

RCRA Inspection Report

1) Inspector and Author of Report

Héctor M. Danois
Environmental Engineer
Land, Asbestos and Lead Section
Chemical Safety and Land Enforcement Branch
Enforcement and Compliance Assurance Division
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street, S.W.
Atlanta, Georgia 30303
(404) 562-8556

2) Facility Information

University of Florida
3076 Longleaf Road
Gainesville, Florida 32611
EPA ID: FLD000823393

3) Responsible Official

Matthew Doty
Hazardous Material Program Manager
Division of Environmental Health and Safety
University of Florida
Surge Area Drive, Building 831
PO Box 112725
Gainesville, Florida 32611

4) Inspection Participants

Matt Doty	University of Florida
Steven Ladendorf	University of Florida
Tori Goodwin	FDEP Northeast District
Héctor M. Danois	US EPA Region 4

5) Date and Time of Inspection

August 18, 2020 at 8:40am

6) Applicable Regulations

Subtitle C of the Resource Conservation and Recovery Act (RCRA) (42 U.S.C. §§ 6921 – 6939g),
the Chapter 403 of the Florida Statutes (Fla. Stat.), Fla. Stat. §§ 403.702 et seq.; 40 Code of Federal

Regulation (C.F.R.), Parts 260 - 270, 273 & 279, and Rule 62-730 et seq. of the Fla. Admin. Code Ann.

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.).

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

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 Section 403.722 of the Florida Statutes, Fla. Stat. § 403.722 [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.

NOTE: As of June 18, 2018, the State of Florida has adopted the recently updated Federal hazardous waste rules, more commonly known as the Generator Improvement Rule.

Final Operating and Corrective Action Permit 17756-006-HO, effective March 27, 2019

7) Purpose of Inspection

The purpose of the inspection was to conduct an RCRA compliance evaluation inspection (CEI) to determine the compliance of University of Florida, EPA ID# FLD000823393 with the applicable regulations.

8) Previous Inspection History

On April 2, 2019, EPA and FDEP conducted a RCRA CEI at the facility and 13 RCRA deficiencies were discovered.

9) Facility Description

The University of Florida ("UF" or "University") 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 (main campus). The 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, and agricultural and natural science research studies. Each laboratory is a potential satellite accumulation area 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. The 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 46,000 students.

The UF's most recent Hazardous Waste Generator Notification (EPA Form 8700-12) dated August 30, 2018, characterized the facility as a large quantity generator (LQG) of hazardous waste, mixed waste (hazardous and radioactive) generator, a transporter of hazardous waste, and, on March 27, 2019, was issued FDEP Permit Number 17756-HO-006 for container storage of hazardous waste and site-wide HSWA Corrective Action. The expiration date of this permit is March 26, 2024.

Currently UF can generate hazardous waste streams, used oil and universal wastes (such as spent batteries, certain types of lamps and mercury containing devices or equipment), waste solvent, spent aerosol cans, paint waste and other wastes which include EPA Waste Codes D001, D002, D003, D004, D005, D006, D007, D008, D009, D010, D011, D012, D015, D016, D018, D019, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D031, D033, D034, D035, D036, D037, D038, D039, D040, F002, F003, F005, F027, P001, P003, P008, P010, P012, P014, P018, P022, P024, P028, P029, P030, P041, P042, P048, P050, P051, P059, P070, P071, P075, P077, P078, P081, P082, P087, P092, P098, P102, P105, P106, P110, P116, P119, P120, P123, P127, P198, P199, P202, P203, U001, U002, U006, U007, U008, U010, U012, U019, U029, U035, U041, U044, U046, U050, U053, U058, U067, U070, U075, U077, U080, U081, U082, U084, U085, U091, U103, U105, U106, U108, U112, U114, U115, U119, U122, U123, U125, U128, U130, U133, U134, U136, U138, U144, U147, U150, U154, U159, U161, U162, U165, U168, U169, U170, U190, U196, U200, U201, U204, U209, U210, U213, U218, U219, U220, U225, U236, U238, U239, U240, U246, U271, U279, U353, U367, U404 and U411.

10) Opening Conference

☐ Credentials Presented

☒ CBI warning to facility provided

☐ SBREFA fact sheet, if applicable

☐ CBI was provided or discussed during the inspection

☒ Health and Safety, Personal Protective Equipment discussion

☐ Additional equipment that will be used, if applicable (FLIR camera, PID, FID)

On August 18, 2020, the U.S. Environmental Protection Agency, Region 4 inspector, Héctor M. Danois, accompanied by FDEP inspector Tori Goodwin, arrived at UF to inspect the facility to determine its compliance status with both RCRA and the State of Florida hazardous waste regulations. UF was represented by Mr. Doty and Mr. Ladendorf. Upon entering the facility, the inspectors introduced themselves, showed their credentials and explained the purpose of the visit and description of the facility's process was discussed.

11) Findings

A brief explanation for the inspection was given, as well as an introduction of the FDEP and EPA inspectors. The inspectors requested a description of the facility operations. The inspectors then performed a walk-through inspection of specific areas in the facility. Below is a description of the observations made during the inspection.

Building 831 – Permitted Container Storage

The permitted hazardous waste storage area is in Building 831. The hazardous waste codes for the waste stored in the permitted storage facility include D001 through D043, F001 through F005, F019, F027, and numerous U and P listed hazardous wastes. The permitted storage area is divided into Phase I and Phase II. The permit limits the volume of waste that can be stored in each phase. The permit also limits the container size for storage of hazardous waste to 1, 2, 5, 12, 30, and 55-gallon containers. This concrete building is equipped with a fire suppression system, fire extinguishers, and shower stations.

Seven full-time employees work in this building handling hazardous waste. The hazardous waste personnel pick up the containers from the campus laboratories and transport them in placarded trucks to building 831. Bulking and lab packing are conducted in both the Chemical Hazardous Waste and Radiological storage areas.

Phase I Area

The Phase I Area is used for the management of non-radioactive chemical wastes and universal waste lamps. The Phase I Area, which is the northern half of the building, is separated into five container storage areas. Each of the five container storage areas is constructed with a six-inch reinforced concrete slab and is separated by a secondary containment berm. The long-term hazardous waste storage areas are in Area 2B and Area 5. These areas are permitted to store waste for one year.

Hazardous waste is also stored for less than 90-days within the Phase I Area. The inspectors observed closed, labeled and dated containers staged on secondary containment pallets in this area. All drums were closed, labeled, and dated.

Area 2B Storage

Area 2B storage is the permitted storage area for non-reactive hazardous waste to be stored up to a year. The Area 2B storage is separated by a yellow berm from the Chemical Waste Staging and

Storage Area. The inspectors observed all containers on secondary container pallets, closed, labeled, and dated. Outside the Area 2B storage, operators store super-sacks containing hazardous waste debris. At the time of the inspection, the super-sacks were closed, dated, and labeled.

