ENVIRONMENTAL PROTECTION AGENCY
REGION 1 – NEW ENGLAND
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

November 4, 2022

Mr. Alan Wagner, Vice President, Research & Innovation
Solvay
1937 West Main Street
Stamford, CT 06902

Re: U.S. EPA-Region 1 Inspection Report of Solvay, September 7, 2022

Dear Mr. Wagner:

In accordance with current policy, I am providing you with a copy of the final inspection report summarizing observations made during the September 7, 2022, inspection of your facility.

This inspection was conducted under the authority of RCRA.

Please contact me at 617-918-1760 or wilkinson.cheryl@epa.gov if you have any questions.

Sincerely,
CHERYL WILKINSON
Digitally signed by CHERYL WILKINSON
Date: 2022.11.03 16:00:43 -04'00'
Cheryl Wilkinson, Life Scientist
Waste and Chemical Compliance Section

cc: George Dews, CT DEEP

Disclaimer: Unless otherwise noted, this report describes conditions at the facility/property as observed by EPA inspector(s), and/or through records provided to and/or information reported to EPA inspector(s) by facility representatives and as understood by the inspector(s). This report may not capture all operations or activities ongoing at the time of the inspection. This report does not make final determinations on potential areas of concern. Nothing in this report affects EPA's authorities under federal statutes and regulations to pursue further investigation or action.

ENVIRONMENTAL PROTECTION AGENCY
REGION 1 – NEW ENGLAND
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

RCRA Compliance Inspection of:

Solvay
1937 West Main Street
Stamford, CT 06902

CHERYL WILKINSON Digitally signed by CHERYL WILKINSON Date: 2022.11.03 16:01:31 -04'00'

September 7, 2022
Date of Inspection

Cheryl Wilkinson, Life Scientist
Waste and Chemical Compliance Section

MARY ODONNELL Digitally signed by MARY ODONNELL Date: 2022.11.03 15:47:58 -04'00'

November 3, 2022
Date Inspection Report Approved

Mary Jane O'Donnell, Manager
Waste and Chemical Compliance Section

November 3, 2022
Date Inspection Report Finalized

November 4, 2022
Date Inspection Report Transmitted to Facility

Disclaimer: Unless otherwise noted, this report describes conditions at the facility/property as observed by EPA inspector(s), and/or through records provided to and/or information reported to EPA inspector(s) by facility representatives and as understood by the inspector(s). This report may not capture all operations or activities ongoing at the time of the inspection. This report does not make final determinations on potential areas of concern. Nothing in this report affects EPA's authorities under federal statutes and regulations to pursue further investigation or action.

RCRA HAZARDOUS WASTE INSPECTION REPORT

I. GENERAL INFORMATION

a. **Facility Name:** Solvay ("Solvay" or the "Facility")

b. **Inspection Date:** Wednesday, September 7, 2022

c. **Inspection Type:** RCRA Compliance Evaluation Inspection (CEI)

d. **EPA Inspectors:** Cheryl Wilkinson, Life Scientist
Andrew Meyer, Environmental Scientist

e. **EPA ID Number:** CTD001864024

f. **NAICS:** 54171-Research and development in the physical, engineering, and life sciences

g. **Street Address:** 1937 West Main Street, Stamford, CT 06902

h. **Mailing Address:** 1937 West Main Street, Stamford, CT 06902

i. **Facility Contacts:** Alan H. Wagner
Vice President, Research & Innovation
Phone: (203) 321-2475 or (203)-521-2568
Email: alan.wagner@solvay.com

Derek Hannah
Technology Solutions, HSE Site Manager
Phone: (203)-321-2204 or (203)-273-0951
Email: derek.hannah@solvay.com

j. **Generator Status (per RCRAInfo):** Large Quantity Generator (LQG)

k. **Date first notified as a generator (per RCRAInfo):** 08/18/1980

l. **Date of most recent notification in RCRAInfo:** 02/14/2022

m. **Current Property Owner:** 19937 Main Office LLC, located at 46 Westchester Avenue, Pound Ridge, NY 10576. The contact person for the property is Steve Wise

n. **Current Operator:** Solvay

- **Wastes generated (per most recent RCRAInfo notification)**: D001 D002 D003 D004 D005 D006 D007 D008 D009 D010 D011 D021 D022 D024 D025 D028 D035 F002 F003 F005 P030 P098 U001 U002 U006 U007 U008 U044 U080 U102 U123 U125 U134 U135 U147 U154 U159 U188 U204 U209 U219 U220 U359

Report Attachments:

ATTACHMENT 1 – Digital photo log of photos taken by EPA inspectors throughout the inspection.

II. FACILITY DESCRIPTION

According to Solvay's website, they are a science company whose technologies benefit many aspects of life including advancements in planes, cars, batteries, smart and medical devices, water and air treatment. They are a global leader in Materials, Chemicals and Solutions to solve critical industrial, social and environmental challenges. The Solvay facility in Stamford, Connecticut is a research and innovation facility which includes discovery of new methods and products for the company.

In EPA's RCRAInfo database, the company's EPA ID is for Cytec Industries. The company is now owned by Solvay.

III. INSPECTION IN-BRIEF

EPA inspectors arrived at the Cytec/Solvay facility located at 1937 West Main Street, Stamford, CT on the morning of Wednesday, September 7, 2022. The EPA Region I inspection team ("inspection team") consisted of Cheryl Wilkinson, and Andrew Meyer. The inspection team approached the receptionist at the facility and requested to speak with Alan Wagner. The receptionist phoned Mr. Wagner, who met the inspection team in the lobby of the Facility. The inspectors presented their Federal IDs and Mr. Wagner escorted them to a conference room on the second floor of the facility, where the in-brief took place. Derek Hannah, Technology Solutions, HSE Site Manager joined the conference room at this time. The following personnel were present at the start of the in-brief:

EPA:	Cheryl Wilkinson, Life Scientist Andrew Meyer, Environmental Scientist
Solvay:	Alan Wagner, Technology Solutions, Vice President, Research & Innovation Derek Hannah, Technology Solutions, HSE Manager

The inspection team explained to Mr. Wagner and Mr. Hannah that they would be asking for information on Solvay's generation of hazardous waste and explained that if they felt that the information was confidential business information, to please let the inspection team know so that it may be handled appropriately.

