

RCRA Inspection Report

1) Inspector and Author of the Report

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2) Facility Information

Sanders Lead Company
P.O. Box 707
1 Sanders Road
Troy, Alabama 36079
EPA ID No.: ALD046481032
Permit Number: ALD046 481 032
Primary NAICS: 331492: Secondary Smelting, Refining, and Alloying of Non-Ferrous Metal

3) Responsible Official

Roy Baggett
Manager of Environmental Affairs
Sanders Lead Company
(334) 566-1563
rb@sanderslead.com

4) Inspection Participants

Chris Rutherford	Sanders Lead
Jason Smiley	Sanders Lead
Leigh Fowler	Sanders Lead
Roy Baggett	Sanders Lead
Ronald Helms	Sanders Lead
DaRell Kennedy	Sanders Lead
Bailee Dykes	ADEM
Alan Newman	US EPA Region 4

5) Date and Time of Inspection

September 29, 2021 1:05 pm – 6:30 pm C.D.T. and September 30, 2021 8:15 am – 6:15 pm C.D.T.

6) **Applicable Regulations**

Alabama Hazardous Waste Management and Minimization Act of 1978, Ala. Code § 22-30-1 *et seq.*, and rules 335-14-1 to 335-14-17 (2016 and 2018) of the Alabama Department of Environmental Management (ADEM) Administrative Code (ADEM Admin. Code).

Pursuant to the Alabama Hazardous Wastes Management and Minimization Act (AHWMMA)

Code of Ala. 1975, Section 22-30-1, *et seq.*, as amended, and attendant regulations promulgated thereunder by the Alabama Department of Environmental Management (ADEM or the Department), on September 26, 2013, a permit was issued to Sanders Lead Company, Inc. for the facility located in Troy, Alabama expiring on September 25, 2023.

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.

Resource Conservation and Recovery Act (RCRA), 42 U.S.C.A. §§ 6901 to 6992
Sections 3005 and 3007 of RCRA, 42 U.S.C.A. §§6925 and 6927
40 Code of Federal Regulations (C.F.R.) Parts 260-270, 273, and 279.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)[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 22-30-12(b) of the AHWMMA, Ala. Code § 22-30-12(b) [Section 3005 of RCRA, 42 U.S.C. § 6925], provided that the generator complies with the conditions listed in ADEM Admin. Code r. 335-14-3-.01(7)[40 C.F.R. § 262.17] (hereinafter referred to as the "LQG Permit Exemption").

Pursuant to ADEM Admin. Code r. 335-14-3-.01(5)[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 22-30-12(b) of the AHWMMA, Ala. Code § 22-30-12(b) [Section 3005 of RCRA, 42 U.S.C. § 6925], and without complying ADEM Admin. Code r. 335-14-3-.01(5)[40 C.F.R. § 262.16(b) or §262.17(a)], except as required in ADEM Admin. Code r. 335-14-3-.01(5) [40 C.F.R. § 262.15(a)(7) and (8)], provided that the generator complies with the satellite accumulation area conditions listed in ADEM Admin. Code r. 335-14-3-.01(5) [40 C.F.R. § 262.15(a)] (hereinafter referred to as the "SAA Permit Exemption").

Pursuant to ADEM Admin. Code r. 335-14-11-.02(1)(a)244. [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.

7) Purpose of Inspection

The purpose of this inspection was to conduct an unannounced compliance evaluation inspection to determine Sanders Lead Company's compliance with the applicable requirements of RCRA and the corresponding Alabama Department of Environmental Management (ADEM) regulations and hazardous waste permit number ALD 046 481 032. This was an EPA lead inspection.

8) **Previous Inspection History**

On February 10, 2021, ADEM conducted a RCRA CEI at the facility and two deficiencies were discovered. These deficiencies were addressed with informal enforcement on February 17, 2021.

9) **Facility Description**

Sanders Lead Company, Inc. (hereinafter SLC or "the Facility") has been operating onsite since 1969. The property consists of approximately 315 acres, employs approximately 425 employees, and operates 7 days a week 24 hours a day. The facility is enclosed by a chain-link fence, which is continuously monitored by security personnel and has restricted access.