Area 5 Storage

The Area 5 storage is the permitted storage area for reactive (flammable) hazardous waste to be stored for up to a year. The reactive (flammable) hazardous wastes are stored in a walled room at the back of the Phase I Area. The inspectors observed all the containers closed, labeled, and dated. All the containers were dated within one year of storage time.

Chem Swap Cabinets

The UF's "Chem Swap" cabinets are also located in the Phase I Area. When the EH&S personnel picks up a new, sealed chemical container as part of a regular waste pickup, EH&S evaluates the material for consideration in the Chem Swap program. Unopened containers of chemicals with no expiration date are kept in the cabinets for potential "resale." EH&S keeps a list of available materials on-line, and laboratories can order the materials from EH&S free of charge. This program began as part of the campus-wide "zero waste initiative."

Phase II Area

The Phase II Area is used for the management of radioactive and radioactive mixed wastes. The Phase II Area is separated into four container storage areas (6-radioactive, 7-poisons, 8-corrosive, and 9-flammable). Each of the four container storage areas is separated by a secondary containment structure. The entire container storage area is separated from the loading/unloading areas by a secondary containment structure.

The incoming wastes are tested for pH, oxidizer, and radiation levels. If possible, the wastes are neutralized before processing and storage. Radioactive wastes are segregated by individual radioisotope for storage and disposal at a permitted treatment, storage, and disposal facility. Radioactive mixed wastes are classified as poisons, flammables, or corrosives, and processed accordingly. The mixed wastes are either bulked or lab-packed in 30 or 55-gallon containers, which are placed directly into storage. Mixed wastes may be sent for incineration, energy recovery, or disposal.

The Radioactive Sources Area, listed as Radioactive Waste Bay Area 6 on the facility plan, contained only radioactive waste. The drums are stored together, and UF keeps the radioactive waste to decay for 20 half-lives before shipping out. Along the back wall of this area, were drums of radioactive liquid being consolidated. All containers were observed closed, labeled, and dated.

At the time of the inspection, the Waste Bay Area 9 was storing two 55-gallon drums of D001 hazardous waste. The drums were closed, labeled, and dated. The Waste Bay Area 7 is where UF keeps the poison waste; corrosives are stored in Waste Bay Area 8. The areas were empty during the inspection.

Freezer

The Phase II Area has a freezer storing animal carcasses that have been used in laboratory experiments and exposed to radiation. UF stores the carcasses for 20 half-lives before shipping out for disposal.

The Compound

The Compound was the original UF permitted storage area. Currently, the area is being used to store spent lead-acid batteries, universal waste batteries, a less than 90-day hazardous waste storage area, (HWSA) and used oil storage. The HWSA is used to store inorganic and organic hazardous acid waste to be neutralized.

A clamshell underneath a canopy contained spent lead-acid batteries (SLABs) to be recycled. The label on the clamshell was dated July 7, 2020. A portable building contained Universal Waste Batteries collected in cardboard boxes and sent out for recycling. At the time of the inspection, there were two boxes dated January 10, 2020.

The area had a 550-gallon double-walled used oil tank and approximately twenty-two 55-gallon drums of used oil. Also, the inspection team noticed containers of non-hazardous latex paint stored in the area.

The incoming acid and base wastes generated by the facility are collected and neutralized with water and soda ash by the EH&S personnel. The neutralized acids and bases are discharged to the sewer to be treated at the onsite wastewater treatment plant. At the time of the inspection, the facility stored the containers waiting to be neutralized in a shed. All containers were closed, labeled, and dated (oldest container July 7, 2020) within 90 days.

Fencing/Security

The inspectors walked the fencing around Building 831. As previously explained, the area outside of the fence was a natural teaching area and the professors did not want it disturbed with clearing and trimming. At the time of the inspection, the fences looked clean and in good condition, and the signs were located every 100 feet.

Fifield Hall Institute of Food and Agricultural Sciences (IFAS) Building

The IFAS is an agriculture, life science, pathogen, and invasive species research facility.

Room 1110 - Bessette Lab

This lab conducts biochemical Genetics and metabolic biochemistry plant research. The hazardous waste generated in this lab is generated from several high-performance-liquid-chromatography (HPLC) instruments. At the time of the inspection, the SAA was storing; two 3-liter containers of HPLC waste (methanol/ethanol/hexane), a 3-liter container of methanol, and a 3-liter container of dichloromethane. All containers were stored in plastic trays as secondary containment. The inspection team recommended the use of paraffin or a wax material to seal the area where the bottle

cap and HPLC hose connect.

The room had a designated SAA under a vent hood. At the time of the inspection, the SAA was storing a 3-liter container of ethanol/acetic acid, a 3-liter container of acetone, and three 3-liter containers of methanol/ethanol/hexane/ dichloromethane. The containers were closed and labeled.

Rooms 1121/1127 – Nuñez Lab

This lab conducts woody plants root physiology, plant-microbe interactions in the rhizosphere, and plant nutrition and soil adaptation research. At the time of the inspection, the SAA was storing; a 1-liter container of phenol/water waste, a 1-liter container of acetone/water waste, a 3-liter container of ethanol waste, a 3-liter container of octanol/sodium acetate/ascorbic acid waste, a 1-liter container of acetic acid waste, a 1-liter container of barmer maxx (fungicide) waste, a 3-liter container of sulfuric acid/water waste, a 1/2-liter container of trichloroacetic waste, a 1/2-liter container of copper sulfate waste, a 1/2-liter container of methanol/water waste, a 1/2-liter container of tromethamine waste, a 1/2-liter container of acetic acid waste, a 1/2-liter container of dimethylformamide/ethanol/chlorophyll waste (missing hazard), a 1-gallon container of sodium acetate/hydroxide waste, a 1-gallon container of orthophosphoric/ninhydrin/glacial acetic/salicylic acid waste, a 3-liter container of titanium tetrachloride/sulfuric acid/copper sulfate/water waste (missing hazard), a 3-liter container of ethanol, a 1-liter container of phenol waste (not labeled “Hazardous Waste”/missing hazard), and a 1-gallon container of titanium sulfate/potassium phosphate/ethylene diamine acid/hydrogen peroxide waste (missing hazard) (See Figures 1-4).

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.

Room 1134 - Kim Lab

This lab conducts plant secondary metabolism and plant hormone research. At the time of the inspection, the inspection team noticed a SAA generated from a HPLC instrument, a 3-liter bottle of methanol waste. The container was closed and labeled.

Rooms 1408/1415 – Dufault Lab

This lab conducts fungal and bacterial pathogen disease in plants. At the time of the inspection, the SAA was storing a bag of universal waste batteries (no date), a bag storing a small container of methanol/rifampicin, a plastic container of pentachloronitrobenzene/water, a container of ethanol/soil/water waste, a container of Promega wizard/guanidinium thiocyanate, a container of guanidium hydrochloride and a container of precipitation solution/DNA stripping solution/Isopropanol (See Figures 4-9). All SAA were missing the hazard identification.

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.

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.

In Room 1415, the inspection team also found an SAA that was storing a 5-gallon bucket of SYBR green/tris/acetic acid/agarose/water waste. The container was closed and labeled.