Solvay employees informed EPA inspectors of the following information about the facility during the in brief:

The Solvay company began as American Cyanamid in 1907 and became Cytec Industries in 1991. In 2015, Solvay fully acquired Cytec Industries, which is the current owner of the company. Solvay is a Belgian based company which consists of 10 global business solutions. The facility located in Stamford, Connecticut is the principal Technology research center for Solvay, and is an analytical research facility. There is no production done at this facility, only the development of new products. The facility employs 10-12 Scientists to support their research. The areas of research conducted at the facility includes research for the mining industry of which they discover reagents to extract rare earth metals; and for the plastic industry, of which they make additives that extend the life of plastics stabilization. This facility includes automation and robotics research labs, and hazard evolution research labs. Solvay leases a portion of the facility.

Mr. Wagner explained that he has been with the company for 35 years, working on-site at this facility for the last 28 or so years. Mr. Hannah explained he has been with the company for 2 years. They explained that Matt Taylor is the Site Director for the facility, but he was not on-site the day of the inspection. They explained that the facility employs 85-90 individuals and has approximately 30 labs throughout 4 floors of the facility. Solvay utilized approximately half of the second, third and fourth floors, and some of Building 13, located on the first floor. The facility operates on a flex time schedule, which runs between the hours of 7:00am and 6:00pm, but the company's official hours of operation are 8:30am to 5:30pm. The facility operates Monday through Friday, no weekends.

The facility manages one 90-day hazardous waste storage area, and approximately 30 satellite accumulation areas (SAAs). Mr. Wagner and Mr. Hannah explained there could be more than one SAA in each lab. The labs are research labs, but generally generate the same hazardous waste. They explained that the facility has hired the contractor, Veolia, to manage their hazardous wastes including filling out and signing their manifests. Veolia picks up their hazardous waste approximately weekly. The facility also hired the contractor, Walden Environmental, to run their training program. Mr. Hannah explained the Contingency Plan was written prior to his employment with the company, but he has updated it since he has been on-site. He explained there have been no spills or fires at the facility.

The facility manages its hazardous waste in mostly 5-gallon or smaller containers, with the exception of its flammable solvent, which is managed in 55-gallon drums. Mr. Hannah explained that the labs collect small containers, approximately 5-gallons of the flammable solvent, which are then brought to 55-gallon drums. Solvay has two individuals who move the solvent from the labs to the 55-gallon drums. They are Gerald Brzoska and James Smith. The solvents used at the facility are acetone, methanol and toluene. The facility does not recycle solvent. They explained that each lab has its own "waste map" to determine how the waste generated in each lab should

be managed. The facility does manage a 5-gallon bucket of used oil and universal waste lamps, batteries, mercury thermometers, and e-waste in the Maintenance Shop. The facility does store samples of its products, which it uses retention labels for. The facility goes through these samples on an annual basis to check if they need to be sent as waste or kept on site.

The facility operates a wastewater treatment (WWT) operation, which is mostly automatic. The water gets tested and treated for pH using caustics and acids and is then discharged to the city sewer. Dom Tolesco (unsure of correct spelling of name) and Jon Smitt monitor the WWT system and calibrate the pH meter. All of the lab sinks in the facility drain to the WWT area. The facility also operates rooms which are Class I, Division II areas, of which one is named, Bulk Rooms. No hard hats or hearing protection are required around the facility. Lab coats and goggles are necessary.

IV. FACILITY TOUR

The physical tour of the facility took place on Wednesday, September 7, 2022. See Attachment 1 for a digital photo log of photos taken throughout the inspection. The following personnel were present for all or part of the tour:

EPA:	Cheryl Wilkinson Andrew Meyer
Solvay:	Alan Wagner Derek Hannah

The tour of the facility began on the first floor, in the Maintenance Shop. In the back left of the Maintenance Shop is where the electronic waste (e-waste) is stored. There is a sign on the wall at the area that reads, “Electronic Waste Only”. There was one open cardboard box sitting on a pallet, for e-waste collection. There was no date on the box or the posted sign *(See Attachment 1, Photos #1 and #2).*

The inspection team observed a Satellite Accumulation Area (SAA) for hazardous waste, non-hazardous lab debris and used oil at the back of the Maintenance Shop *(See Attachment 1, Photo #3).* There were signs attached to the wall at the area for each type of waste stored here. The hazardous waste SAA sign was for hazardous waste aerosols. The sign included the waste code D001: Ignitable *(See Attachment 1, Photo #4).* There was one 5-gallon bucket of hazardous waste stored at this area. The bucket had a hazardous waste label which stated the waste stream as waste aerosols, flammable (*See Attachment 1, Photo #7*). There were 4 containers of non-hazardous waste, and two containers of used oil. There was a fire extinguisher at the SAA.

The inspection team followed Mr. Hannah and Mr. Wagner to the 90-day HWSA, located in a room in the back of the Maintenance Shop. The entry doors to the 90-day HWSA had a sign which read, “CAUTION HAZARDOUS WASTE STORAGE AREA UNAUTHORIZED PERSONS KEEP OUT”. Additionally, there was a no smoking sign on the door. There was a

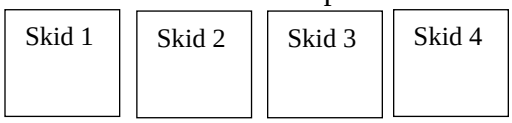
fire extinguisher, and a telephone located to the right of the entry doors. No emergency contact information, nor an evacuation route was present at or near the 90-day HWSA *(See Attachment 1, Photo #8 and #9).* Directly to the left when inside the HWSA there is a section of the room for corrosive waste. There were two secondary containment skids located in the area. One skid had 5 hazardous waste containers on it, and one had one 5-gallon bucket on it *(See Attachment 1, Photo #10).* The following is a description of the hazardous waste containers observed on these two skids:

Skid 1: Two 55-galllon cardboard drums and three red lab pack boxes.

- One 55-gallon drum had a corrosive label and a hazardous waste label with the waste stream described as, waste corrosive liquid, basic, inorganic, n.o.s., (sodium hydroxide solution) 8, II. The label was marked with waste code D002 and was dated 07/12/2022. There was also a "Waste Material Inventory" sheet attached to the top cover of the drum, which listed HCl solution *(See attachment 1, Photos #11, #12 and #14).*
- One 55-gallon drum had a corrosive label, but no hazardous waste label and was not dated.
- Three red boxes containing lab pack hazardous waste, the boxes had "Waste Material Inventory" sheets in them, but no hazardous waste labels or dates on the boxes *(See attachment 1, Photos #10, #11 and #13).*

Skid 2: One 5-gallon white container, with the words "Silver Nitrate Crystal" written on the side of it. The container did not have a hazardous waste label and was not dated.

In the back of the 90-day HWSA, along the wall, there were 4 secondary containment skids with hazardous waste and non-hazardous waste containers on them. The following represents the configuration of the four skids inspectors observed:



Note: Each square above represents the configuration of each secondary containment skid located at the back of the 90-day HWSA. The numbers were assigned arbitrarily by inspectors for the purpose of marking notes on their contents.