SLC is a permitted land disposal facility undergoing post-closure care, a permitted hazardous waste storage facility, a large quantity generator (LQG) of hazardous waste, a small quantity handler of universal waste (SQHUW), and a used oil generator. The facility was issued a Hazardous Waste Facility Permit on September 26, 2013, that expires on September 25, 2023. The facility last notified of its hazardous waste activity on October 13, 2020.

SLC operates a permit-exempt hazardous waste recycling unit (battery cracking operation and a secondary lead smelting operation) and permitted storage areas (container storage building and containment building) of materials generated during the battery cracking operation. Additionally, SLC manages multiple solid waste management units (SWMU) at the site. Hazardous wastes are stored prior to being recycled in two permitted hazardous waste storage units: Existing Raw Material Storage/Containment Building (SWMU #1) and Drum Washing/Crushing Station/Container Storage Area (SWMU #15). The Drum Washing/Crushing Station/Container Storage Area is not currently used to store containers of hazardous waste.

The facility has seven closed land disposal units:

- Wastewater Treatment Plant Landfill (SWMU #3)
- K069 Waste Pile (SWMU #4)
- Main Plant Landfill (SWMU #5)
- Lower Lagoon (SWMU #6)
- Upper Lagoon (SWMU #7)
- Surface Impoundment 1 (SWMU #8)
- Surface Impoundment 2 (SWMU #9)

SLC accepts and reclaims lead and other materials from spent lead acid batteries and other sources. Batteries received at the facility are placed into a large hammer mill. Solid waste battery fragments generated in the hammer mill pour into a flotation separator, which separates heavy solid waste materials (lead-bearing battery fragments) from light material (plastic battery fragments). The plastic fragments are delivered to KW Plastics (ALD981475304), a plastic recycling facility located adjacent to the hammer mill. Heavy materials are moved to SLC's Containment Building (CB), where they are staged prior to being introduced into the facility's furnace.

Spent electrolyte liquids (D002) generated in the hammer mill are used as a flotation media in the flotation separator. Excess liquids are discharged into Sander's WWTP. Floor drains located throughout the building also discharge into the collection system that drains to the WWTP.

Lead-bearing material, coke, and various alloying agents (D008) are batch fed into the blast furnace to produce lead ingots. Lead-contaminated waste are also staged within the CB and are used as feedstock. Batteries that cannot be recycled onsite, such as nickle-cadmium or lithium-ion batteries, are either returned to the sender or segregated and handled as universal waste. The CB is equipped with a dust suppression system to minimize lead-bearing dust.

Each of SLC operating areas are equipped with air emission control systems (ECS). Baghouse dust generated in the ECS is collected and introduced into a wet agglomeration system to produce lead-rich amalgam (K069). This is used as feedstock in the furnace. Slag generated in the furnace is treated onsite (D008). After the blast furnace slag cools off, SLC returns to the furnace a portion of the slag that has a high lead content and treats the remaining slag. The treatment consists of crushing the slag and mixing it with sodium silicate, mangesium oxide, Portland cement, and other materials. The facility conducts waste determinations on the low-lead slag in the onsite laboratory. Non-hazardous slag is disposed of at the facility's active Subtitle D landfill. Slag that is determined to be hazardous waste is disposed of at Chemical Waste Management, Inc., a hazardous waste landfill.

Any precipitation at the facility is collected and drained into a 35,000-gallon sump. The concrete sump is lined with stainless steel. The contents are pumped into three fiberglass wastewater storage tanks to be batch treated at the WWTP. The NAICS code for this operation is 331492 – secondary smelting, refining, and alloying of nonferrous metal (except copper and aluminum).

