke detectors
- One 5-gallon container of capacitors
- One box of non-PCB ballasts

All of the universal waste observed in this area properly containerized, labeled, and shipped for disposal the following day during the CEI.

IFAS HVAC/Plumbing/Paint Shop (Building 808)

IFAS maintains a SAA in the IFAS paint shop (Photo 32.) Inspectors observed containers stored on wood pallets in the corner of the paint shop storage area. At the time of the inspection, the following containers were observed in this area:

- Two open 5-gallon buckets (Photo 33). One was not labeled, and one was RCRA empty and marked with a product label for coating. Inspectors requested the safety data sheet (SDS) of this material in the records review. The unlabeled container was identified following the inspection as nonhazardous Ultrabond Eco 711 floor adhesive. Inspectors informed facility representatives that a nonempty waste container should not be left open to dry out and evaporate.
- One 15-gallon SAA container labeled as solvent contaminated rags (Photo 34). Facility representatives informed inspectors that these rags are shipped under a hazardous waste profile, and the facility does not use the solvent rags exclusion. The container was closed and marked with the words “hazardous waste” and “flammable,” but was not labeled with a toxic hazard indication.

Pursuant to Fla. Admin. Code Ann. r. 62-730.160(1) [40 C.F.R. § 262.15(a)(5)(ii)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers (ii) with an indication of the hazards of the contents.

- One 7-gallon empty container labeled as contaminated solvent rags
- One open 1-gallon RCRA empty paint can. Inspectors reminded facility representatives that although the paint can was RCRA empty at the time of the inspection, a nonempty paint container should not be left open to dry out and evaporate.
- Two empty 5-gallon containers of flammable product cleaner.
- One 30-gallon SAA container storing HW aerosols. At the time of the inspection, this container held two aerosol cans and was labeled with the words “Hazardous Waste Flammable.” This container was missing a toxic indication of hazard.

Pursuant to Fla. Admin. Code Ann. r. 62-730.160(1) [40 C.F.R. § 262.15(a)(5)(ii)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers (ii) with an indication of the hazards of the contents.

- One 5-gallon container of used oil

Inspectors observed a fire extinguisher and eye wash station in this area. Facility representatives informed inspectors that personnel in this area communicate via cell phone. Inspectors informed IFAS personnel that it is recommended to maintain some other form of communication in the event of an emergency, such as an airhorn, in case cell signal is compromised.

Inspectors observed a container of metal shavings in the plumbing shop side of Building 808. IFAS personnel informed inspectors that these metal shavings are generated in the plumbing area and are brought to the scrap dumpster for recycling as scrap metal.

Inspectors observed a 30-gallon container labeled “hazardous waste, oil dry.” Facility personnel informed inspectors that this container held unused oil dry for HW spill cleanup and was not waste. Inspectors also observed one 5-gallon container of oily rags. This container was marked with a hazardous waste label and the words “oily rags.” Facility representatives informed inspectors that this container held nonhazardous oil contaminated rags and was not hazardous waste. The label was corrected on site. Solvent rags generated at the facility are managed as hazardous waste, while oily rags are managed as nonhazardous.

IFAS Maintenance Shop - Building 805

The IFAS maintenance shop in Building 805 conducts maintenance on IFAS fleet vehicles. UF operates a universal and nonhazardous waste area in a closed storage unit in the maintenance shop. Inspectors observed the following containers in this area:

- One empty 5-gallon container of compressor oil
- One 7-gallon container with a product label with the words “Diesel Guard Clear” (Photo 35). Facility representatives informed inspectors that this was a product container that had been stored in this area for years. Inspectors requested an SDS for the diesel guard and requested the container be shipped for disposal if it does not have commercial use at the facility.
- Five lead acid batteries on a shelf staged for retrieval of the core charge
- One 2.5-gallon container of used oil. This container was open and beneath an oil container drainage sink to collect residual oil. This container was marked as compressor oil and not labeled with the words “used oil.”

Pursuant to Fla. Admin. Code Ann. r. 62-710.210(2) [40 C.F.R. § 279.22(c)(1)], containers and aboveground tanks used to store used oil at generator facilities must be labeled or marked clearly with the words “Used Oil.”

Inspectors observed a 20-gallon SAA container accumulating hazardous waste aerosol cans along the outside of the maintenance shop (Photo 36). At the time of the inspection, this container was labeled with the words “hazardous waste, flammable” but was not marked with a toxic indication of hazards.

Pursuant to Fla. Admin. Code Ann. r. 62-730.160(1) [40 C.F.R. § 262.15(a)(5)(ii)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers (ii) with an indication of the hazards of the contents.

Inspectors also observed a satellite accumulation container for oily rags in the maintenance shop (Photo 37). Mac’s 4800 Break Cleaner and GRO contact cleaner is used with rags in this area. The oily rags container was marked with a flammable hazardous waste label. Inspectors requested an SDS of the contact cleaner and brake cleaner in the records review which demonstrated that Rags used with Mac’s 4800 Brake Cleaner generate an F005 hazardous waste when disposed of. The container of rags was missing a toxic indication of hazard at the time of the inspection.

Pursuant to Fla. Admin. Code Ann. r. 62-730.160(1) [40 C.F.R. § 262.15(a)(5)(ii)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers (ii) with an indication of the hazards of the contents.

Inspectors also observed a 150-gallon double walled tank of used oil outside the maintenance shop. The tank was labeled used oil. IFAS personnel drain oil filters into a 55-gallon drum labeled used oil next to the oil tank. Inspectors observed a second 55-gallon drum for the drained used oil filters. This was labeled “used oil filters,” but the label was faded and illegible (Photo 38). This was corrected on site (Photo 39).

IFAS once used a System One parts washer in the maintenance area, but facility representatives informed inspectors that the parts washer had not been used in seven years (Photo 40). Facility representatives could not verify at the time of the inspection if the parts washer still held solvent. Inspectors requested that the facility determine if there is still liquid held in the parts washer and conduct a waste determination, if applicable. Following the inspection, the facility confirmed that the parts washer contained liquid and would be managed under the facility’s bulk solvent hazardous waste profile.

Pursuant to Fla. Admin. Code Ann. r. 62-730.160(1) [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in Fla. Admin. Code Ann. r. 62-730.160(1) [40 C.F.R. § 261.2], must make an accurate determination as to whether that waste is a hazardous waste in order to ensure wastes are properly managed according to applicable RCRA regulations articulated in Fla. Admin. Code Ann. r. 62-730.160(1) [40 C.F.R. § 262.11].

IFAS Carpentry Shop

IFAS operates a carpentry shop in building 680 for woodworking. Inspectors observed a satellite accumulation container with a hazardous waste label and the words “oily rags” (Photo 41). Facility representatives informed inspectors that solvent is not used in this area and the rags are contaminated with wood stain and lacquer thinner. At the time of the inspection, the

container accumulating oily rags in the carpentry shop was marked with as flammable but was missing a toxic hazard indication.

Pursuant to Fla. Admin. Code Ann. r. 62-730.160(1) [40 C.F.R. § 262.15(a)(5)(ii)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers (ii) with an indication of the hazards of the contents.

Inspectors observed an eye wash station in this area.

IFAS Pesticide Degradation Pit

UF operates a pesticide degradation pit within IFAS. Inspectors were greeted by Brian Owens, Operations manager, and Cody Banner, Farm Manager, in this area. This nondischarging process wastewater containment and evaporation system is operated under a FDEP wastewater permit (Permit No.: FLA011324). The degradation pit consists of a metal pit filled with soil and gravel under a covered roof (Photo 42). Pesticides are triple rinsed into the pit. The pesticide rinse water remains in the pit permanently and the water is slowly removed over time through photodegradation and evaporation.

Facility representatives informed inspectors that the unit is not considered to be land disposed as there is no discharge. The unit is surrounded by a secondary containment area to catch any overfill, which is collected and put back into the unit. All pesticides that can be added to the unit are maintained on a list at the facility. Pesticides on the list do not contain metals or any P or U codes. The volume of material added to the degradation pit is tracked on an operational log.

Vet Sciences Building (Building 215) Pharmacy (Room VH-70)

The veterinary sciences building at UF operates a vet clinic, intensive care unit, and patient pharmacy. The vet pharmacy provides medication to patients of the vet hospital. The pharmacy manages a hazardous waste accumulation area in a closed room under control of a pharmacist (Photo 43). General RCRA hazardous waste pharmaceuticals are accumulated in closed 5-gallon buckets labeled "hazardous waste pharmaceuticals." Waste pharmaceuticals that are also DEA controlled substances are placed in a 2.5-gallon RX Destroyer container. RX Destroyer is a sequestration device used to dispose of controlled substance waste and render substances non-retrievable by DEA standards. Hazardous waste placed in the container that does not meet the DEA exclusion must still be managed and disposed of as hazardous waste.