The following is a description of the containers the inspectors observed on each of the 4 skids:

Skid 1. Five hazardous waste containers and 6 non-hazardous waste containers.

- Four 5-gallon white buckets with a hazardous waste labels, with the waste stream described as waste corrosive liquid, basic, inorganic, n.o.s., (sodium hydroxide, sodium aluminate), 8, II. The containers were marked with waste code D002, three were dated 7/20/22 and one was dated 8/24/22.
- One 5-gallon, white square container with a hazardous waste label, with the waste stream described as, waste corrosive liquids, flammable, n.o.s., (sodium hydroxide, methanol) 8 (3), II. The container was marked with waste codes D001 and D002 and was dated 08/22/22.

Skid 2. Seventeen red lab pack boxes (*See attachment 1, Photos #23-#33)*. Each box contained small containers of hazardous waste, along with a "Waste Material Inventory" sheet. The Waste Material Inventory listed the waste codes, a description of the contents of the containers and was dated. None of the lab pack boxes had hazardous waste labels, and they were not dated. One lab pack had a container of OnePrep F-501, and a container of Sulfuric acid (*See attachment 1, Photo #26)*.

Note: During the document review part of the inspection, it was found that the SDS for OnePrep F-501 stated this material should not be stored with strong acids.

Skid 3. Thirteen red lab pack boxes, one square hazardous waste cardboard box and one white hazardous waste container (*See attachment 1, Photos #34-#42)*.

- The thirteen red lab pack boxes contained small containers of hazardous waste, along with a "Waste Material Inventory" sheet. The Waste Material Inventory listed the waste codes, a description of the contents of the containers and was dated. None of the lab pack boxes had hazardous waste labels, and they were not dated.
- One square hazardous waste cardboard box with a hazardous waste label that described its contents as, "Aero 400", there were no waste codes, or a description of the waste. The label was dated, 8/9/22 (*See attachment 1, Photo #36)*.
- One white hazardous waste white container with the waste stream described as, waste corrosive liquid, basic, inorganic, n.o.s., (sodium hydroxide, potassium hydroxide) 8, III. The label was marked with waste code D002 and was dated 9/6/22 *(See attachment 1, Photo #38)*.

Skid 4. Four hazardous waste cardboard boxes, and two red lab pack boxes *(See attachment 1, Photo #34 and #43-46)*.

- Four hazardous waste cardboard boxes with hazardous waste labels that described the waste stream as, "Hydroxymated PolyAcrylamide". The label did not have waste codes, or the hazard associated with the waste. Three of the containers were dated, 8/30/22 and one was dated 9/6/22.
- Two red lab pack boxes. One box had two small hazardous waste containers in it, and one had one hazardous waste container with a retention label on it. Neither box had the Waste Material Inventory sheet, nor did they have hazardous waste labels on the box. The boxes were not dated. There is a retention label on the larger hazardous waste container that has a "RETAIN UNTIL" date of 02/08/21.

Also, in the 90-day HWSA, against the wall on the right side of the room were two black 55-gallon drums with hazardous waste labels which described the waste stream as, waste flammable liquids, n.o.s., (methanol, xylene), 3, II, RQ (D001). Both labels were dated with the date of 8-25-22. One drum was sitting on a secondary containment skid and was grounded. The other was on the floor and was not grounded, it was full. *(See attachment 1, Photo #47-#50)*.

Staged in front of the two 55-gallon black drums were two white 55-gallon drums of hazardous waste. One had an old product label of sulfuric acid 50%, and the other had an old product label of Molygard-100. Neither drum had hazardous waste labels, they were not dated, and neither were on secondary containment pallets. Mr. Hannah explained that the Molygard-100 container was holding caustic, high pH chemical waste from the boiler at the wastewater treatment area (*See attachment 1, Photo #51-#52).*

The 90-day HWSA room did not have spill control material in the room, nor nearby the room. There was a fire extinguisher present inside and outside of the room, and the room was equipped with a working sprinkler system. There was an eye wash station and shower present in the room. Both entry doors had hazardous waste signage and no smoking signs.

The inspection team followed Mr. Hannah and Mr. Wagner through the Maintenance Shop and into the Crushing Room. The Crushing Room was no longer being used, there were containers of metal remaining in the room. The inspection team continued to follow Mr. Hannah and Mr. Wagner to Building 13.

The following areas were observed in Building 13:

Instron Laboratory, where samples of plastic material are pulled apart. This is where the strength of the materials is tested using machines. There is no hazardous waste generated here.

High Bay area, where heavy equipment is located. In the back of this area there was a SAA for hazardous waste in a lab hood. There was one 5 to 10-gallon cardboard container with a hazardous waste label that described the waste as “Sulfur” and had flammable checked off on the label. Mr. Hannah and Mr. Wagner explained that this waste is solid sulfur waste. Sulfur is used to fumigate the plastics by heating it up, and this is where the waste sulfur is collected. The container was closed *(See attachment 1, Photo #53-#55).*

Grinding/Mixing Lab. No hazardous waste generated here.

Xenon Weatherometer Lab. Test chambers are located here. These chambers are cooled with deionized water. No hazardous waste is generated here.

Prep Lab, Room 4.4. This is where larger volume chemistry takes place, greater than 500 milliliters. There is a cabinet in this area which holds pyrophoric virgin material. The sign on the left cabinet door states, “No Flammables”, on the right door it states, “FLAMMABLE” and inside the cabinet there is a box containing flammable liquid. The cabinet does not have grounding (*See attachment 1, Photo #57-#60).*

In the Prep Lab there were three containers on the floor. There were two cardboard containers holding contaminated lab debris and one blue container holding “REAGENT S-10338 PROMOTER”. Mr. Hannah and Mr. Wagner explained that this material is waste, and it was from a process which they are no longer running. They explained that

they have not run this process since the beginning of the year, or first part of the second quarter of the year. They stated that they are waiting for Veolia to create a Waste Identification Profile (WIP) for them before they add a hazardous waste label and move them to the 90-day area. They did state the blue container is unused material and is waste. The three containers had labels, but they were not hazardous waste labels. They did state the contents were contaminated "LAB DEBREE". The carboard containers were not dated. The blue container had a retention label with a "DATE IN" of 11/27/17 and a "RETAIN UNTIL" date of 11/27/27" and it stated "Corrosive" (*See attachment 1, Photo #61-#64).*

Additionally in this room, there was a SAA that did not have any waste in the containers at the time of the inspection.

Lab 10, not in use, the lab was empty.