10) Opening Conference

On September 29, 2021, EPA inspector Alan Newman, accompanied by ADEM inspector Bailee Dykes, arrived at SLC at approximately 1:05 p.m. Jason Smiley of Environmental Affairs immediately received the inspectors. Jason Smiley and the inspectors were joined by Roy Baggett and Leigh Fowler for the opening conference. The inspectors introduced themselves, showed their credentials to Mr. Smiley, Mr. Baggett, and Mrs. Fowler, and explained the purpose of the visit. The inspectors described the anticipated use of equipment (digital camera) during the inspection and provided a request for records. The inspectors 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. The inspection participants

also discussed health and safety protocols and required personal protective equipment before Mr. Smiley and Mrs. Fowler led the inspectors on a tour of the Facility operations.

Roy Baggett provided an overview of the facility's history and current operations during the opening conference. The company does not appear to meet the Small Business Regulatory Enforcement Fairness Act's classification of a "small business," which is generally set by the Small Business Administration using the business' SIC/NAICS code and annual receipts or number of employees. Therefore, the EPA inspector did not provide a copy of the agency's information sheet for small businesses, which can be found at <https://www.epa.gov/sites/production/files/2017-06/documents/smallbusinessinfo.pdf>.

11) Findings

On September 29, 2021, Alan Newman and Bailee Dykes arrived at SLC to inspect the facility to determine its compliance status with both RCRA and the State of Alabama hazardous waste regulations. SLC was represented by Mr. Jason Smiley, Mr. Roy Baggett and Mrs. Leigh Fowler. Upon entering the facility, the inspectors introduced themselves, showed their credentials and explained the purpose of the visit and a description of the facility's process was discussed. Chris Rutherford joined the inspection on the second day.

- **Battery Cracking Building**

Trucks enter the facility and drop off paperwork at the security gate. The driver unhooks from the trailer and the trailer is staged in an outside parking area behind the Wiley Trucking company building. SLC organizes the loads and schedules which trailers will be unloaded each shift. Plant personnel will pick up the scheduled sheet with the trailer numbers and transport them to the Battery Cracking Building (BCB) for processing.

The BCB is comprised of a corrugated metal structure with a concrete floor where the hammer mill, floatation separator, and the baghouse systems are located. Waste generated in the hammer mill are placed on the floor of the building (Photo 1), then transported by front end loaders via a corridor to the enclosed Containment Building (CB). Liquids generated in the hammer mill are pumped into the floatation separator. Spilled liquids are collected in a grated pit located in the center of the BCB where they are periodically pumped into the WWTP. Lead-rich solids generated in the agglomeration system are collected in the floor of the BCB and then transported to the CB. Liquid generated in the agglomeration system is filtered using a plate filter press and pumped to the WWTP.

- **Containment Building**

The Battery Cracking Building connects to the Containment Building thru an enclosed corrugated metal corridor. This corridor is co-located with the permitted hazardous waste container storage area.

The CB is a corrugated metal building with a concrete floor that Sanders uses to store the lead-containing material (Photos 2-3). This permitted hazardous waste storage unit has an overhead

sprinkler system to minimize lead dust and keep the material staged within the building. All vehicles and equipment used in the building are washed before they exit the building. Wash and dust suppression waters accumulate in a sump in the building. Workers wash off their boots each time they enter or egress the CB. The sump is connected to a filter press to remove the solids, and the filtered water is reused in the suppression system.

During the inspection, the inspection team noted a 55-gallon container and several 250-gallon blue metal totes storing K069 listed hazardous waste from the baghouse collection system (Photos 4-5). The K069 is reintroduced in the furnace to reclaim the lead. The containers are managed as SAAs containers. Facility personnel inspect these SAAs daily to determine if there is more than 55 gallons of waste in the containers. If so, they are emptied within three days and the waste is placed into the permitted waste pile to recover the lead.

SLC is accumulating lead contaminated plastic wrap and cardboard used for packaging material for incoming batteries at the receiving dock and along the wall of the containment building (Photo 6-7). Packaging material including wooden pallets and cardboard that do not come in contact with leaded waste are considered clean and sent offsite for recycling.