Potentially creditable hazardous waste pharmaceuticals are shipped to reverse distributors, Rx Reverse Distributors (FLR000144808) or Guaranteed Returns (NYR000122879). The facility is reminded that hazardous waste pharmaceuticals shipped back to the reverse distributor should have a reasonable expectation of receiving credit and be in original manufacturer's packaging, be undispensed and be unexpired or less than one year past the expiration date. Facility personnel informed inspectors that the pharmacy maintains a full list of all products managed in the pharmacy with information on which waste container is appropriate.

At the time of the CEI, inspectors observed the following waste containers in the pharmacy:

- One 1-gallon RX Destroyer container that was in use accumulating waste at the time of the inspection. This container was closed, properly labeled and had accumulated for less than one year.

Inspectors observed a separate accumulation area within the pharmacy (Room VH70-E) (Photo 44). The following hazardous waste containers were observed in this area:

- Three 5-gallon buckets labeled “hazardous waste pharmaceuticals.” One was full and dated 1/25/2025 and one was in progress accumulating waste at the time of the inspection.
- Four 1-gallon RX Destroyer containers. Pills are added to the RX destroyer container in a safe room and moved to the waste storage area when full. All of the containers were closed, secured, and properly labeled. The oldest container at the time of the inspection was dated 1/16/2025.

Inspectors also observed one small container labeled “universal waste batteries” and one 5-gallon container of excess IPA and water solution used for cleaning. This container was labeled with the words “hazardous waste” and an indication of the contents’ hazards. Facility representatives informed inspectors that universal waste lamps are removed when they are replaced, and bulbs are no longer accumulated here.

The pharmacy prepares chemotherapy drugs and silver nitrate injections in a Biosafety Cabinet located in Room VH-71C in the Pharmacy. Chemotherapy process waste is disposed of in one 30-gallon, plastic lined fiberboard container located just outside of the room and managed as hazardous waste pharmaceuticals. Inspectors observed the following waste containers in this area:

- One 30-gallon container of chemotherapy PPE. This container was labeled “hazardous waste pharmaceuticals.”
- One empty 5-gallon container of liquid chemotherapy solution. This container was labeled “hazardous waste pharmaceuticals.”
- One 3-gallon container of silver nitrate filters (Photo 45). This container was marked with a hazardous waste pharmaceuticals label and dated 2/29/24, however facility representatives informed inspectors that the material was nonhazardous.

Silver nitrate is sterilized before the liquid is injected into a patient. The silver nitrate is run through a filter to collect contaminants, and the filter is disposed of as nonhazardous waste. The facility submitted waste determination documentation to FDEP to demonstrate the filters are nonhazardous following the last CEI. This label was corrected on site.

Vet Sciences Building (Building 215) and Intensive Care Unit (Room VH-160)

The veterinary sciences building operates a second waste storage area in the Intensive Care Unit (Room VH-160). Inspectors were greeted by Dr. Megan Eide, Pharmacy Manager, and Suzanne Pereau, EC Technician Manager, in this area. Inspectors observed the following waste containers:

- Five 5-gallon containers dated and labeled “hazardous waste pharmaceuticals” (Photo 46).

- One closed 1-gallon RX Destroyer container that was accumulating waste at the time of the inspection. This container was not labeled with the words “hazardous waste pharmaceuticals” (Photo 47). This label was corrected on site.

Pursuant to Fla. Admin. Code Ann. r. 62-730.181(1) [266.502(e)], labeling containers used to accumulate non-creditable hazardous waste pharmaceuticals at healthcare facilities. A healthcare facility must label or clearly mark each container of non-creditable hazardous waste pharmaceuticals with the phrase “Hazardous Waste Pharmaceuticals.”

Solid Waste Management Unit (SWMU) 30

SWMU 30 is the former ROTC rifle gun range in the center of campus. The unit is now surrounded by a locked chain link fence and a wood building structure (Photos 48-49). The area undergoes post closure monitoring due to lead contamination, and interim engineering controls are currently implemented to restrict exposure to the soils. At the time of the inspection, the lock on the building was not functioning and needed replaced.

Pursuant to permit 17756-HO-007, Permit Condition VI.B.2 (Remedy Selection and Implementation – Selected Remedies) [Florida Statue 403.727(1)(c)], the selected remedy for SWMU 30 is the use of interim engineering controls, implemented to restrict exposure to soils.

Biology Building

UF operates satellite accumulation areas at the multiple laboratories throughout the biology building. The biology building was split between two connected sides, Archie F. Carr Hall (Building 748) and William Bartram Hall (Building 747). Laboratories occupy the 3rd, 4th, and 6th floors of these buildings. Unless otherwise noted, all containers in the biology laboratories were clearly marked with the words “hazardous waste” and an indication of their contents’ hazards. Inspectors walked through the following biology laboratories:

Carr Hall - Room 622

The Keiser lab occupies Room 622 and conducts behavioral disease ecology research. Inspectors were greeted by Nick Keiser, Assistant Professor in this area. Inspectors observed the following waste containers in the Keiser lab SAA:

- One 4-liter container of hazardous waste ethanol
- One 4-liter container of hazardous waste acetic acid and chloroform
- One 500-mililiter container of peroxide former. Inspectors reviewed the safety data sheet for the peroxide former on site, which demonstrated the material is nonhazardous.
- Three 500-mililiter containers of Apacor Triton X. Inspectors reviewed the safety data sheet for Triton X on site, which demonstrated the material is nonhazardous.

Inspectors observed a spill kit in this area.

Bartram Hall - Room 621

Inspectors were greeted by Charles Baer in Room 621, which conducts research on the genetic variation in nematodes. Waste generated in this laboratory includes agar, ecoli, and a glycerol cleaning solution. Ethanol is used for cleaning, and no ethanol waste is generated. Inspectors observed one container holding hazardous waste contaminated PPE and a broken mercury thermometer in this area. A spill kit and eye wash station were observed in the laboratory and an emergency shower was located just outside in the hall.

Bartram Hall – Room 521

The Yao lab occupies Room 521 and conducts research on fruit fly gut brain access. Inspectors observed the following waste containers in the satellite area under a fume hood:

- One 5-gallon container of hazardous waste ethidium bromide and sodium borate
- One 1-liter container of hazardous waste paraformaldehyde, sodium chloride, and potassium chloride.
- One empty 5-gallon container outside the fume hood.

Inspectors also observed some product containers under the fume hood housing the SAA.

Inspectors observed a 500-mililiter container labeled ethanol on the lab counterspace (Photo 50). The container was holding fruit fly carcasses suspended in 70% ethanol. Laboratory personnel informed inspectors that this “fly morgue” is changed monthly and the ethanol is disposed of in the sink and the flies are disposed of in the trash. Inspectors informed the facility that this may constitute improper disposal if the facility is not authorized to dispose of ethanol waste in the sink via wastewater or discharge permit.

Following the inspection, the facility provided more information on the fly morgue from Dr. Yao of the Yao lab. The fly morgue is used to collect excess fly carcasses in genetic experiments in which the F1 progeny is anesthetized. Ethanol is used in these morgues to mitigate microbial growth and odors. Only a small percentage of the flies used in the Yao laboratory are disposed of in the fly morgue. There are three fly morgues present in the lab, and one which was set up 1.5 years prior to the inspection, and two were set up six months prior to the inspection. None of the morgues have reached the capacity for disposal. The majority of fly waste is placed in plastic vials containing an agar culturing medium which is disposed of in the trash.

Facility representatives confirmed that these containers would be labeled as flammable hazardous waste going forward.

Carr Hall - Fraser Lab

The Fraser lab in the Carr side of the biology buildings. This laboratory conducts developmental biological research. An eye wash and spill kit were in this area. Inspectors observed the following containers in the satellite area:

- One 1-gallon container of hazardous waste ethanol histoclear
- One 1-gallon container of hazardous waste ethanol acetic acid

Carr Hall - Room 518

The Subalusky lab occupies Room 518 of the Carr Hall. This laboratory conducts environmental chemistry and biological geochemistry research. This includes water sampling and carbon analysis. Inspectors observed the following containers in the satellite area (Photo 51):

- One 7-gallon container of hazardous waste phosphoric acid, sulfuric acid and water (Photos 52-53). This container was open and missing an indication of the contents' hazards. A pH test was conducted on site and confirmed the material exhibits the hazardous waste characteristic of corrosivity.

Pursuant to Fla. Admin. Code Ann. r. 62-730.160(1) [40 C.F.R. § 262.15(a)(4)], which is a condition of the SAA Permit Exemption, A container holding hazardous waste must be closed at all times during accumulation, except: (i) When adding, removing, or consolidating waste; or (ii) When temporary venting of a container is necessary.

Pursuant to Fla. Admin. Code Ann. r. 62-730.160(1) [40 C.F.R. § 262.15(a)(5)(ii)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers (ii) with an indication of the hazards of the contents.

- One 4-liter container of hazardous waste sodium nitrate. This container was missing an indication of the contents' hazards. A pH test was conducted on site and confirmed the material exhibits the hazardous waste characteristic of corrosivity.