QUV Laboratory, Polymer Additives lab. Instrumentation using light sources are used here. There was a Universal Waste Fluorescent bulb collection point. There were 5 boxes of mercury containing light bulbs sitting on a table, and one box standing up on the floor with spent lamps in it that was open. There was a sign on the wall above the table and open box of waste bulbs that stated, "FLUORESCENT BULBS UNIVERSAL WASTE". There was an additional box of lamps on a shelf against the wall. Mr. Wagner and Mr. Hannah were, unsure which lamps were spent, and which were still being used, so they contacted the operator that works in the lab. Ken Blackman, the lab tech operator stated that the only lamps in the room that were spent and not being reused, were the ones in the one open box standing on the floor. The rest of the lamps were being reused or were new. There was no Universal Waste label on the box, and there was no date on the sign on the wall, nor on the box (*See attachment 1, Photo #65-#68).*

Oven Room. There was one SAA, with one red container that was empty at the time of the inspection. The container stated, "empty every night".

Resin Storage room, no waste generated here.

Polymer Additives, Instrument Lab. There was one SAA, with one red container. The container had a form attached to the top of it, which was named "HAZARDOUS WASTE SOLVENT DISPOSAL". The form keeps track of when, who added, what type and how much waste is added to the container. The SAA sign at the area stated the waste stream was non-chlorinated mixed solvents. The container was closed (*See attachment 1, Photo #69-#71).*

Additives Storage Room, located inside the Instrument Lab. Archive samples, samples of competitors products and Solvay products are stored in this room. Behind the entry door to the room, there was a cardboard box which had the words, "Pesticide Treated Samples to be Wasted, D.F.". Mr. Wagner and Mr. Hannah did not know what was placed in this box (*See attachment 1, Photo #72-#73).*

This room is equipped with a rack system for storage of the containers. There was one shelf labeled, "QUARANTINE TABLE" which held small containers which had expiration dates on them (*See attachment 1, Photo #74-#77)*. There was another shelf which was labeled, "MSDS/Self Life", which had small containers along with a Waste Material Inventory sheet (*See attachment 1, Photo #78-#79)*.

Lab 22, Wet Lab, there was one SAA container, white with hazardous waste label. The container was in secondary containment, located in the chemical hood. The waste stream on the hazardous waste label was described as, waste corrosive liquid, acidic, inorganic, n.o.s., (nitric acid, sulfuric acid), 8, III. The container was closed (*See attachment 1, Photo #80-#81)*.

There were 5 red lab pack boxes, three located on the counter by the windows, and two on the floor. Two were empty, and three had hazardous waste lab pack containers in them. None of the boxes had a hazardous waste label, and none were dated. They were not in a designated SAA, or 90-day HWSA (*See attachment 1, Photo #82-#85)*.

There was one additional SAA container, which was a red can with hazardous waste label located on the floor. The container had the "HAZARDOUS WASTE SOLVENT DISPOSAL" form attached to the top of it. No other hazardous waste label was on the container, and there was no SAA signage at the area. The container was closed (*See attachment 1, Photo #86-#87)*.

The inspection team followed Mr. Hannah and Mr. Wagner out of Building 13, and to the Wastewater Treatment Room. There is no hazardous waste generated in this area. Next, the inspection team observed the loading dock, and Shipping and Receiving area. There was a blue cabinet for virgin peroxide storage and ammonium hydroxide *(See attachment 1, Photo #88-#91)*.

There were two small green plastic bins for waste batteries on a work bench in the shipping and receiving area. One green bin was labelled, "RECYCLE USED BATTERIES HERE" and contained AA and AAA batteries. The other green bin was labelled, "Li-ion" and used Li-ion batteries were inside the box. Both containers were open, neither was dated, and there was no sign stating Universal Waste Batteries (*See attachment 1, Photo #92-#97)*.

The inspection team followed Mr. Wagner and Mr. Hannah to the second floor of the facility, to continue the inspection. The inspection team observed the following areas on the second floor:

BOCA Storage Room, this area is where virgin chemicals are stored. It was a restricted area, where electronics were not allowed. The inspection team observed one small jar in secondary containment on a shelf by itself. The jar stated, "Cyphos 442 Phosphonium Salt" and had an expiration date of August 8, 2020. The jar was closed with tape around the top of it. Mr. Hannah and Mr. Wagner did not know if it was waste or not.

Lab 238, Analytical Lab X-Ray Fluorescence and Rheology. One SAA with hazardous waste sign on wall at area. The sign stated the waste stream was "ACIDIC LIQUID". There was one SAA container in secondary containment that was empty at the time of the inspection. The container had a hazardous waste label on it. The container was closed *(See attachment 1, Photo #98-#100)*.

Titrations and Classical Analysis Lab, there was one SAA with a red SAA container in secondary containment with a hazardous waste solvent disposal sheet attached to the top of it and a hazardous waste label on the container. There was a hazardous waste SAA sign on the wall at the area which stated, "MIXED SOLVENTS (Non-Chlorinated). The container was closed *(See attachment 1, Photo #101-#103)*.

There was a red lab pack box on the bottom of a shelf in the room. There was a bag in the box that had a description on it. The description could not all be read. The words that could be read were, …Towels soaked with Kerosene, … 272… Cobalt ion. There was no inventory sheet in the box and the box had no hazardous waste label, or date *(See attachment 1, Photo #104-#105)*.

Additionally, there was one SAA in a chemical lab hood, with a SAA sign which read, "CAUSTIC SOLVENT". There was one small jar labelled, "Acetone Waste", which did not have a hazardous waste label, and one plastic jug with a hazardous waste label which described the waste stream as, waste corrosive liquids, flammable, n.o.s., (sodium hydroxide, methanol), 8 (3), II. The jar was closed *(See attachment 1, Photo #106-#109)*.

NMR & IR Preparations Laboratory, there was one SAA with three white hazardous waste containers, and one red container. The red container was in secondary containment. All of the containers had a hazardous waste label on them. There were 4 different hazardous waste SAA signs with different waste streams on the wall at the area. The four waste streams were, "IGNITABLE VIALS", "ACIDIC VIALS", "CAUSTIC VIALS", and "MIXED SOLVENTS". All four containers were closed *(See attachment 1, Photo #110-#117)*.

Analytical Separations Prep Lab, there was one SAA in a chemical lab hood, with a SAA sign which read, "CAUSTIC VIALS". There was one SAA container in the area at the time of the inspection. The container had a hazardous waste label on it and it was closed *(See attachment 1, Photo #118-#120)*.