- Blast Furnace Building

The blast furnace building (BFB), attached to the CB, is the area where SLC melts lead-containing material in one of four furnaces (burned at 2,600°F) to recover the lead. The melted lead is cast into ingots and reworked per customers demands. Finished ingots are stored in the shipping area before being shipped to customers. At the time of the inspection, the area was storing two 250-gallon totes containing K069 listed hazardous waste from the ECS (Photo 8). These containers were managed as SAAs.

- Central Storm Water Collection Sump

The central storm water collection sump (CSWCS) is a 35,000-gallon sump that collects precipitation runoff from around the facility (Photo 10). The concrete sump has a stainless-steel liner. No RCRA waste was generated during the inspection in this area.

- Maintenance Shop

The maintenance shop is where technicians conduct maintenance on some of the SLC vehicles (i.e., forklifts). At the time of the inspection, the area was storing several containers used to collect the used oil from maintenance operations (Photos 11-13). The containers were labeled “Used Oil.” In addition, the shop has three parts-washers (low VOC/low flammability) and a 55-gallon container draining storing used oil from oil filters (Photo 11). Outside, the building has four storage tanks to store diesel fuel, new motor oil, hydraulic oil, and used oil (Photo 13). The 1,000-gallon tank of used oil was labeled, had secondary containment, and was covered by a metal roof. There was also a container to collect drained used oil filters (Photo 12).

- Permitted Hazardous Waste Container Storage Area

The inspection team noted a 55-gallon container with an aerosol can puncture device affixed to the top in the Excavator building inside the footprint of the permitted hazardous waste container storage area. At the time of the inspection the device was open and there was no label on the container to identify the contents as hazardous waste or an indication of the hazard (Photo 14-15). The inspection team noted this container as an area of concern due to un-remediated waste paint spilled on the outside of this container. Previously, SLC had operated a bailer for contaminated solid wastes compaction prior to shipment off site. The unit operated from Summer/Fall of 2020 through ceased operations on February 10, 2021. The unit was disassembled and removed on August 19, 2021. SLC stated that the bailer was ineffective and was removed, decontaminated, disassembled, and placed into storage in a shed.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(5)(a)4. [40 C.F.R. § 262.15(a)(4)], which is a condition of the SAA Permit Exemption, a generator is required to keep containers of hazardous waste closed at all times during accumulation, except when adding, removing, or consolidating waste; or when temporary venting of a container is necessary for the proper operation of equipment, or to prevent dangerous situations, such as build-up of extreme pressure.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(5)(a)5. [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 ADEM Admin. Code r. 335-14-3-.01(7)(a)(6) [40 C.F.R. § 262.17(a)(6)], which incorporates ADEM Admin. Code r. 335-14-3-.14(2) [40 C.F.R. § 262.251], and is a condition of the LQG Permit Exemption, a generator is required to maintain and operate its facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

- Slag Processing Building

The slag processing building is where SLC processes the slag generated in the furnace. The process starts by crushing the slag and then mixing it with Portland cement and other materials. The mixture is screened and moved through a pug mill and conveyer system. The building uses negative pressure to maintain the dust inside and an air filtration system. The treated slag is placed into the onsite landfill.

- WWTP

The WWTP treats the process water from around the facility. At the WWTP, wastewaters are neutralized (pH adjusted), chemically treated to precipitate metals, sent through a clarification and filtration system. Sludge generated at the WWTP is tested by SLC before it is disposed of in the onsite landfill. The treated wastewater is discharged to the City of Troy's POTW.

- Landfill

SLC has an active 12-acre landfill for the disposal of stabilized slag from the lead smelting operation and filter cake from the WWTP. The landfill has disposed waste in 7 out of the 12 acres. Leachate and stormwaters from the retention ponds are treated at the WWTP. There are trees growing in the bottom of the unfilled portion of the landfill.

- Supply Room

This warehouse stores supplies, and chemicals used around the facility. In addition, this is the area where universal waste lamps (UWL) are stored. At the time of the inspection, the area was storing: one box of 8-foot UWL dated 7/30/2021 and one box of 4-foot UWL dated 6/17/2021 (Photos 16-17). The boxes were closed and labeled.