Pursuant to Fla. Admin. Code Ann. r. 62-730.160(1) [40 C.F.R. § 262.15(a)(5)(ii)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers (ii) with an indication of the hazards of the contents.

- One 1-gallon container of hazardous waste methanol
- One 1-gallon container of hazardous waste sodium hydroxide

The following containers were managed under a flame hood adjacent to the other satellite waste:

- One 1-gallon container of hazardous waste sulfuric acid
- One 1-gallon container of hazardous waste hydrochloric acid and cadmium
- Two 500-mililiter container of hazardous waste solids. One of these containers was not marked with an indication of hazards

Pursuant to Fla. Admin. Code Ann. r. 62-730.160(1) [40 C.F.R. § 262.15(a)(5)(ii)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers (ii) with an indication of the hazards of the contents.

- One 5-gallon container of hazardous waste phosphoric acid and sulfuric acid and water. This container was open and attached to a total organic analyzer machine which was not in operation (Photo 54). Inspectors informed the facility that satellite containers must be closed when not actively adding or removing waste.

Pursuant to Fla. Admin. Code Ann. r. 62-730.160(1) [40 C.F.R. § 262.15(a)(4)], which is a condition of the SAA Permit Exemption, A container holding hazardous waste must be closed

at all times during accumulation, except: (i) When adding, removing, or consolidating waste; or (ii) When temporary venting of a container is necessary.

Carr Hall - Room 418

The animal migration and ecology lab occupies Room 418 of the Carr Hall. This laboratory conducts testing on animal tissue to research migration patterns and behaviors. Two waste containers were observed under a fume hood and two were stored just outside the hood. Inspectors observed the following containers in this satellite area:

- One 4-liter container of hazardous waste ethanol and water
- One 4-liter container of hazardous waste chloroform, methanol, and water
- One 4-liter container of hazardous waste hydrochloric acid and water
- One 4-liter container of nonhazardous Triton X and water. This was marked with a hazardous waste label and a toxic hazard indicator. Facility representatives informed inspectors that Triton X is managed as hazardous waste in this lab as a precaution.

Bartram Hall - Room 411

The Gavin Naylor Laboratory occupies Room 411 of the Bartram Hall. This laboratory conducts research on shark biology through molecular techniques, including sequencing. Inspectors observed the following containers in the satellite area:

- Three 4-liter containers of hazardous waste sodium hydroxide and guanidinium hydrochloride
- One 5-gallon container of hazardous waste guanidinium hydrochloride and trypan blue

Bartram Hall - Room 321

The Choe lab occupies Room 321 of the Bartram Hall and conducts research on the genetics of *c. elegans* nematodes. Inspectors observed the following containers in the satellite area:

- Eight 100 - 500-mililiter toxic hazardous waste containers
- Three boxes of hazardous waste mercury devices
- Four 4-liter hazardous waste containers
- One 5-gallon hazardous waste container

Inspectors observed an eye wash station and spill kit here.

Bartram Hall - Room 011

A biology teaching lab occupies Room 011 of the Bartram Hall. Inspectors were greeted in this area by Jorge Gomez, Lab Manager. This laboratory is used for student biology course experiments. The satellite accumulation area for the teaching laboratory was located in a closed cabinet against the wall. Containers were stored on a secondary containment pallet. Inspectors observed the following containers in the satellite accumulation area (Photo 55-56):

- One 55-gallon hazardous waste container of pig carcasses preserved in Ranacos Holding Solution
- Two 2.5-gallon hazardous waste containers

At the time of the inspection, the 55-gallon container of hazardous waste was less than half full. Facility representatives informed inspectors that the container never reaches full capacity before transferring to the central accumulation area. Inspectors recommended limited the container size in this area to 55-gallons to avoid exceeding the 55-gallon accumulation limit for satellite areas. Inspectors observed a spill kit in this area.

Carr Hall – Room B20

A biology teaching lab occupies Room B20 of the Carr Hall. Inspectors observed the following containers in the satellite accumulation area:

- Five 5-gallon hazardous waste containers
- Two 1-gallon hazardous waste containers

College of Pharmacy

UF operates satellite accumulation areas at the multiple laboratories throughout the College of Pharmacy. The College of Pharmacy chemistry laboratories occupy the 4th and 6th floors of these buildings. Unless otherwise noted, all containers in the College of Pharmacy laboratories were clearly marked with the words “hazardous waste” and an indication of their contents’ hazards.

Inspectors walked through the following College of Pharmacy laboratories:

Xing Lab – P6-08

The Xing Lab occupies room P6-08 of the College of Pharmacy and conducts medicinal chemistry research. Inspectors observed the following containers in the satellite area (Photo 57):

- One 5-gallon hazardous waste container of methanol, acetonitrile, and water
- Two 5-gallon hazardous waste containers of G-buffer. One of these containers was not marked with the words “hazardous waste” or an indication of its contents’ hazards.

Pursuant to Fla. Admin. Code Ann. r. 62-730.160(1) [40 C.F.R. § 262.15(a)(5)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers (i) with the words “Hazardous Waste” and (ii) with an indication of the hazards of the contents.

- Two 4-liter containers of hazardous waste
- One 500-mililiter container of silicone oil. Facility representative informed inspectors that this waste stream is managed as used oil, although it was not marked with the words “used oil” at the time of the inspection.

Pursuant to Fla. Admin. Code Ann. r. 62-710.210(2) [40 C.F.R. § 279.22(c)(1)], containers and aboveground tanks used to store used oil at generator facilities must be labeled or marked clearly with the words “Used Oil.”

- One 500-mililiter hazardous waste container. This container was not marked with an indication of its contents’ hazards.

- One 5-gallon hazardous waste container. This container was not marked with an indication of its contents' hazards.

Pursuant to Fla. Admin. Code Ann. r. 62-730.160(1) [40 C.F.R. § 262.15(a)(5)(ii)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers (ii) with an indication of the hazards of the contents.

Luesch Lab – P6-30

The Luesch Lab occupies room P6-08 of the College of Pharmacy. This laboratory isolates compounds from marine bacteria to consider as drug candidates. Inspectors observed the following containers in the satellite area:

- Two 5-gallon hazardous waste containers glass and pipette waste.
- One 500-mililiter hazardous waste container
- One 5-gallon hazardous waste container.
- One 2.5-gallon hazardous waste container. This container was labeled as 10% water and 90% flammable solvents but was missing a flammable indication of hazards. This was corrected on site.

Pursuant to Fla. Admin. Code Ann. r. 62-730.160(1) [40 C.F.R. § 262.15(a)(5)(ii)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers (ii) with an indication of the hazards of the contents.

12) Records Review

Contingency Plan and Quick Reference Guide (QRG):

The actions that facility personnel should take in response to an emergency are described in the facility's contingency plan, which was last updated in May 2024.

The plan describes actions facility personnel must take in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.

The plan describes arrangements agreed to with the local police department, fire department, other emergency response teams, emergency response contractors, equipment suppliers, local hospitals or the Local Emergency Planning Committee.

The plan lists the names and emergency telephone numbers for persons identified as emergency coordinators. Matthew Doty is listed as the primary emergency coordinator, and the other individuals are listed in the order in which they will assume responsibility as alternates.

The plan includes a list of all emergency equipment at the facility. The list includes fire extinguishing systems, spill control equipment, communications and alarm systems, and decontamination equipment. The list appears to be up to date. The plan includes the location and a physical description of each item on the list, and a brief outline of its capabilities.

The plan includes an evacuation plan for personnel. This plan describes signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes.

A copy of the Contingency Plan (and its quick reference guide) was most recently submitted to the local authorities in April 2025.

The quick reference guide includes the types/names of hazardous waste in layman's terms and the associated hazard associated with each hazardous waste present at any one time; the estimated maximum amount of each hazardous waste that may be present at any one time; the identification of any hazardous wastes where exposure would require unique or special treatment by medical or hospital staff; a map of the facility showing where hazardous wastes are generated, accumulated and treated and routes for accessing these wastes; a street map of the facility in relation to surrounding businesses, schools and residential areas; the locations of water supply; the identification of on-site notification systems; and the name of the emergency coordinator(s) and emergency telephone number(s).

Training Records:

The inspectors reviewed facility job descriptions and employee names that were provided for the UF hazardous waste program team. Each description included the requisite skill, education, or other qualifications, and duties of facility personnel assigned to that position.

UF provided a written description of the type and amount of both introductory and continuing training to be given to each person filling the positions listed above. The inspectors reviewed records of employee hazardous waste training completed in since the date of the last inspection in 2024.

Waste Manifest and Land Disposal Restriction (LDR) Records:

The inspectors reviewed available hazardous waste manifest records and land disposal restriction forms for shipments of hazardous waste sent since the date of the last inspection, January 2024. Hazardous waste manifest records show that bulk hazardous waste is routinely shipped to Perma-Fix of Florida, Inc. (EPAID: FLD980711071), and the most recent shipment at the time of the inspection was made on March 4, 2025. The facility used Clean Harbors as their designated hazardous waste facility in the beginning of last year but have not used them since a shipment on July 24, 2024. Facility representatives informed inspectors that gas cylinders are shipped to SET Environmental, INC (TXD055135388) and radioactive waste is shipped on a uniform low-level radioactive waste manifest to Bionomics, INC. (EPAID: TND982116493).