Analytical Separations Lab, Room 234, there are multiple analytical instruments located in this lab with many SAAs collecting waste from the instruments. Some were non-hazardous while others were hazardous. One Size Exclusion Chromatography (SEC) instrument was using "SEAL WASH 15% MeOH in H2O" and "0.1M HPO4 + 20% ACN". Additionally, there was another SEC instrument that was using, "SEAL WASH 15% MeOH in H2O" and "0.2M NaNO3 + 0.01M PO4". Both of the SAAs that were collecting waste from these instruments were managed as non-hazardous aqueous waste. The analytical lab manager, Boyu Li explained that the waste is non-hazardous and is

mostly aqueous waste. She explained that they review their waste profiles each year to determine if the waste is hazardous *(See attachment 1, Photo #121-#124)*.

Note: The waste profile for this waste (WIP#405303) that was reviewed as part of the document review confirmed that it was non-hazardous.

There was one SAA collecting THF waste from an additional SEC instrument, which was hazardous waste. And another two SAA areas collecting hazardous waste from a different instrument. All of the SAA containers were in secondary containment, they were closed and there were hazardous waste SAA signs present which stated the waste streams were, "MIXED SOLVENTS (Non-Chlorinated)" *(See attachment 1, Photo #125-#129)*.

In the back of the Analytical Separations Lab, there was a red lab pack box sitting on a shelf with spent columns from the analytical instruments used in the lab. The container was not covered, did not have a hazardous waste label, and was not dated. *(See attachment 1, Photo #130-#131)*.

Separations Preparations Lab, Room 232, there were two SAAs in a chemical lab hood, with SAA signs which read, "IGNITABLE VIALS" and "MIXED SOLVENTS". There were three SAA containers at the area, one white 5-gallon bucket, one red container with a Hazardous Waste Solvent Disposal sheet attached to the top of it, and a small white container. The two white containers had hazardous waste labels on them. All three containers were closed *(See attachment 1, Photo #132-#135)*.

There was one 5-gallon white bucket sitting on the floor, not in a designated SAA, with a hazardous waste label that described the waste steam as, "WASTE FLAMMABLE LIQUIDS, TOXIC, n.o.s., (METHANOL, METHYLENE CHLORIDE), 3 (6.1), II", and had a date of 09/03/22. The container was closed. Mr. Hannah and Mr. Wagner explained that this container is waiting to be moved to the 90-day HWSA *(See attachment 1, Photo #136-#137)*.

Room 230, there was one container located under a work bench that was actively collecting waste from an Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES) instrument. The container was in secondary containment, it was open and had a label on it that read, "DILUTE HCL/HNO3". There was no hazardous waste label on the container, and there was no SAA signage nearby *(See attachment 1, Photo #138-#139).*

There was another container under another work bench that was actively collecting waste from a Microwave Plasma Atomic Emission Spectroscopy (MP-AES) instrument. The container was in secondary containment, it was open, and it had a hazardous waste label on it that described the waste as, "Dilute Acid Waste". There was no SAA signage nearby *(See attachment 1, Photo #140-#141).*

Additionally, there was one more ICP-OES instrument located under a work bench. The instrument was not actively adding waste at the time of the inspection. The container was in secondary containment, it was open and had a label on it that read, "DILUTE

HCL/HNO3" and a sticker that had the corrosive symbol on it. There was no hazardous waste label on the container, and there was no SAA signage nearby *(See attachment 1, Photo #142).*

The lab manager explained that these containers are moved to a designated SAA when the containers are full.

Microscopy Lab, Room 228, no hazardous waste is generated in this lab room.

Thermal Analysis, Physical Chemistry, there was one SAA with a red SAA container in secondary containment with a hazardous waste solvent disposal sheet attached to the top of it. There was a sticker on the container that read, "HAZARDOUS WASTE". There was a hazardous waste SAA sign on the wall at the area which stated, mixed solvents, non-chlorinated. The container was closed *(See attachment 1, Photo #143).*

Scanning Electron Microscopy Prep, Room 224, there was one white plastic jar in a hood that had a sticker on it that read, "waste solvent Haseltine, 3/14/2014 flamable". There was SAA signage at the area, and the container did not have a hazardous waste label on it. The container was closed *(See attachment 1, Photo #144-#145).*

Room 222, there was one SAA on the floor under a table with one red container and one blue container, both containers were in secondary containment. There were two SAA signs at the area which read, "MIXED SOLVENTS (Non-Chlorinated) and "ACIDIC SOLVENT". Both SAA containers had hazardous waste labels on them. Both containers were closed *(See attachment 1, Photo #146-#149).*

Room 218, in the corner of the room, there was one SAA with a red container in secondary containment with a hazardous waste solvent disposal sheet attached to the top of it. There was a hazardous waste SAA sign on the wall at the area which stated, "MIXED SOLVENTS (Non-Chlorinated)". The container was closed *(See attachment 1, Photo #150).*

There was one container in a lab hood. The container had a hazardous waste label which described the waste as, "0.1M AgNO3 titration waste". The container was closed. Additionally, there was one SAA with one container that was equipped with a funnel. The container was on secondary containment, had a hazardous waste label and was closed. The SAA signage stated, "ACIDIC SOLVENT" *(See attachment 1, Photo #151-#153).*

Room 216, there was an SAA in a lab hood with two red hazardous waste containers, one had the words "WASTE SOLVENT' on it. The SAA sign stated, "MIXED SOLVENTS (Non-Chlorinated). Both containers had the Hazardous Waste Solvent Disposal sheet attached to the top of them. Both containers were closed *(See attachment 1, Photo #154-#156).*

Located in another lab hood, there was a green hazardous waste container which had a hazardous waste label that described the waste as, "HAZARDOUS WASTE, SOLID, n.o.s., (METHANOL, XYLENE), 9, III, RQ (D001). The container was closed, *(See attachment 1, Photo #157).*

Additionally, there was one SAA on the floor with two SAA signs that read, "IGNITABLE VIALS" and "ACIDIC SOLVENT". There were two hazardous waste containers, in secondary containment. Both containers had a hazardous waste label, and both were closed *(See attachment 1, Photo #158-#160).*

Room 215, there was one SAA on the floor with one hazardous waste container and one non-hazardous waste container. The containers were not in secondary containment. The hazardous waste container was red, it had a hazardous waste label on it, and a Hazardous Waste Solvent Disposal sheet attached to the top of it. Both containers were closed *(See attachment 1, Photo #161).*

Located in a lab hood, there was one container with a piece of paper taped to it that read, "Derivatives waste…Toluene…Flammable". The container was closed and did not have a hazardous waste label on it. *(See attachment 1, Photo #162).*

Located on a lab bench there was a container collecting waste from an analytical instrument. The container was in secondary containment, had a hazardous waste label which described the waste as, "THF, Acetonitrile". The container was closed *(See attachment 1, Photo #163-#164).*