- SWMUs

The inspection team conducted a visual inspection on the following SWMUs:

- Wastewater Treatment Plant Landfill (SWMU #3) – a portion covered at the CB
- K069 Waste Pile (SWMU #4)
- Main Plant Landfill (SWMU #5) – a portion covered at the CB
- Lower Lagoon (SWMU #6)
- Upper Lagoon (SWMU #7)
- Surface Impoundment 1 (SWMU #8)
- Surface Impoundment 2 (SWMU #9)

All SWMUs appeared to be in good condition with no signs of erosion.

- Laboratory

SLC has three working laboratories: the metallurgic laboratory, the environmental laboratory (conducts air monitoring, wastewater testing, etc.), and a plastic assays laboratory. We observed 10 satellite accumulation containers for the various laboratory rooms ranging in capacities from one liter to three gallons (Photos 18-20). All of the containers were closed and labeled with the words “Hazardous Waste” and marked with an indication of the hazards.

Outside the laboratory, SLC is storing two 55-gallon containers that accumulate consolidated wastes from inside the laboratories. These containers were being managed as an extension of the SAA from inside the laboratory. This container was labeled, closed, and dated 9/24/2021 (Photo 21). The second 55-gallon container was staged to accept consolidated laboratory waste once the first one was full. According to Mr. Rutherford, all of the waste generated in the Satellite containers inside the laboratory are transferred into the 55-gallon container outside of the building. Laboratory personnel are the only SLC staff that have access to the keys. The container SLC was filling was placed on top of a secondary containment pallet. The pallet was partially full of water and dirt. SLC would not be able to identify if there was a leak from this container. Subsequent to the inspection, SLC emptied the secondary pallet and replaced it with a clamshell

pallet that will deflect any precipitation. The waste from this container is moved to the onsite WWTP for treatment and disposal.

- Recordkeeping

Documents and records that the inspection team reviewed included weekly inspections (2021), manifests (2021), post-closure inspections, monitoring well logs, used oil records, universal waste disposal records, contingency plan (2019), and personnel hazardous waste management training documentation (2021). There was one area of concern noted during the record review. The inspection log for 6/24/2021 was missing. After the inspection the SLC staff documented that this inspection was misfiled.

12) **Closing Conference**

Following the walk-through inspection and the record review, the inspection team held a closing conference with Mr. Rutherford, Mr. Baggett, Mr. Smiley, and Mrs. Fowler beginning at approximately 5:30 PM C.D.T and ended at approximately 6:15 pm. C.D.T.

13) **Inspection Findings**

Based on the observations made during the inspection, SLC was apparently deficient with the following RCRA requirements:

Pursuant to ADEM Admin. Code r. 335-14-3-.01(5)(a)4. [40 C.F.R. § 262.15(a)(4)], which is a condition of the SAA Permit Exemption, a generator is required to keep containers of hazardous waste closed at all times during accumulation, except when adding, removing, or consolidating waste; or when temporary venting of a container is necessary for the proper operation of equipment, or to prevent dangerous situations, such as build-up of extreme pressure.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(5)(a)5. [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 ADEM Admin. Code r. 335-14-3-.01(7)(a)(6) [40 C.F.R. § 262.17(a)(6)], which incorporates ADEM Admin. Code r. 335-14-3-.14(2) [40 C.F.R. § 262.251], and is a condition of the LQG Permit Exemption, a generator is required to maintain and operate its facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

14) **List of Appendices**

Appendix 1 – Photo Log:

21 Photos taken on: September 29-30, 2021

Photos taken by Bailee Dykes

15) **Signed**

ALAN NEWMAN

Digitally signed by ALAN
NEWMAN

Date: 2021.12.21 14:53:08 -05'00'

Alan Newman
Environmental Engineer

Date

16) **Concurrence**

ARACELI CHAVEZ

Digitally signed by ARACELI CHAVEZ
Date: 2021.12.21 16:00:31 -05'00'

Araceli B. Chavez
Chief
RCRA Enforcement Section

Date

Photographs

Photos taken by

Bailee Dykes, ADEM

Photos taken on September 29-30, 2021

Photos taken with iPhone



Photo 1: Lead Bearing battery pieces from Hammer Mill System.