Land disposal restrictions and a final copy signed by the designated facility were provided for all manifests except the two most recent shipments which were awaiting the signed copy. At the time of the CEI, these two manifests were still within 35 days since the date of shipment.

Used Oil and Universal Waste Shipment Records

Inspectors reviewed used oil and universal waste bill of ladings. Used oil and used oil filters are sent for disposal through Howco Environmental Services once or twice a year. The most recent

shipment at the time of the CEI occurred in August 2024. The facility also maintains the FDEP used oil and used oil filter recordkeeping form on site to record the cumulative quantity of used oil and used oil filters generated since 2015.

Inspectors reviewed the bill of ladings for universal waste shipments since the date of the last FDEP inspection. Universal waste lamps are shipped off site by Lighting Resources on a bill of lading. Lead acid and deep cycle marine batteries are collected by Continental Batteries.

Weekly Inspection Records:

The inspectors reviewed UF's available records of inspections of the hazardous waste central accumulation area (CAA) since the date of the last inspection. UF inspects the Phase I and II permitted storage areas five days a week and satellite accumulation areas monthly.

The Phase I inspection log includes a checklist to record observations about leaking containers and for deterioration of containers caused by corrosion or other factors. The inspection log includes a checklist to record observations about doors and locks, spills or leaks, the alarm system, and dock and equipment condition for areas 1b, 1c, 1d, 1e, 1f, 2b, 3, 4, 5, and the compound area. Container counts for this area, including the CAA, are recorded weekly.

The Phase II inspection log includes a checklist to record observations about leaking containers and for deterioration of containers caused by corrosion or other factors. The inspection log includes a checklist to record observations about doors and locks, spills or leaks, the alarm system, dock and equipment condition, aisle space and housekeeping for areas 6, 7, 8, 9, and total area including CAA.

The records include the date and time of the inspection and the name, signature and initials of the employee conducting the inspection. Employees do routinely record inspection observations and subsequent follow-up actions on the inspection log. Some 5-day inspections were missing at the time of the CEI for days the facility office was closed for holidays. No weekly inspection records were missing.

Waste Determination Records

Waste determinations are specific to each point of generation throughout campus, and these areas submit a detailed description of the waste and the process generating the waste to help make an accurate hazardous waste determination. Inspectors reviewed the documentation submitted for a waste determination during the records review.

The product's label description is used as the basis for the waste determination, and supporting documentation is provided which includes a description of the process and other materials used. This information is used together to make a waste determination. Laboratories that

generate aqueous mixtures of hazardous waste are given a hazardous waste label on which they list all constituents added and a contact number for personnel in that area.

Inspectors requested the safety data sheets for Diesel Guard Clear, MAC's 4800 brake cleaner, GRO Contact Cleaner and Ultrabond Eco 711 floor adhesive observed during the inspection. The safety data sheets for the Diesel Guard and Brake cleaner were provided by the facility following the inspection on March 20, 2025. The safety data sheets demonstrated that the brake cleaner has a flash point of 29.3 degrees Fahrenheit and exhibits the hazardous waste characteristic of ignitability. The Diesel Guard has a flash point of 149 degrees Fahrenheit and is not RCRA hazardous waste. Facility representatives informed inspectors that they are having difficulty locating the SDS for the contact cleaner as it is manufactured in Germany. This SDS was submitted on April 2, 2025, and demonstrated the material is nonhazardous. The SDS for Ultrabond Eco 711 floor adhesive was available online and demonstrated that the floor adhesive is nonhazardous.

13) Closing Conference

The inspectors conducted the exit meeting at 4:30 with Matthew Doty, Steven Ladendorf, Shailendra Singh, and Artiom Chacon. During this meeting, the inspectors stated their preliminary conclusions of the inspection. Facility representatives agreed to provide the requested waste determination records by March 20, 2025, two weeks from the date of the CEI. On March 20, 2025, Matthew Doty provided two of the requested documents with one pending due to an overseas manufacturer. On April 2, 2025, Matthew Doty submitted the additional SDS, and photos of corrections made since the observations made during the CEI.

14) List of Attachments

Attachment 1 – Photo Log

15) Signed

TARIN TISCHLER Digitally signed by TARIN TISCHLER
Date: 2025.05.07 17:25:18 -04'00'

Tarin Tischler
Life Scientist

16) Concurrence

ARACELI CHAVEZ Digitally signed by ARACELI CHAVEZ
Date: 2025.05.08 08:43:52 -04'00'

Araceli B. Chavez
RCRA Enforcement Section

Attachment 1 – Photo Log

57 Photos taken on: March 5 and 6, 2025

Photos taken by: Tarin Tischler

Photos taken with: EPA iPad

EPA Property Tag: SS8852



Photo 1 –
Mixed waste
label in Phase II
permitted
storage area.



Photo 2 –
Corrosive
mixed waste
containers in
Phase II
permitted
storage area
for radioactive
waste.



Photo 3 –
Flammable
mixed waste
containers in
Phase II
permitted
storage area
for radioactive
waste.



Photo 4 –
Phase I of the
permitted
storage area.
This area is
permitted for
nonhazardous
and
nonradioactive
hazardous
waste storage.



Photo 5 –
Permitted
storage area 1B
on Phase I.

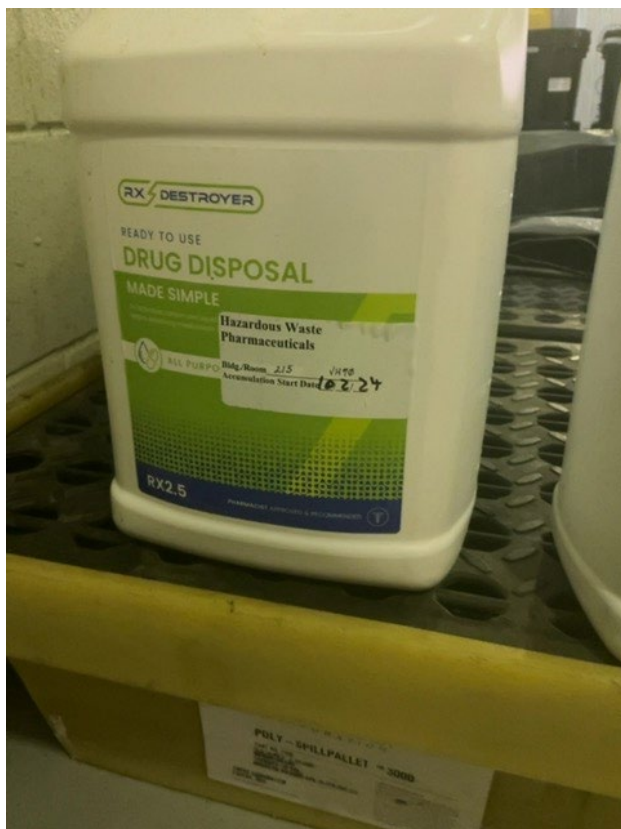


Photo 6 –
labeling on
hazardous
waste
pharmaceutical
s containers



Photo 7 – Reactive hazardous waste container in Area 1B that was labeled EPA waste code D003 but not marked with an indication of the hazard of reactivity.

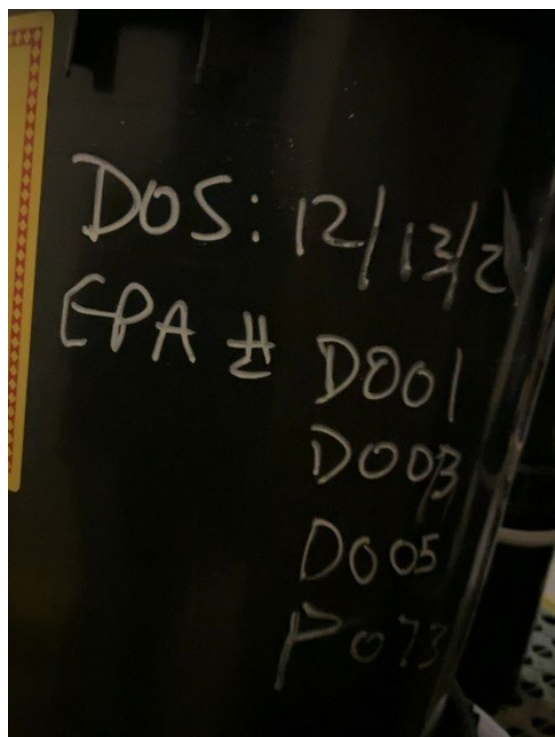


Photo 8 - Reactive hazardous waste container in Area 1B that was labeled EPA waste code D003 but not marked with an indication of the hazard of reactivity.



Photo 9 –
Permitted
hazardous
waste storage
area 2 B.