Room 217, there was one SAA on the floor with four red hazardous waste containers. Two of the containers were empty and were for virgin material, not waste. The containers were not in secondary containment. The two containers which had waste in them had the Hazardous Waste Solvent Disposal sheet attached to the top of them. One of them had a hazardous waste label on the container, one did not. All four of the containers were closed *(See attachment 1, Photo #165-#167).*

The inspection team followed Mr. Wagner and Mr. Hannah to the third floor of the facility, to continue the inspection. The inspection team observed the following areas on the third floor:

Room 318, there was one SAA with two white hazardous waste containers sitting in secondary containment. One container had a hazardous waste label. One had a corrosive sticker, and a label with a waste description that stated, "Corrosive liquid, n.o.s., (Contains Sodium Hydroxide)", but did not state the words hazardous waste. There were two SAA signs that stated, "MIXED SOLVENTS (Non-Chlorinated)" and "BAYER LIQUOR". Both containers were closed *(See attachment 1, Photo #168-#170).*

Room 317, there was one SAA with two hazardous waste containers, one blue, one white, sitting on the floor under a table, with no secondary containment. Both containers had hazardous waste labels. The white container described the waste as, "Glass vials containing Bayer Liquor", the blue container described the waste as, "Alkyl

phosphonium salt". There was one SAA sign nearby that stated, "CAUSTIC VIALS". Both containers were closed *(See attachment 1, Photo #171-#174)*.

Room 330.2, there was one SAA in a lab hood with two white hazardous waste containers. One SAA hazardous waste container was collecting waste from an analytical instrument. The other had a hazardous waste label that described the waste as, "WASTE CORROSIVE LIQUID, ACIDIC, INORGANIC, n.o.s., (SULFURIC ACID SOLUTION), 8, II. Both containers had hazardous waste labels and were closed. There was a SAA sign that stated, "ACIDIC LIQUID" *(See attachment 1, Photo #175-#178)*.

There was one SAA on a bench top, with one white hazardous waste container in secondary containment. The sign at the SAA stated, "ACIDIC LIQUID". The container had a hazardous waste label and was closed *(See attachment 1, Photo #179-#180)*.

Room 332, there was one hazardous waste container in a lab hood, not in secondary containment. The container had a hazardous waste label that described the waste as, "UV Additives", the container was closed. *(See attachment 1, Photo #181)*.

There was one SAA on the floor that had four different waste streams, and 6 hazardous waste containers. 5 of the containers were red, one was white. All 5 red containers had the Hazardous Waste Solvent Disposal sheet attached to the top of them. All 6 containers had a hazardous waste label, were closed and were sitting in secondary containment. The signs at the SAA stated the waste streams were, "MIXED SOLVENTS (Non-Chlorinated)", "ACIDIC LIQUID", and "HALOGENATED SOLVENTS". *(See attachment 1, Photo #182-#190)*.

Robotics and Automation, Room 333, there was one SAA with 4 hazardous waste containers. Three of the containers were in secondary containment, one was not. Three of the containers had hazardous waste labels, one is undetermined, it was not visible through the glass on the hood. All four containers were closed. There were two SAA signs, that stated the waste streams as, "CHEMICALLY CONTAMINATED SHARPS" and "MIXED SOLVENTS (Non-Chlorinated)" *(See attachment 1, Photo #191-#193)*.

There was one SAA on the floor with two hazardous waste containers. Both containers were not in secondary containment, they both had hazardous waste labels on them, and they were both closed. The SAA signs at the area stated the waste streams as, "ACIDIC VIALS" and "IGNITABLE VIALS" *(See attachment 1, Photo #194-#196)*.

There was one hazardous waste container in a lab hood, in secondary containment. The container had a hazardous waste label that described the waste as, "ACID WASTE", the container was closed *(See attachment 1, Photo #197-#198)*.

HEL Lab, Room 335, there was one SAA on the floor, with one hazardous waste container not in secondary containment. The container was red and had the Hazardous Waste Solvent Disposal sheet attached to the top of it. There was an SAA sign which

stated the waste as, “MIXED SOLVENTS (Non-Chlorinated)”. The container did not have a hazardous waste label on it *(See attachment 1, Photo #199)*.

There was one red lab pack box in a hood which had small glass jars in it, along with a Waste Material Inventory sheet. The box did not have a hazardous waste label on it and was not dated. There was also a glass jar containing spent assorted batteries *(See attachment 1, Photo #200-#202)*.

The inspection team followed Mr. Wagner and Mr. Hannah to the fourth floor of the facility, to continue the inspection. The inspection team observed the following areas on the fourth floor:

Alumina Separation, Room 440, there was one SAA on the floor with three hazardous waste containers, two white and one red. The two white containers were in secondary containment and were equipped with funnels. The one red container had the Waste Solvent Disposal sheet attached to the top of it. All three containers had hazardous waste labels. One of the white containers equipped with a funnel did not have the funnel closed tightly. The waste stream for that container was described as, “WASTE CORROSIVE LIQUID, BASIC, INORGANIC, n.o.s., (SODIUM HYDROXIDE, SODIUM ALUMINATE) 8, II. There were two SAA signs at the area which described the waste streams as, ‘CAUSTIC LIQUID” and “BAYER LIQUOR” *(See attachment 1, Photo #203-#209)*.

Minerals Metallurgical, Room 430, there was one blue box in a lab hood holding two containers. One was a glass jar, and the other was a plastic jar. The glass jar had “Odorous Waste” written on a label on the outside of the jar. The other container had “ODOROUS AQUEOUS WASTE” written on a label on the outside of the jar. Both containers did not have hazardous waste labels. Mr. Hannah and Mr. Wagner did not know if this was hazardous waste at the time of the inspection. Both containers were closed. There was no SAA signage at the area *(See attachment 1, Photo #210-#211)*.

There was one yellow box inside a lab hood holding approximately 14 small containers. On the glass outside of the lab hood, there was a sign which read, “Caution: Cyanide use in Hood No Acids!” Not all labels on the small containers could be read through the hood glass door. The inspectors observed some containers which stated “waste” on their labels. The following containers that stated waste were observed, “10% … Sodium Cyanide WASTE” with a date of 4/29/22. One container stated, “CYANIDE WASTE” and had a date of 3/26/19. One container stated, “CYANIDE… WASTE”. It was unknown if the other containers were waste or not. None of the containers had hazardous waste labels. The containers were not at a designated SAA. All of the containers were closed. *(See attachment 1, Photo #212-#215)*.