Room 2138 – Settles Lab

This lab conducts maize genetics and genomics, seed development, and seed phenomics research. This is a brand-new lab and no waste was generated at the time of the inspection.

Room 2225 – Chase Lab

This lab researches the environmental impact of weed reduction management, methyl bromide alternatives, and cover crops, and living mulches. At the time of the inspection, the SAA was storing a 1-gallon container of protein extraction buffer waste, three 1-gallon containers of ethidium bromide stained gels waste, a 1-gallon container of Coomassie fix waste, a 1 quart container of used oil (not properly labeled), a small bag of wipes contaminated with fixer, a box of 5 mercury thermometers, a box of x-ray films, a container of amidino phenyl/phosphate waste (missing hazard indication), a container of cyanide iodide/ethanol/tetra ethyl benzimidazo waste (missing hazard indication), a container of mitotracker green/mannitol/phosphate waste (missing hazard indication), ½ gallon container of Coomassie protein assays, a glass container of ethanol/acetone waste (missing hazard indication), a container of ethidium bromide stained gels, a 1-gallon container of thermo-pierce/methanol (1X NUPAGE) waste, a 1-gallon container of transfer buffer/methanol (1X TRIS-GLYCINE) waste, a 1-gallon container of protein assay with thermo-pierce, and a 1-gallon container of nucleic acid extraction waste (Figure 9-12).

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.

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.”

Room 2234 – McCarty Lab

This lab conducts maize/E.coli research. At the time of the inspection, the SAA was storing a 1-gallon bag of phenol/chloroform contaminated tips, a 3-liter bottle of liquid phenol/chloroform waste, two 1-gallon bags of ethidium bromide/agarose/tris/water contaminated tips (open), a 1-gallon container of paraformaldehyde, a 1-gallon container of ethidium bromide/tris/EDTA waste, a 5-gallon bucket of phenol/chloroform waste, and a 5-gallon bucket of ethidium bromide/tris/EDTA waste (See Figure 13).

Pursuant to Fla. Admin. Code Ann. r. 62-730.160(1) [40 C.F.R. § 262.17(a)(1)(iv)], which is a condition of the LQG Permit Exemption, (A) a container holding hazardous waste must always be closed during accumulation, except when it is necessary to add or remove waste; and (B) A container holding hazardous waste must not be opened, handled, or stored in a manner that may rupture the container or cause it to leak.

Room 2560 – Jones Lab

This is the Phyto-bacteriology lab researching bacterial spot disease of tomato and pepper. At the time of the inspection, the SAA was storing a 3-liter container of phenol/chloroform/isoamyl alcohol waste, a 1-gallon container of magnesium and copper nanomaterial/magnesium sulfate/water waste, a 1-gallon container of copper hydroxide/water waste, two 1-liter jars of phenol/chloroform/ isoamyl alcohol liquid waste, and a 5-gallon bucket of phenol/chloroform/isoamyl alcohol solids waste.

Room 2530 – Smith Lab

This is the Mycology lab researching the ecological evolution of fungi. At the time of the inspection, the SAA was storing a bucket of phenol/chloroform/isoamyl alcohol waste, and a jar of chloroform/phenol/isoamyl alcohol waste.

UF's Cancer Genetic Research Complex

The Complex is a research facility to convert scientific breakthroughs into innovative cancer therapies, basic research, agriculture, and other beneficial technologies applied to life science.

Room 220D – RNA Biology Lab

This lab conduct research on ribonucleic acid (RNA) extraction to study the roles in coding, decoding, regulation, and expression of genes. At the time of the inspection, the SAA was storing three 1-gallon containers of formaldehyde/sodium chloride, two 1-gallon containers of methanol/glycine/water waste, a 1-gallon container of ethanol/phenol/guanidine/ammonium thiocyanate/sodium citrate waste, two small bags of spent silver nitrate sticks (not labeled and open container), a spent lead-acid battery (missing label and date), a 1-gallon container of ethidium bromide/plastic waste, a 3-liter container of filtered hematoxylin waste, a 1-gallon container of xylene/EOSIN-Y waste and a 1-liter container of eosin waste (See Figure 14-15).

Pursuant to Fla. Admin. Code Ann. r. 62-730.160(1) [40 C.F.R. § 262.17(a)(1)(iv)], which is a condition of the LQG Permit Exemption, (A) a container holding hazardous waste must always be closed during accumulation, except when it is necessary to add or remove waste; and (B) A container holding hazardous waste must not be opened, handled, or stored in a manner that may rupture the container or cause it to leak.

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.

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.

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).”

Room 225E – Ranun Lab

This lab conduct research on amyotrophic lateral sclerosis (ALS) genetic disease performing xylene/ethanol staining on mice tissue samples. At the time of the inspection, the SAA was storing a 5-gallon container of methanol/water waste, a 5-gallon container of ethanol/water waste, a 3-liter container of ethanol/water/Sudan black, a 3-liter container of hydrogen peroxide/water waste, a 3-liter container of tris/formamide/sodium chloride/water waste, three 5-gallon containers of water/ethidium bromide/agarose waste, two 5-gallon containers of xylene waste, a 5-gallon container of xylene/water waste, a 3-liter container ethidium bromide/water waste, a 3-liter container formalin/water waste, a 3-liter container methanol/acetone waste, a 1-gallon container of hydrogen peroxide/water waste, a 1-gallon container of tris/formamide/sodium chloride/water waste, a 3-liter container methanol/ hydrogen peroxide waste, a 5-gallon container of methanol/tris/water waste and a 1-gallon container of methanol/tris/water waste. All containers were closed and labeled.

Room 230B – Hoffman Lab

This lab conducts gene therapy research performing xylene staining and phenol-chloroform extraction. At the time of the inspection, the SAA was storing a 1-gallon container of ethidium bromide/isoamyl alcohol/plastic waste, a 1-gallon container of isopropanol/water waste, a 1-gallon container of CEDTA/ethylenediaminetetracetic acid/distilled water waste, a 1-gallon container of CEDTA/acetic acid, a 1-gallon container of methanol/tris/glycine/water, a 1-gallon container xylene waste, a 1-gallon container Luxor/fast blue waste, a 1-gallon container hematoxylin, a 1-gallon container of glacial acetic acid /Cresylic acid violet waste, a 1-gallon methanol/water waste, a 1-liter container of phenol/chloroform waste, a 1-gallon container of hematoxylin waste, a small container of Dithiothreitol (DTT) (not labeled) (See Figure 16).

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.

Room 235A – Zolotukhin Lab

This lab conducts molecular therapy/protein work/cloning research. At the time of the inspection, the SAA was storing a 3-liter container of methanol/water waste, a 3-liter ethidium bromide/isoamyl alcohol/TE waste, a 3-liter container of bleach/TRI/ethanol waste, a 3-liter container of

methanol/water waste, a 1-liter container of phenol/chloroform/TE buffer/water waste, a 5-gallon bucket of chloroform/phenol/ethidium bromide/acetic acid waste and a 5-gallon bucket of agarose gel waste. Also, the area was storing a universal waste lamp box. All containers were closed and labeled.