Photo 10 –
Container in
permitted
storage Area 2B
that was
marked with
toxic EPA waste
codes and not
marked with an
indication of
the hazard of
toxicity.



Photo 11 – 90-day central accumulation area containers in Building 831.



Photo 12 - 90-day central accumulation area containers in Building 831.



Photo 13 - 90-day central accumulation area containers in Building 831.



Photo 14 - 90-day central accumulation area containers in Building 831.

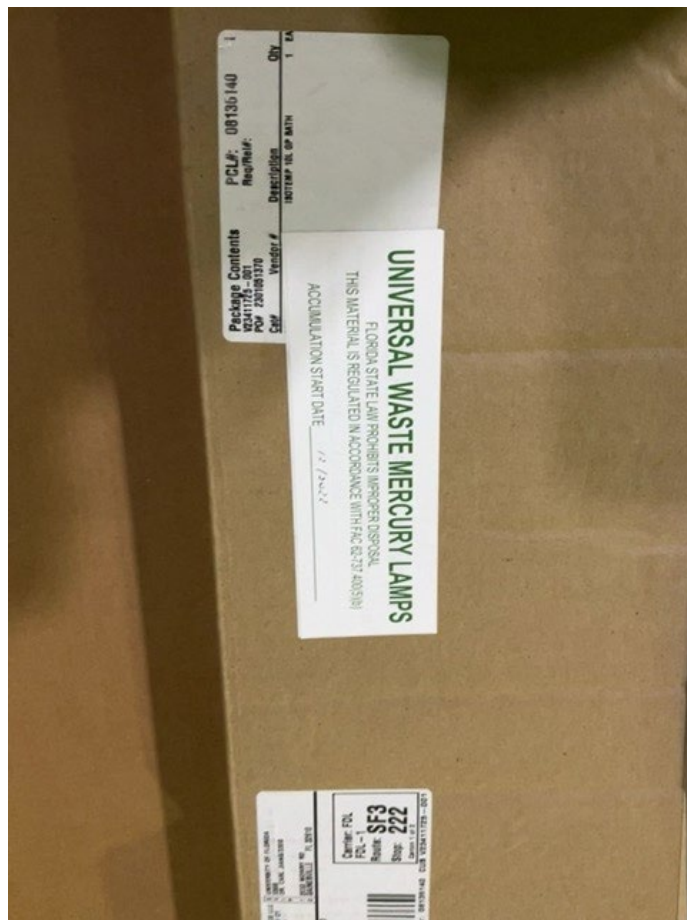


Photo 15 – Box of Universal Waste lamps that was marked with an accumulation date greater than one year from the date of the inspection.



Photo 16 - Box of Universal Waste lamps that was marked with an accumulation date greater than one year from the date of the inspection.

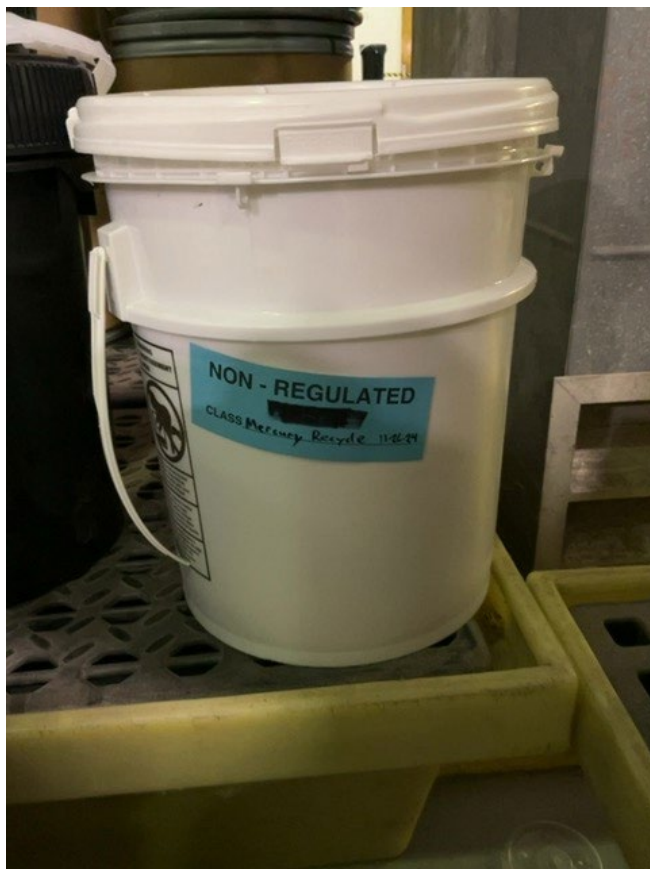


Photo 17 – 5-gallon container labeled as nonhazardous mercury for recycle in the central accumulation area.

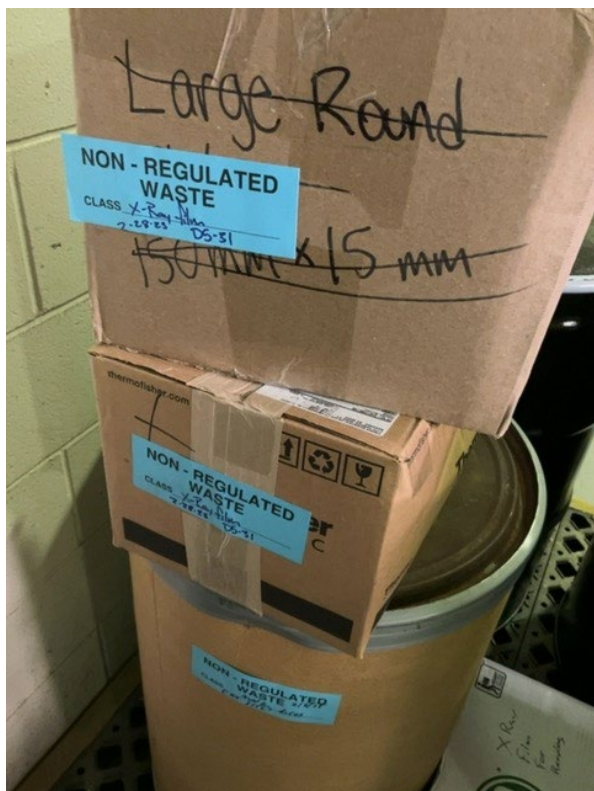


Photo 18 - excluded x-ray film waste sent for recycling observed in the CAA.



Photo 19 – Compound area used for elementary neutralization and used oil storage.



Photo 20 – Clamshell storage unit in the compound area storing a waste lead acid battery.



Photo 21 –
Nine open
universal waste
lamp boxes in
the IFAS
Warehouse,
Building 665.



Photo 22 –
Nine open
universal waste
lamp boxes in
the IFAS
Warehouse,
Building 665.



Photo 23 -
Open universal
waste lamp
boxes in the
IFAS
Warehouse,
Building 665.



Photo 24 -
Open universal
waste lamp
boxes in the
IFAS
Warehouse,
Building 665.



Photo 25 -
Open universal
waste lamp
boxes in the
IFAS
Warehouse,
Building 665



Photo 26 -
Universal waste
lamp box in the
IFAS
Warehouse
Building 665
marked with an
accumulation
date greater
than one year
from the date
of the CEI.



Photo 27 - Universal waste lamp boxes in the IFAS Warehouse Building 665 marked with an accumulation date greater than one year from the date of the CEI



Photo 28 - Universal waste lamp boxes in the IFAS Warehouse, Building 665 marked with an accumulation date greater than one year from the date of the CEI.

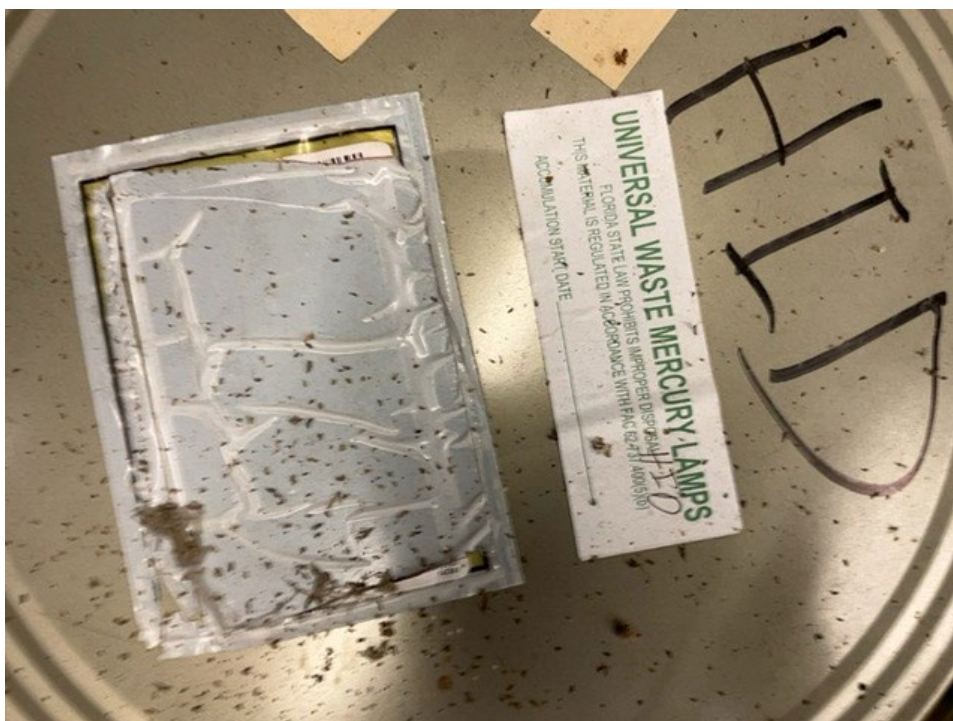


Photo 29 – 30-gallon container of universal waste lamps in the IFAS warehouse not marked with an accumulation date,



Photo 30 – 13 boxes of universal waste batteries not properly labeled or marked with an accumulation date.