There was one box in a lab hood, which was holding three containers. Not all container labels could be read through the lab hood glass door. The inspectors observed one container label that stated, “Water + Hydrogen Peroxide Liquid Waste” with a date of 3/10/2020. It was unknown if the other containers were waste. None of the containers had

hazardous waste labels. There was no SAA sign at the area *(See attachment 1, Photo #216)*.

The tour of the facility ended at the Minerals Metallurgical, Room 430.

End of Facility Tour Meeting

The inspection team followed Solvay employees back the office where in the in-brief took place. A discussion took place regarding the areas of concern that were observed during the walk through of the facility. The following areas were discussed:

<u>90-day HWSA</u>

- Emergency posting
- Evacuation route

  Note: After the out-brief, it was determined that an evacuation route is not a requirement at the 90-day HWSA in Connecticut. Inspector Wilkinson sent an email to Mr. Hannah and Mr. Wagner with the signage that is required.

- Spill control equipment
- Red bins with a date over 90 days (April 2022)
- HW labelling not on a lot of the containers
- Sulfuric acid next to a caustic incompatible

<u>Universal Waste</u>

- UW lamps and batteries, container must be labelled, not the area
- Used electronics is UW

<u>Container Management</u>

- Day containers, no SAA to SAA

<u>Waste Determination</u>

- The determination of if a waste is hazardous or not, must be done in a timely manner. The labels must be done when the waste determination is made and not waiting for Veolia to do it. One instance is not moving the waste to the 90-day area within the required 3 days. And the many small waste containers in lab areas that were not labelled and managed appropriately.

Also, during the end of tour facility meeting, the inspection team stated documents that were being requested as part of the document review and they are required to be submitted by the end of day on September 14, 2022. The documents stated to submit were:

- Contingency Plan, with proof of submission to local authorities,
- One year of HW Manifests and LDR Notices (July 2021-July2022)
- Training: 3 years for Mr. Hannah and Mr. Wagner, Gerald Broska, James Smith and anyone else with hazardous waste responsibilities. Also, the agenda or content of the training given.
- Weekly 90-day inspections
- HW determination documentation for Room 230 waste, non-haz from MP-AES instrument (Profile #S10338).

- HW determination documentation for Room 430, odorous aqueous waste and organic waste; cyanides and peroxides waste.
- HW determination documentation for Additives storage room two shelves.

The inspection team explained that the next steps would be the document review, and then an out-brief call to discuss all of the areas of concern. They thanked Mr. Hannah and Mr. Wagner for their time. The meeting ended and the inspection team left the facility.

V. RECORDS REVIEW

Inspector Wilkinson sent Mr. Hannah at dere.hannah@solvay.com and Mr. Wagner, alan.wagner@solvay.com, an email on September 7, 2022 with the following list of documents to be submitted:

- Weekly 90-Day Inspection Logs for July 2021 through July 2022
- Hazardous Waste Contingency Plan and documentation of transmittal to local authorities
- RCRA Personnel Training Records
    - RCRA Training Program Description or Plan
    - Documentation of annual training for the most recent three years for the following individuals:
        - Derek Hannah
        - Alan H. Wagner
        - Gerald Broska
        - James Smith
        - Any other individuals with hazardous waste responsibilities
- Hazardous Waste Manifests and Land Disposal Restriction Notices for July 2021 through July 2022
- Hazardous waste determination documentation for:
    - Two containers collecting non-Hazardous waste behind the MP-AES instrument in the analytical lab
    - The two waste shelves in the Additives Storage Room
    - Room 230
        - Odorous aqueous waste
        - Odorous organic waste
        - Cyanides container in lab hood
        - Peroxides container in lab hood

Inspector Wilkinson sent an email on September 9, 2022 with a modified list of manifests to submit. The list was modified after a further review of the number of manifests Solvay generates on a monthly basis. The number of manifests requested for review were decreased from, one year's worth, to five month's worth, to lessen the burden on the facility. The months requested were, July 2021, October 2021, January 2021, April 2022 and July 2022. Additionally, a clarification question on the sprinkler system being operational in the 90-day HWSA was added to this email.

All documents and information on requested by EPA as part of the inspection were submitted by Solvay electronically through a One Drive folder, or through email to Inspector Wilkinson. All documents Solvay submitted to EPA were reviewed prior to the out-brief, after the on-site portion of the inspection. The following information are notes, the inspection team had regarding specific documents. See Attachment 1 for a list of documents and information requested by EPA.

VI. INSPECTION OUTBRIEF

The out-brief conference was conducted via Microsoft Teams at 1:00pm Friday, September 23, 2022. The following personnel were present for the closing conference:

EPA:	Cheryl Wilkinson Lisa Papetti
Solvay:	Derek Hannah Alan H. Wagner Matthew Taylor, North American Research Director

Ms. Wilkinson stated the purpose of the call was to discuss areas of concern identified as a result of EPA's Compliance Evaluation Solvay. And the intent of the inspection was to assess Solvay's compliance with the Large Quantity Generator Hazardous Waste requirements.

Ms. Wilkinson stated the following areas of concern were discovered during the inspection:

SAAs

At many Satellite Accumulation Areas throughout the facility, there were waste containers observed that were missing hazardous waste labels, or some information on the label.

There was one instance observed in a SAA located in Lab 232 that had a container with the date of 9/3/22, that Mr. Hannah stated was awaiting to be moved to the 90-day HWSA. This container was there for 4 days.

The inspection team observed some containers collecting hazardous waste from analytical instrumentation that had the piping draining into the top of the container. There was open space around the piping.

Red Lab Pack Boxes

There were red lab pack boxes holding lab pack waste around the entire facility. These boxes, and the majority of the containers inside these boxes did not have hazardous waste labels.

90-Day Areas

The 90-day hazardous waste storage area did not have the following:

- Spill control equipment nearby;
- An Emergency Posting with emergency contact information near the telephone; and
- An Evacuation Route

  Note: After the out-brief, it was determined that an evacuation route is not a requirement at the 90-day HWSA in Connecticut. Inspector Wilkinson sent an email to Mr. Hannah and Mr. Wagner with the signage that is required.

Labeling Concerns

There were 4 containers located at the 90-day HWSA, not including all the red lab pack containers that did not have hazardous waste labels or the date of accumulation.

- There was one cardboard drum holding lab pack material;
- one white bucket that had the words “silver nitrate crystal” written on it;
- one drum with a sulfuric acid 50% label; and
- one drum with a Molygard-100 label on it.

The red lab pack waste containers included inventory sheets, of which 3 of them had a date that was past the 90-day allowance. There was also one sheet that had one day left before reaching the 90-day limit, and one that had the date completely scratched out.