Room 285B – Zhijian Qian Lab

This lab conducts hematology/oncology research performing cultural cell and animal expertise. At the time of the inspection, the SAA was storing a 3-liter container of phenol/chloroform waste and a 5-gallon bucket hazard gel waste that was not labeled (See Figure 17).

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.

Room 280B – Lab

This lab conducts DNA isolation using chloroform/formalin in tissue samples. At the time of the inspection, the SAA was storing a 3-liter container of methanol waste (missing hazard identification), a ½ -liter container of phenol-chloroform, and a ½ -liter container of azoxy methanol (See Figure 18).

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.

Room 280D – Cancer Research Lab

At the time of the inspection, the SAA was storing a 1-gallon container of PBS/formalin waste, a small jar of TRIzol/ethanol waste, a small jar of TRIzol waste, two 1-gallon jars of TRIzol/chloroform/IPA waste, a small bag of phenol/chloroform tubes and several small containers storing lab waste. All containers were closed and labeled.

Room 270B – Pharma Development Lab

At the time of the inspection, the SAA was storing two 3-liter containers of HPLC waste (acetonitrile/formic acid), a 3-liter container of phenol waste, a 3-liter container of used oil, a 3-liter container of IPA waste, a 5-gallon container of phenol/chloroform/water waste, a 1-liter container of thionyl chloride waste and a box of lithium chloride/phenol/water waste. All containers were closed and labeled.

Room 275D Lab

The inspection team was informed that this lab was going thru a chemical inventory clean up. The Principal Investigator was categorizing the chemicals in hazard categories. The inspection team

noticed trays of flammables, corrosives, and flammables/corrosives containers. The trays and other chemicals were stored inside a vent hood.

Room 270D - Vidyasagar Lab

This lab conducts gastrointestinal/bronchial/cystic fibrosis research by performing xylene/formalin staining on mice tissue samples. At the time of the inspection, the SAA was storing a 3-liter container of formalin/PBS waste (missing hazard identification) (See Figure 19).

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.

Recordkeeping

Per the EPA’s COVID-19 field operations guidance, required and relevant paperwork were submitted digitally by the facility per request of the EPA and FDEP. The following documents were reviewed off site following the site inspection: training records (2020), the contingency plan (2020) and quick reference guide (QRG), final permit, inspection logs, job descriptions and the 2019-2020 hazardous, non-hazardous, used oil and the universal waste manifests. The generator status notification (EPA Form 8700-12) was last updated on 03/17/2020.

The inspectors requested Building 831’s contingency plan. The plan included a current emergency contact list, a fire extinguisher map, an evacuation map, and a list of emergency response equipment. Documentation (i.e., green return receipt cards) that copies of the contingency plan were provided to the local emergency response agencies (i.e., fire, police, hospital) was not available.

The Final Operating and Corrective Action Permit 17756-006-HO, effective March 27, 2019, was reviewed. The permit was issued to operate a hazardous container storage facility, UF building 831 located in Gainesville, Florida.

The weekly and daily inspection records for Building 831’s less than 90-day hazardous waste storage area (HWSA) included:

Phase I

- General Chemical Waste Storage Area 1
- Mixed and Chemical Waste Storage Area 2A and 2B
- Ignitable Waste Storage Area 3
- Corrosive Waste Storage Area 4
- Reactive Waste Storage Area 5
- Waste Management Compound

Phase II

- Storage Area 6
- Radioactive Mixed Waste Storage Area 7
- Corrosive Mixed Waste Storage Area 8

- Ignitable Mixed Waste Storage Area 9

The inspectors reviewed the inspection records and observed the current daily and weekly inspections from 2019-2020. No issues were observed during the review.

Hazardous and non-hazardous manifests were reviewed (e-records and e-manifests) for 2019-2020. Hazardous wastes were removed and disposed of by Environmental Quality Florida, Inc. (EPA ID FLD981932494) in Tampa, FL. The land disposal restriction forms were reviewed, and no issues were observed during the review. Used Oil was disposed by HOWCO Environmental Service.

Universal wastes lamps were removed and disposed of by Lighting Resources, Inc., LLC (EPA ID FL0000207449) in Ocala, FL. Universal waste batteries were removed and disposed of by Fisher, Inc. in Lakeland, FL.

12) Closing Conference

The RCRA inspectors completed their inspection on August 18, 2020. The facility was inspected as a LQG. An out-briefing on the findings of the inspection was provided by Mr. Danois and Ms. Goodwin to the inspection participants.

13) Signed

For:

Héctor M. Danois
Inspector and Author of Report

Date

14) Concurrence and Approval

Alan A. Annicella
Chief
Land, Asbestos and Lead Section

Date

Photo Log Summary

Photos taken on August 18, 2020

Héctor M. Danois

Camera: Samsung WB250F

EPA Property Tag: S75914

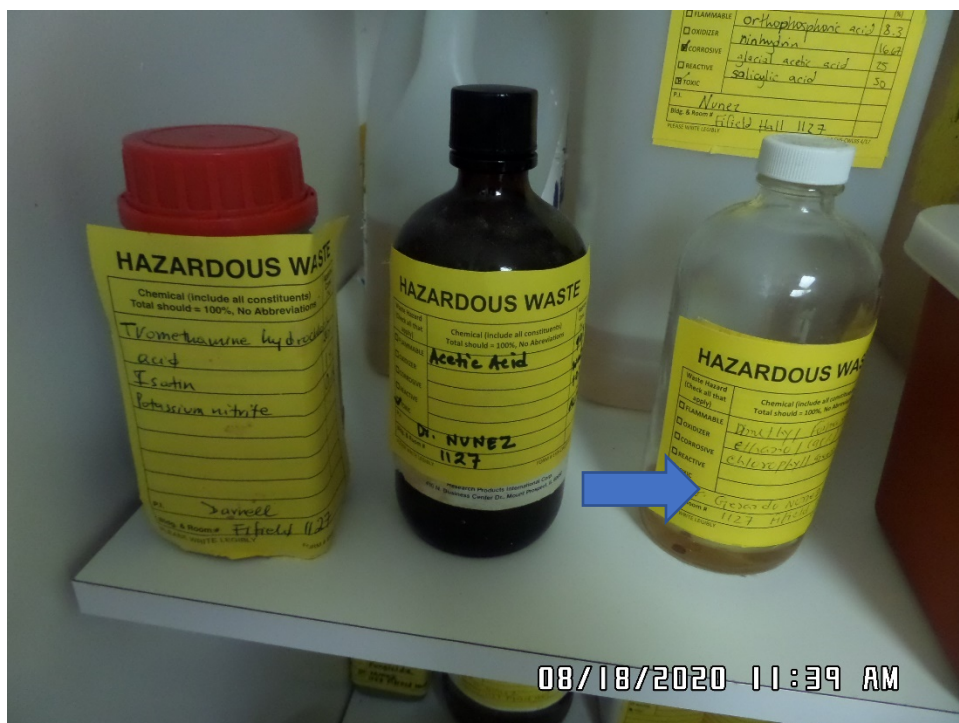


Figure 1 - SAA container missing hazard identification

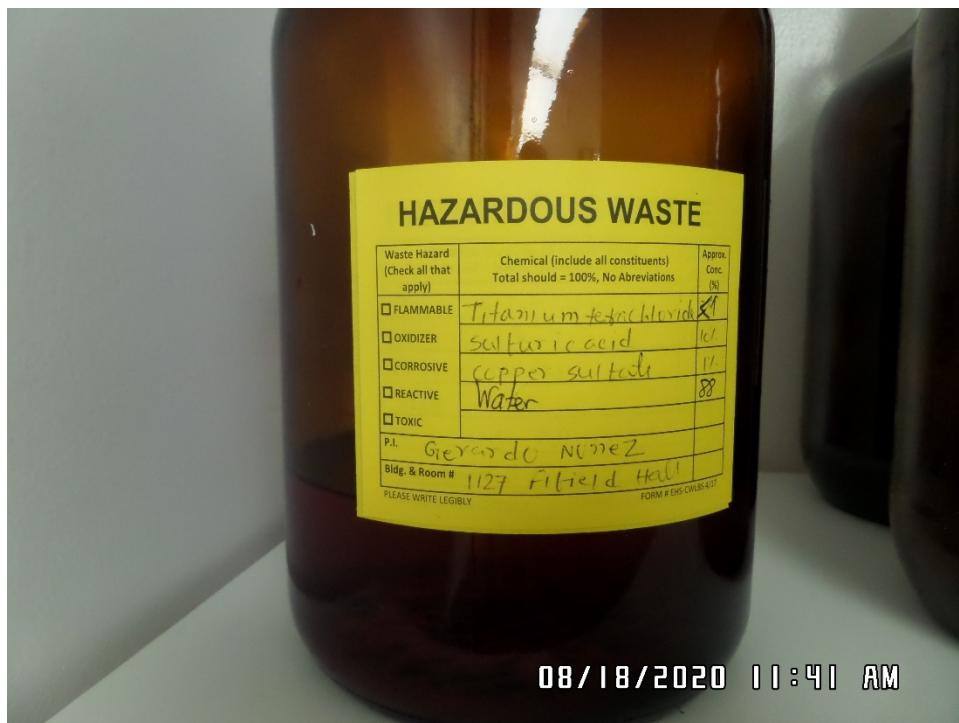


Figure 2 - SAA container missing hazard identification

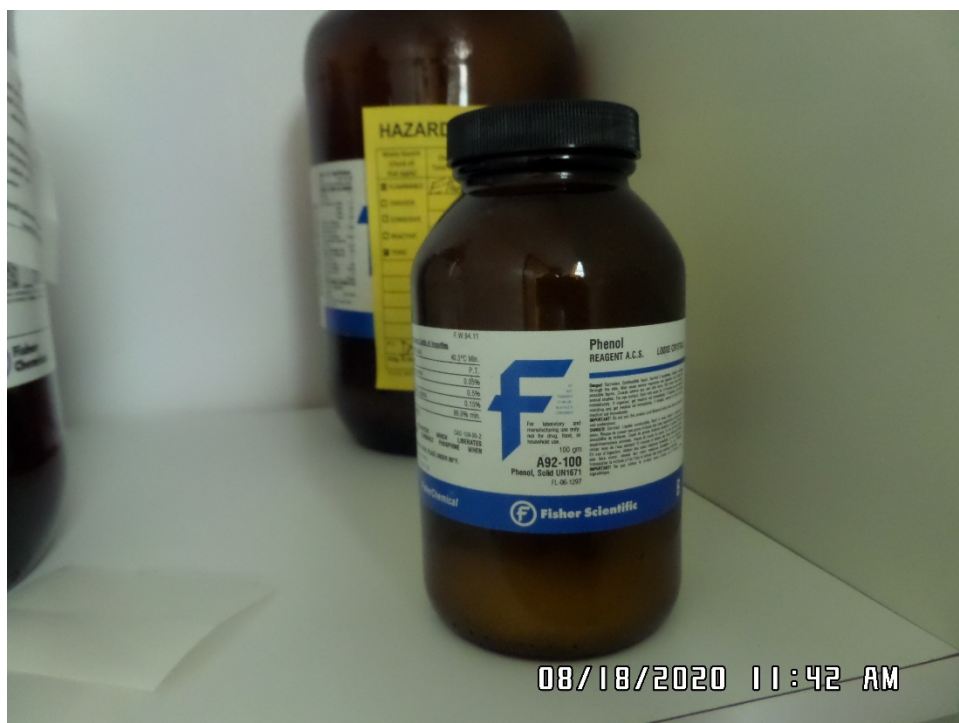