Photo 31 – Mercury equipment observed in the IFAS warehouse stored in open, unlabeled container.



Photo 32 – SAA in IFAS paint shop.



Photo 33 – Open RCRA-empty containers in the IFAS paint shop SAA.



Photo 34 – Container of solvent contaminated rags missing the toxic indication of hazards.

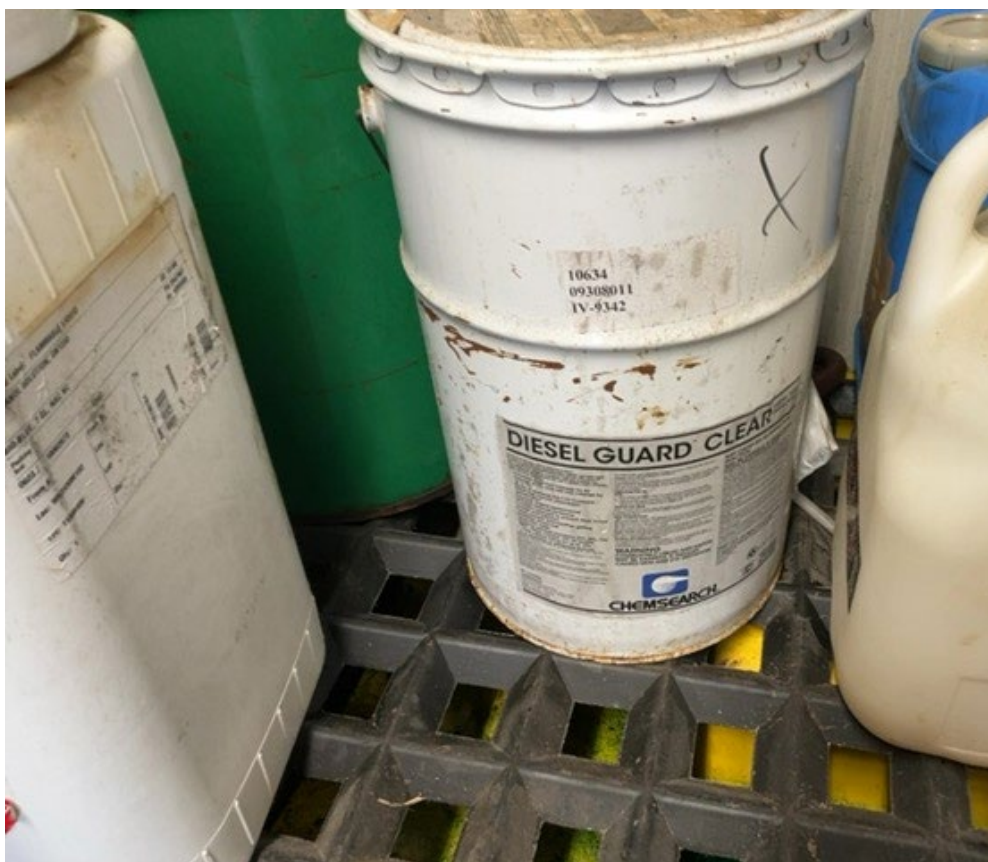


Photo 35 – Diesel Guard Clear container observed in maintenance shop storage area.



Photo 36 – Aerosol waste container observed outside of the IFAS maintenance shop. This container was missing a toxic indication of hazard.



Photo 37 – Oily rags container observed in the IFAS maintenance shop missing a toxic indication of hazard.



Photo 38 – Faded used oil filter label on container in the IFAS maintenance shop.

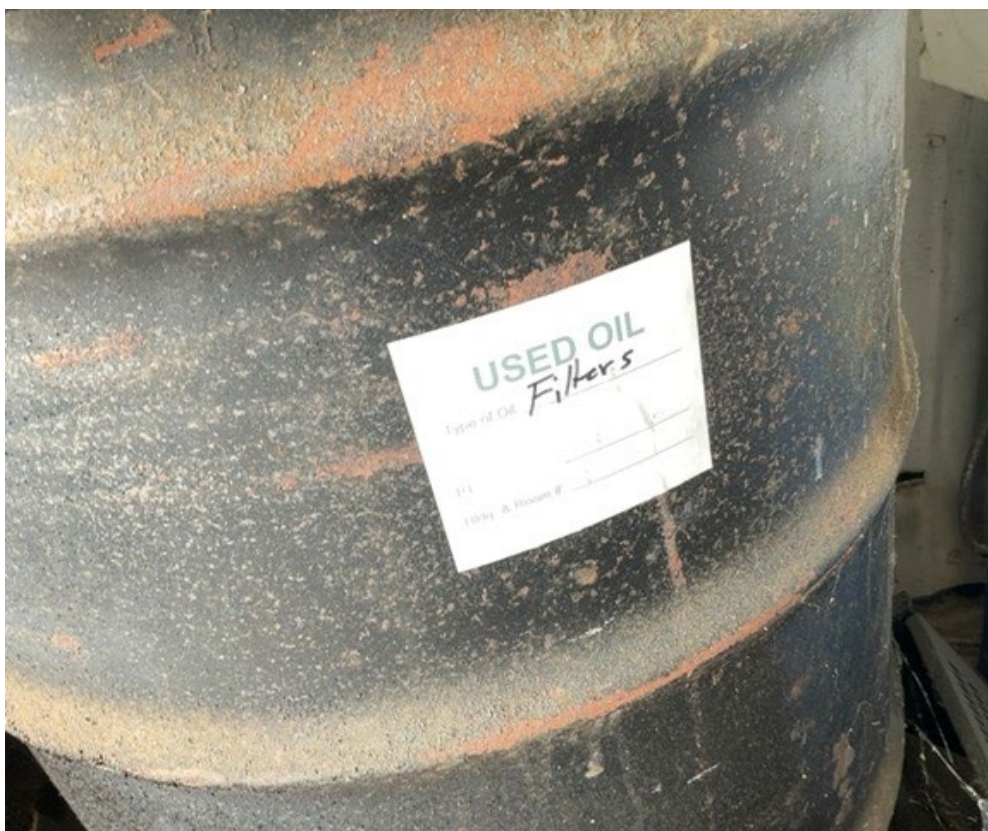


Photo 39 –
Corrected used
oil filter label
on container in
the IFAS
maintenance
shop.



Photo 40 –
unused Parts
Washer in
maintenance
shop that
contained
liquid sat the
time of the
inspection.



Photo 41 – Oily rags container observed in IFAS carpentry shop. This container was missing a toxic indication of hazard.



Photo 42 – IFAS Pesticide degradation pit

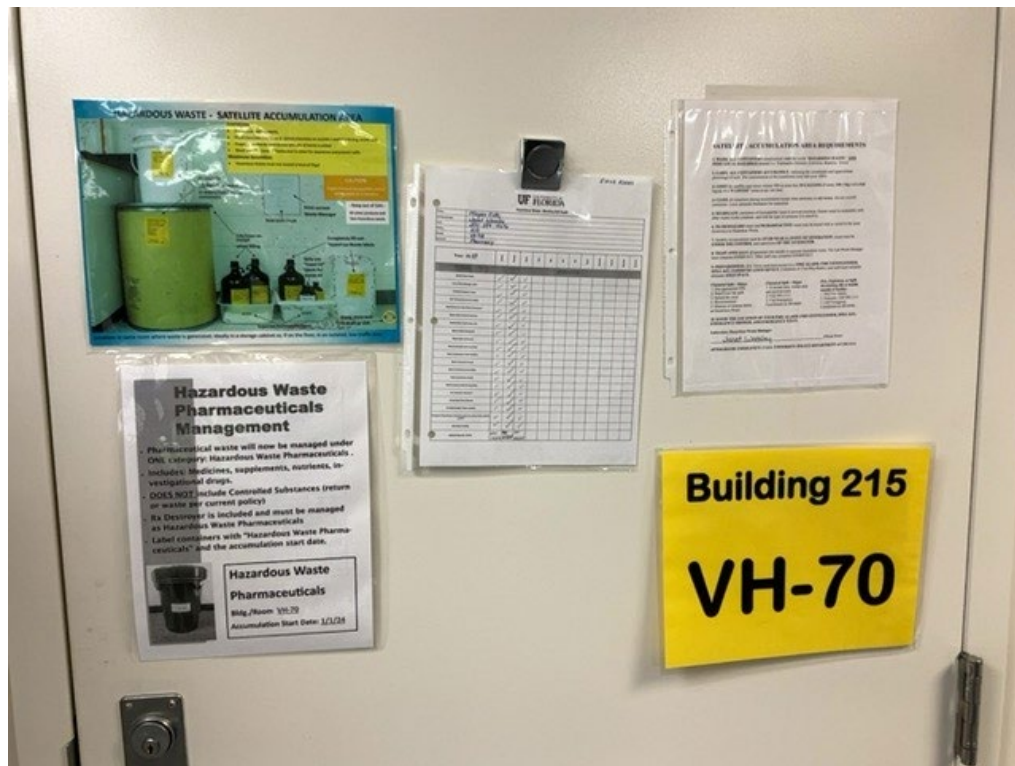


Photo 43 – signage near Vet Sciences Building Pharmacy HW accumulation area.