Photo 3: Lead bearing waste in Containment Building.





Photo 5: One 250-gallon K069 SAA bin located in CB.



Photo 7: Debris at Receiving.



Photo 8: SAA containers in Shipping/Product Storage Area.



Photo 9: Previous location of hazardous waste bailer.



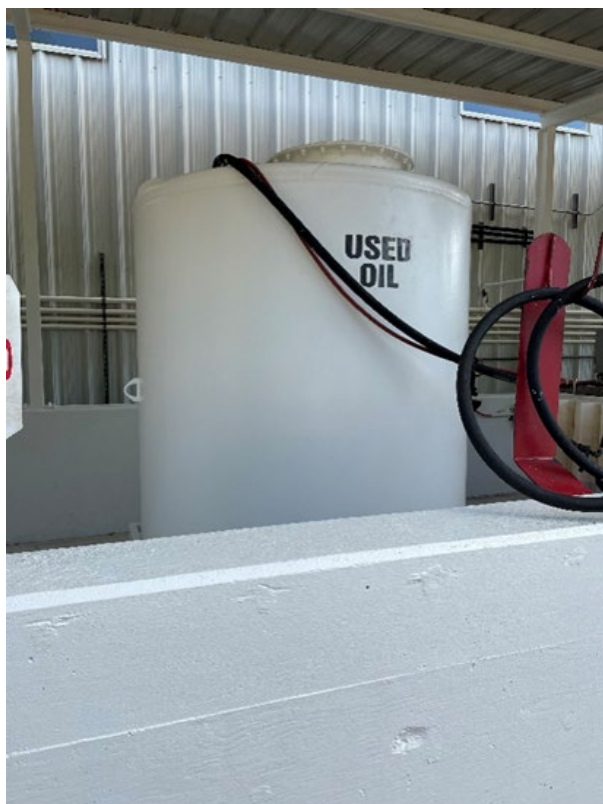




Photo 16: Universal Waste Lamps Storage.



Photo 17: Universal Waste Lamps Storage.



Photo 18: Laboratory Waste SAA.



Photo 21: Laboratory Waste SAA.

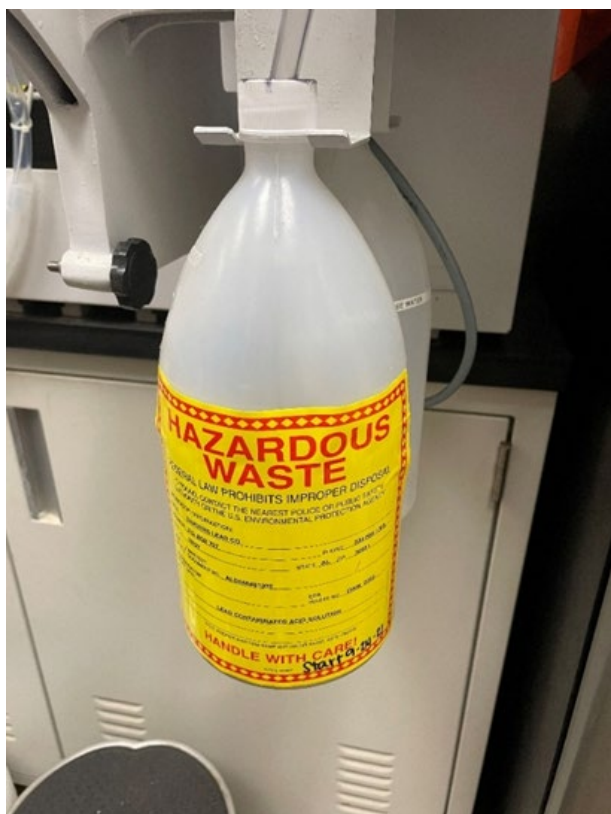


Photo 19: Laboratory Waste SAA.