Figure 3 - SAA container missing HW label and hazard identification

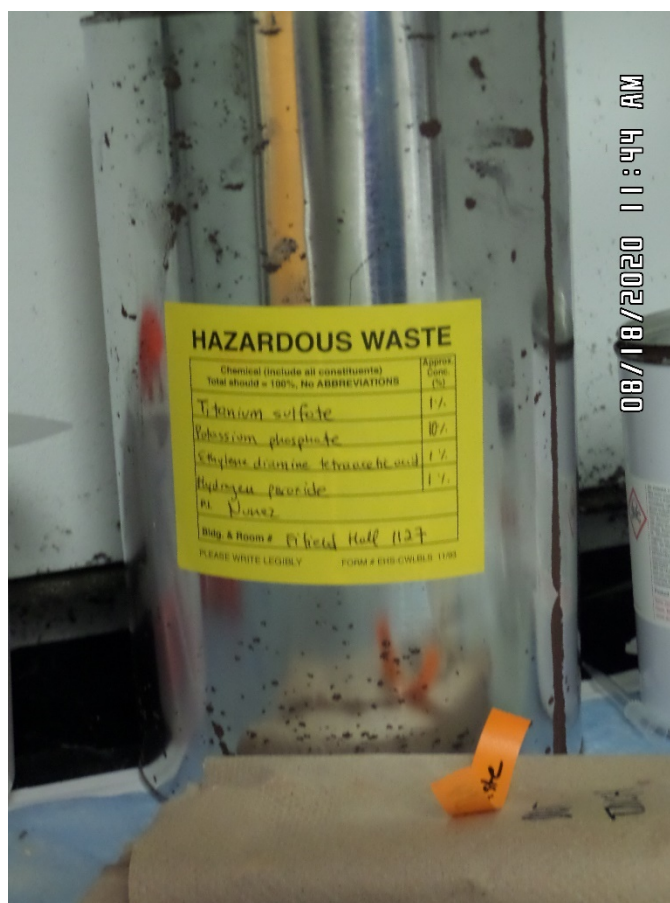


Figure 4 - SAA container missing hazard identification

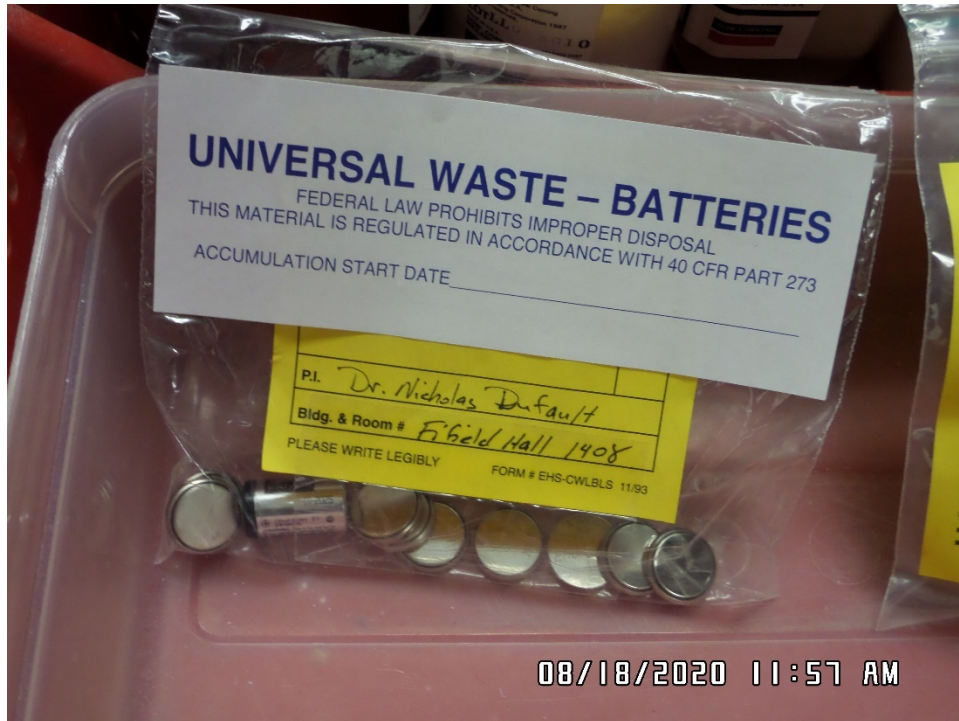


Figure 5 - UWB bag not dated

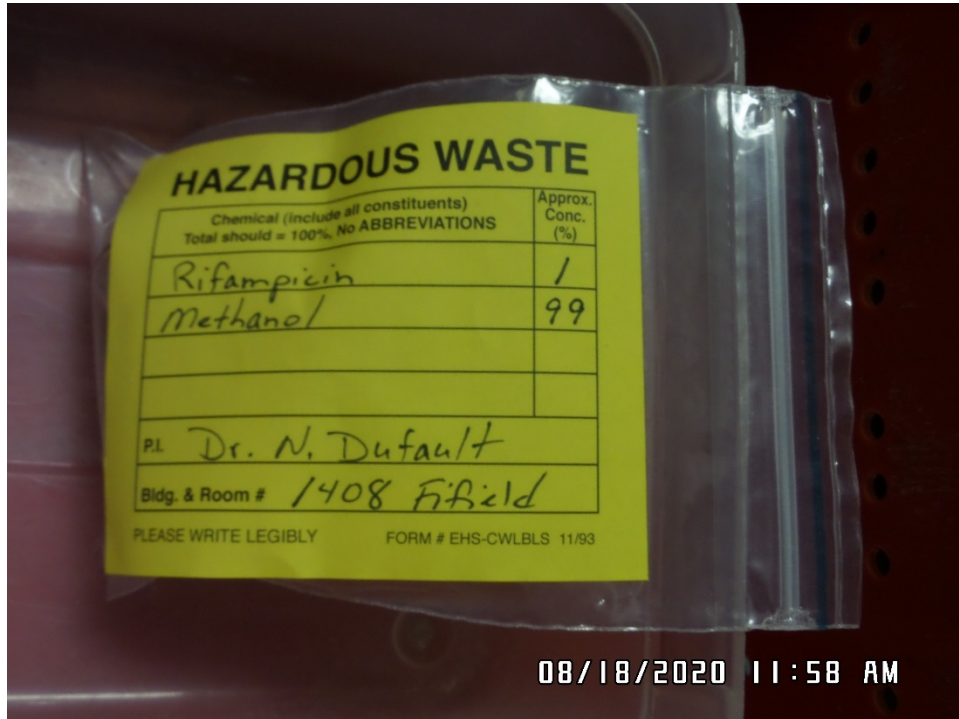


Figure 6 - SAA container missing hazard identification

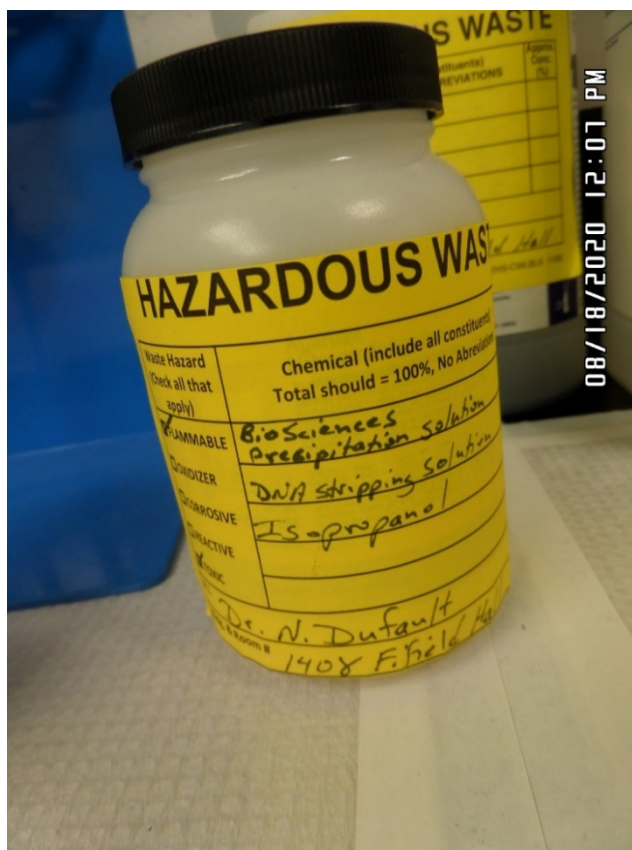


Figure 9 - SAA container missing hazard identification

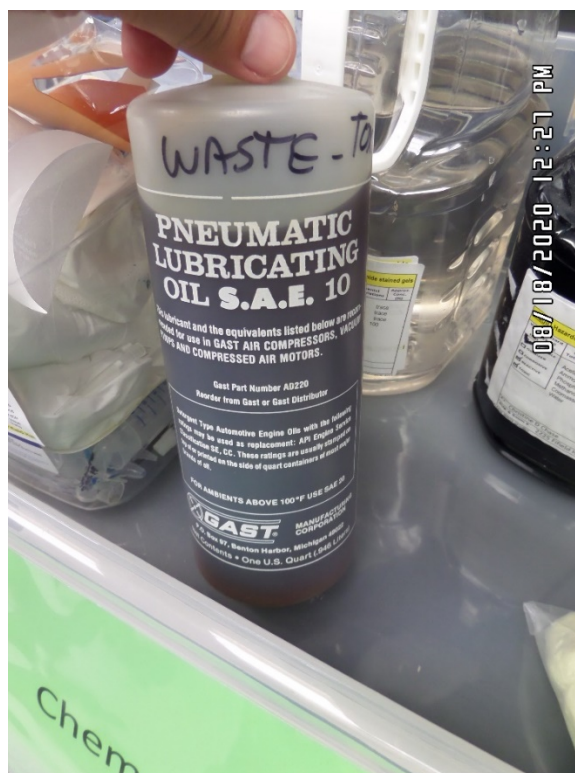


Figure 10 - container of used oil (not properly labeled)