Photo 44 – Hazardous waste containers observed in the Vet Sciences Pharmacy

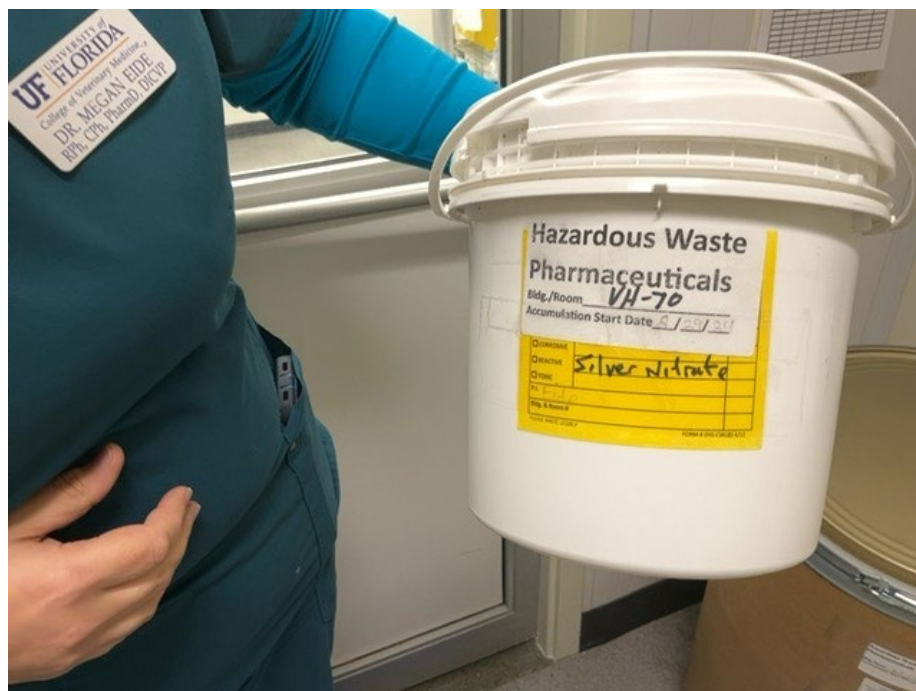


Photo 45 – Silver nitrate filter containers observed in the vet sciences pharmacy.

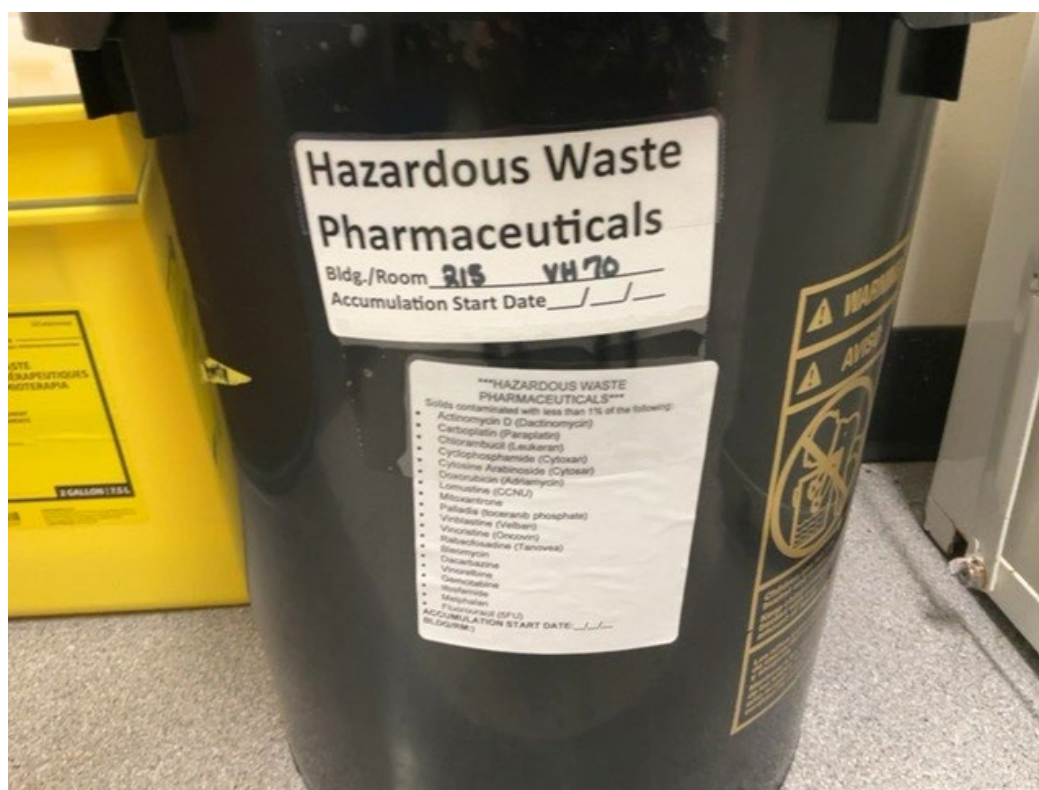


Photo 46 – Hazardous waste pharmaceuticals label in Vet Sciences Intensive Care Unit.

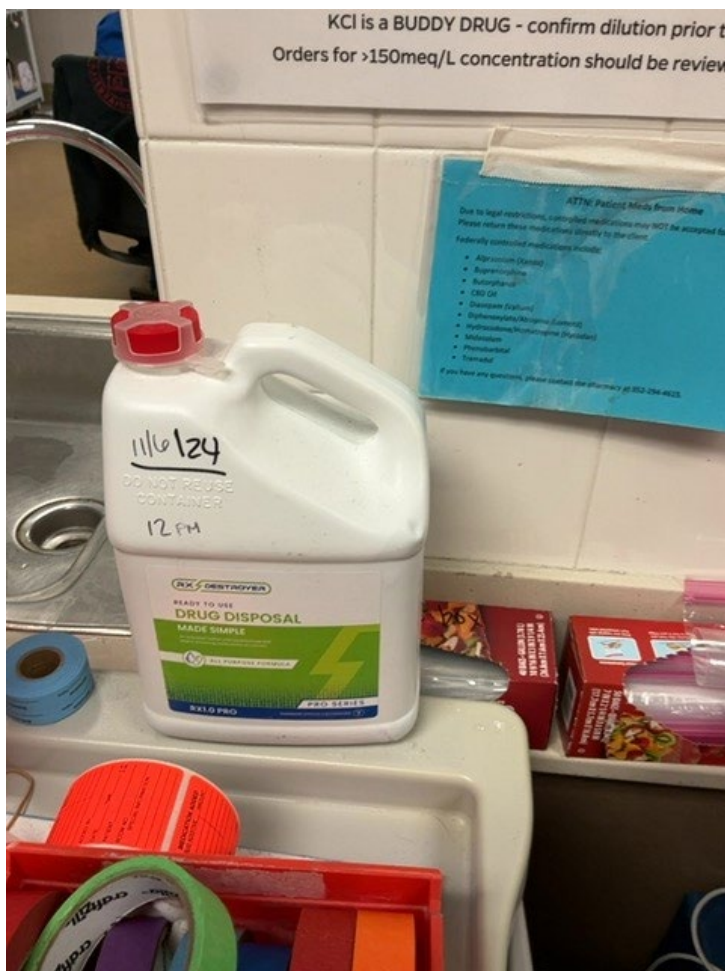


Photo 47 - Rx container accumulating hazardous waste pharmaceuticals. This container was not marked with the words "hazardous waste pharmaceuticals."



Photo 48 - SWMU 30.



Photo 49 –
SWMU 30.

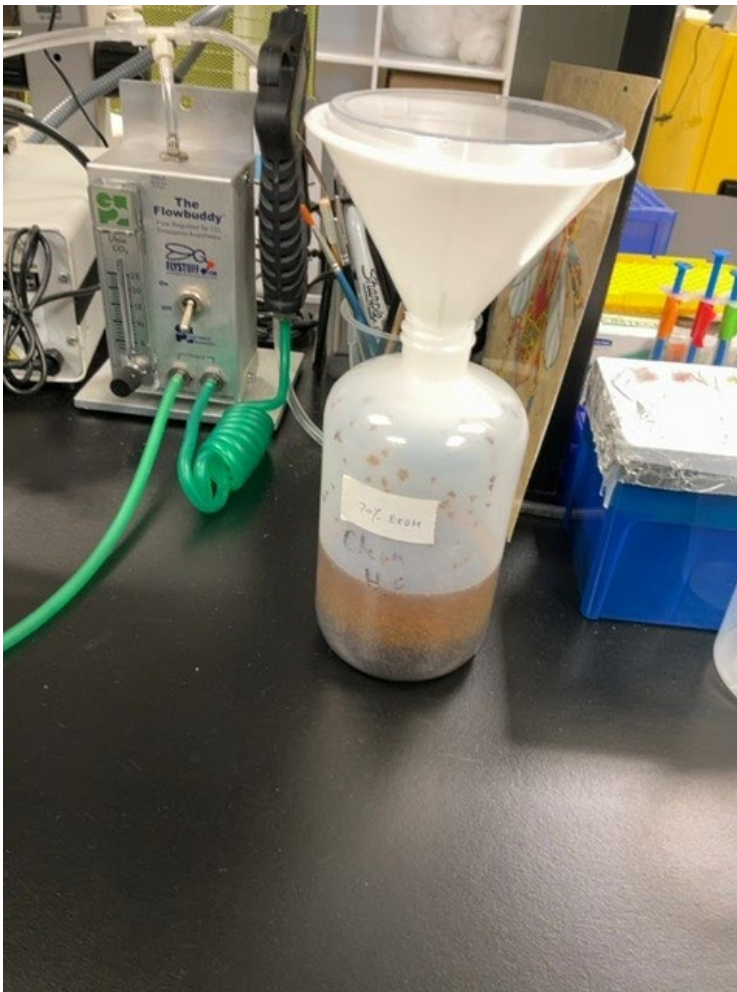


Photo 50 – “Fly
Morgue”
observed in
Yao Biology
Lab – Room
521



Photo 51 –
Biology
building, Carr
Hall Room 518
Lab SAA



Photo 52 –
Open
container in
biology lab SAA

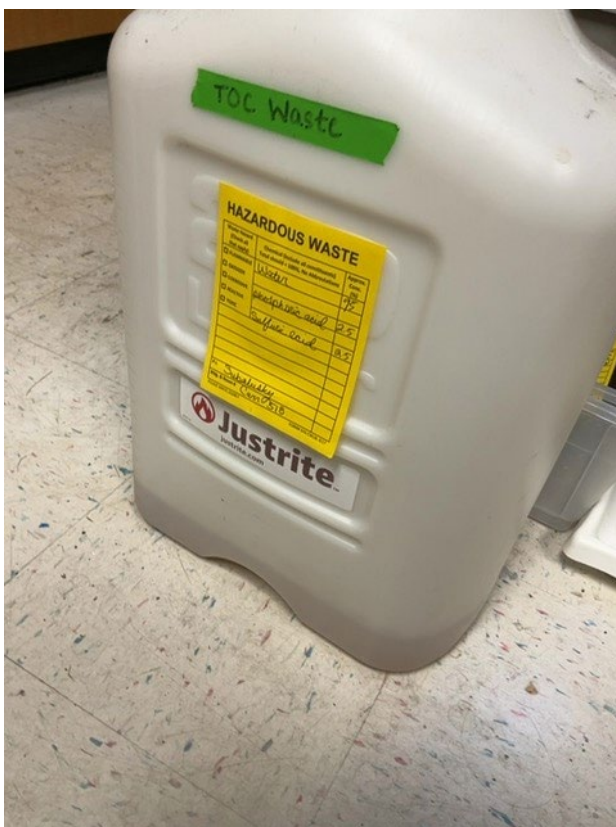


Photo 53 –
label on SAA
container
missing a
corrosive
indication of
hazard

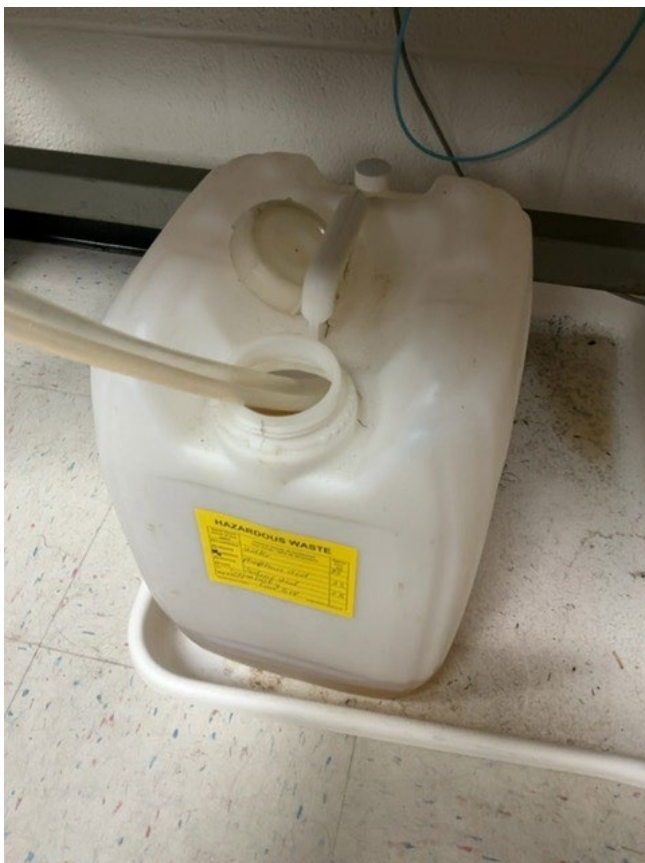


Photo 54 –
Container
connected to a
total organic
analyzer
machine. This
container was
open while not
actively
receiving
waste.



Photo 55 – SAA
in Teaching Lab
– Room 011.



Photo 56 - SAA
in Teaching Lab
– Room 011.

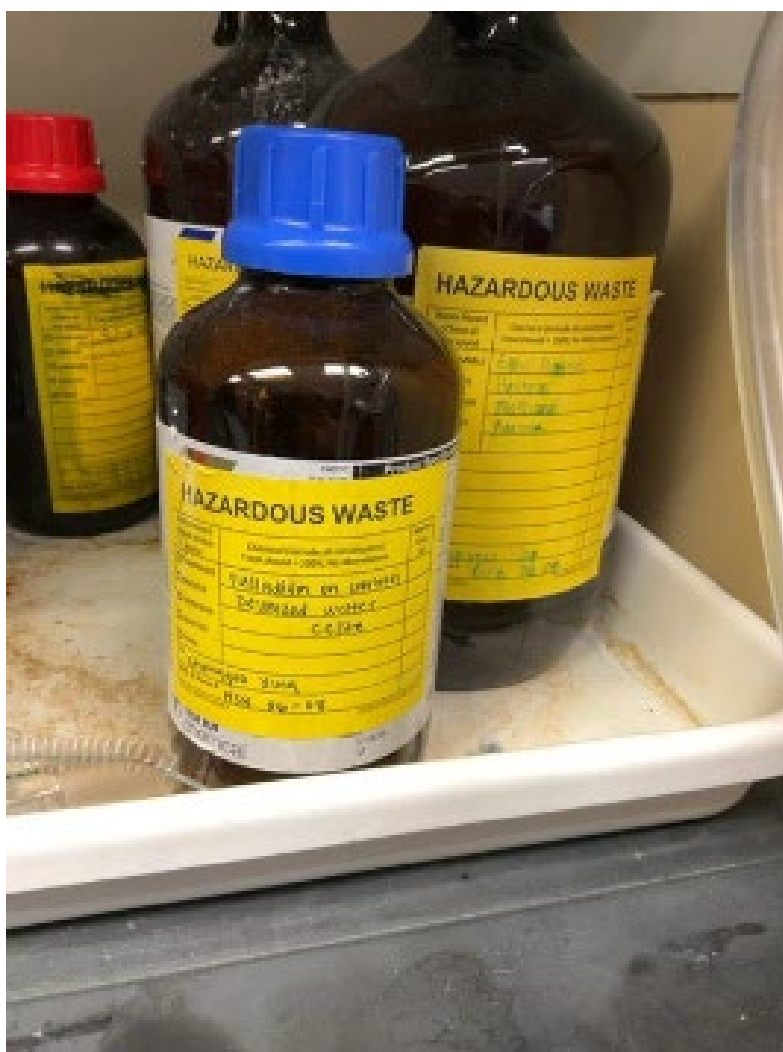


Photo 57 – SAA containers under hood in the College of Pharmacy Xing lab.