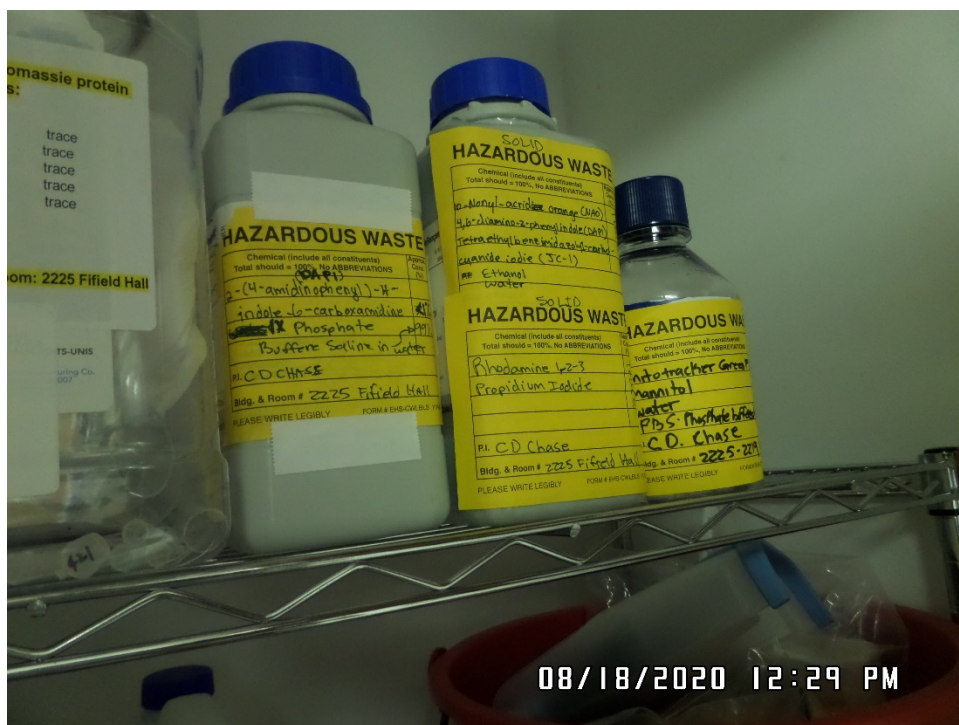


Figure 11 -SAA containers missing hazard indication

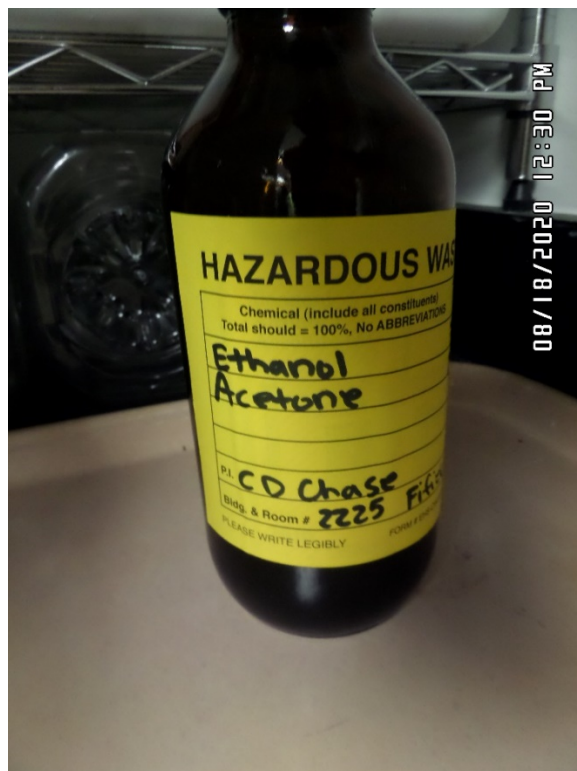


Figure 12 - SAA container missing hazard indication

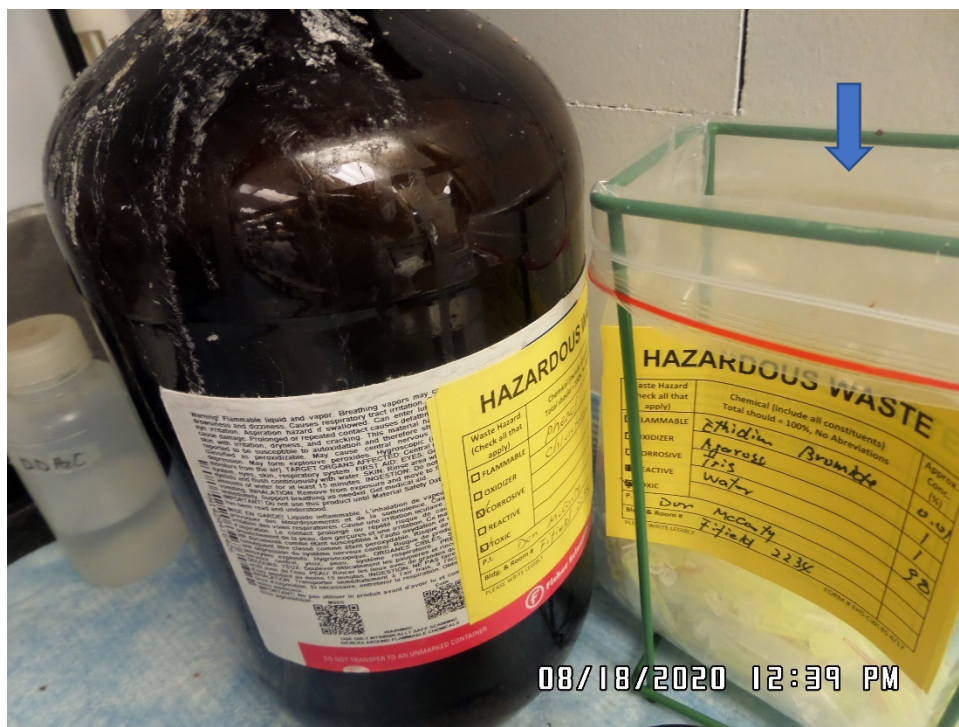


Figure 13 - Open SAA container



Figure 14 - Bag of spent silver sticks



Figure 15 - spent lead acid battery

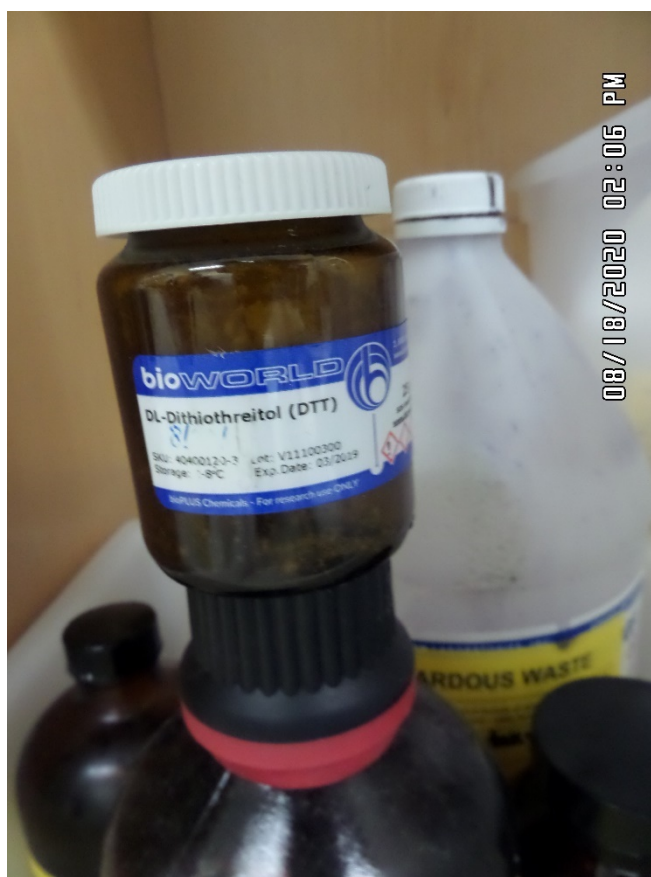


Figure 16 - Unlabeled SAA of DTT

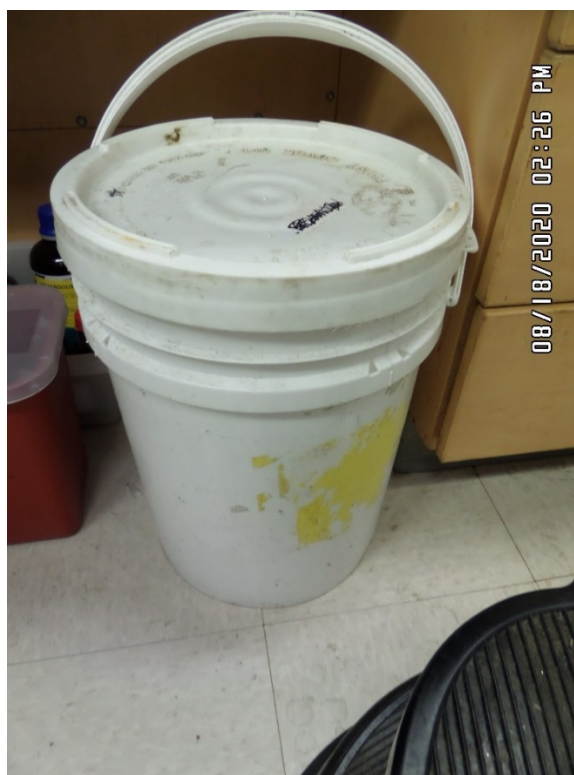


Figure 17 - Unlabeled 5-gallon SAA

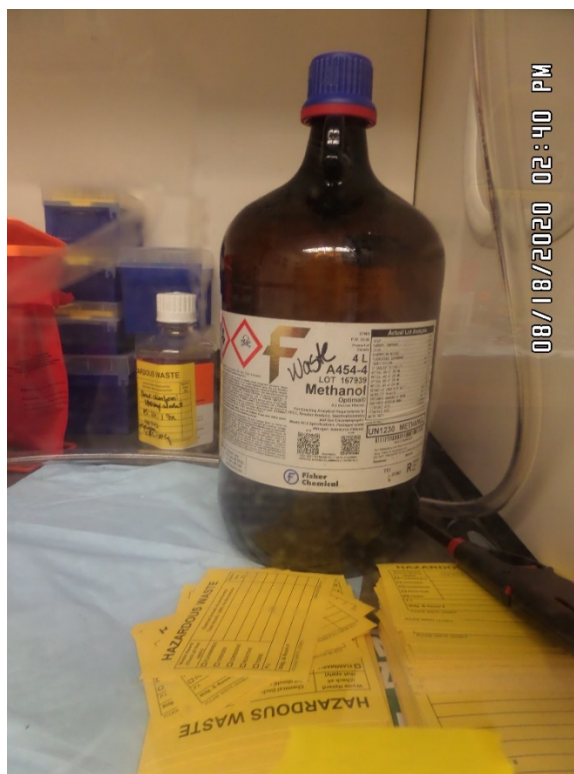


Figure 18 -Not labeled SAA container

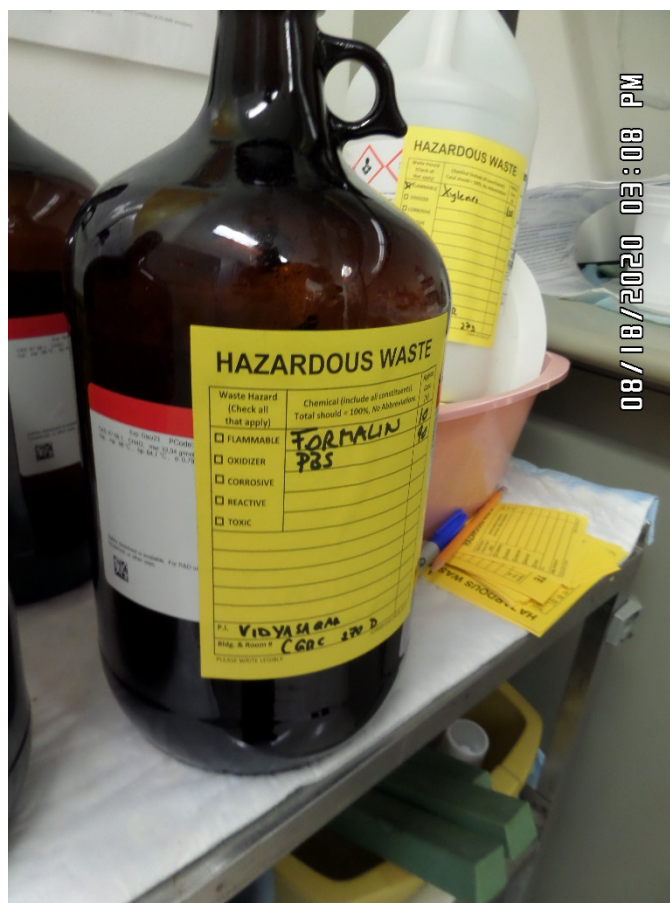


Figure 19 - Container missing hazard identification