Aisle Space

In the 90-day HWSA, the inspectors had to move containers around, that were situated on secondary containment skids to find and inspect labels and get around the containers for inspection.

Universal Waste

There was a box of Universal waste lamps that was open, and not dated. There was a sign at the area where the box was stored that said, “Fluorescent Bulbs, Universal Waste”.

There was one area where universal waste batteries were observed. It was an open green container holding Li-ion batteries on a bench top. The label stated “Li-ion” and had a recycle symbol, it did not have a date, and it was open.

There was one area for electronics waste that was an open box. There was a sign at the area that stated, “Electronic Waste Only”. The box was open and there was no date.

> *Note: After the out-brief it was determined that e-waste can be on a pallet, it does not have to be in a closed container. Inspector Wilkinson sent an email to Mr. Hannah and Mr. Wagner with the signage that is required.*

Waste Determination

The documentation submitted to the inspection team showed that the “odorous aqueous waste”, the “cyanides” container in the lab hood, and the “peroxides” container in the lab hood were all hazardous.

There were three containers located in the Prep Lab, Room 4.4 that Mr. Hannah and Mr. Wagner explained that they were waiting for Veolia to create a WIP, waste identification profile for. They had mentioned that this process was last performed either toward the beginning of the year, or the first part of the second quarter. These containers did not have hazardous waste labels.

Training

Documentation provided as proof of RCRA training, were calendar invite receipts from individuals who intended to attend the training sessions, but not proof that they actually attended. There was one Excel spreadsheet, which included the times of attendance for the training that took place on May 11, 2022, for 6 individuals, but not all of the required facility personnel.

Additionally, Alan Wagner was not on the sign in sheets showing he attended training in 2022 and in 2021. And, that the inspection team understands that no one was trained in 2020 due to COVID complications.

Contingency Plan

There was no proof that the contingency plan was submitted to local authorities. Mr. Hannah stated, via email that Solvay has no proof. Mr. Hannah and Mr. Wagner explained that the facility has gone through many HSE managers and that it may have been submitted prior, but there is no proof that it was.

Manifests/LDR

There was one observation made during the review of the hazardous waste manifests. That was that not all of the manifests that were submitted that are kept on-site at the facility were uploaded to EPA’s e-Manifest system. There were between one and three manifests for each month that were not uploaded. Solvay should discuss this with Veolia, who manages their manifests.

Weekly Inspection Logs

There was only one inspection log that stated anything in the Observation section, and that observation was that “everything looked closed, but there is a sulfur smell”. There was no corrective action written on the log. All of the other logs reviewed had no observations and had

yes checkmarks that all areas were fine. EPA inspectors observed, when at the inspection containers that weren't labeled correctly, had incompatible storage, dates greater than 90-days and aisle space concerns. All of these items are listed on the inspection log to look for, the log should be used to help avoid these concerns.

Inspector Wilkinson explained next steps in the inspection process and thanked the Solvay representatives for their time and effort and the call ended.

Attachment 1

Photo Log

Photo Number	Description of Digital Image
Photo 1	Electronic waste collection area located in the Maintenance Shop
Photo 2	Inside electronic waste collection containers in the Maintenance Shop
Photo 3	HW Aerosols SAA, non-HW lab debris and Used Oil collection point located in the Maintenance Shop
Photo 4	Signage for HW Aerosols SAA located in the Maintenance Shop
Photo 5	Signage for Non-HW lab debris located in the Maintenance Shop
Photo 6	Signage for Used Oil located in the Maintenance Shop
Photo 7	Label on HW container located in the Maintenance Shop
Photo 8	Entry doors into 90-Day HWSA, located in the Maintenance Shop
Photo 9	Signage on entry doors into 90-Day HWSA, located in the Maintenance Shop
Photo 10	Left side corner of 90-Day HWSA, located in the Maintenance Shop
Photo 11	HW containers on left side corner of 90-Day HWSA, located in the Maintenance Shop
Photo 12	Inventory Sheet on HW container on left side corner of 90-Day HWSA, located in the Maintenance Shop
Photo 13	Inventory Sheet on HW container on left side corner of 90-Day HWSA, located in the Maintenance Shop
Photo 14	Label on HW container located on left side corner of 90-Day HWSA, located in the Maintenance Shop
Photo 15	Label on HW container located on left side corner of 90-Day HWSA, located in the Maintenance Shop
Photo 16	HW container on left side corner of 90-Day HWSA, located in the Maintenance Shop
Photo 17	Signage on wall located on left side corner of 90-Day HWSA, located in the Maintenance Shop
Photo 18	HW containers on skid 1, in left back side corner of 90-Day HWSA, located in the Maintenance Shop
Photo 19	HW label on container on skid 1, in left back side corner of 90-Day HWSA, located in the Maintenance Shop
Photo 20	HW label on container on skid 1, in left back side corner of 90-Day HWSA, located in the Maintenance Shop
Photo 21	HW label on container on skid 1, in left back side corner of 90-Day HWSA, located in the Maintenance Shop
Photo 22	HW label on container on skid 1, in left back side corner of 90-Day HWSA, located in the Maintenance Shop
Photo 23	HW containers on skid 1 and skid 2, in left back side corner of 90-Day HWSA, located in the Maintenance Shop
Photo 24	Inventory Sheet in HW container on skid 2, in left back side corner of 90-Day HWSA, located in the Maintenance Shop

Photo 25	Inventory Sheet in HW container on skid 2, in left back side corner of 90-Day HWSA, located in the Maintenance Shop
Photo 26	Inventory Sheet in HW container on skid 2, in left back side corner of 90-Day HWSA, located in the Maintenance Shop
Photo 27	Inventory Sheet in HW container on skid 2, in left back side corner of 90-Day HWSA, located in the Maintenance Shop
Photo 28	Inventory Sheet in HW container on skid 2, in left back side corner of 90-Day HWSA, located in the Maintenance Shop
Photo 29	Inventory Sheet in HW container on skid 2, in left back side corner of 90-Day HWSA, located in the Maintenance Shop
Photo 30	Inventory Sheet in HW container on skid 2, in left back side corner of 90-Day HWSA, located in the Maintenance Shop
Photo 31	HW containers on skid 2, in left back side corner of 90-Day HWSA, located in the Maintenance Shop
Photo 32	Inventory Sheet on HW container on skid 2, in left back side corner of 90-Day HWSA, located in the Maintenance Shop
Photo 33	Contents inside HW container for lab pack on skid 2, in left back side corner of 90-Day HWSA, located in the Maintenance Shop
Photo 34	HW containers on skid 3 and skid 4, in center back of 90-Day HWSA, located in the Maintenance Shop
Photo 35	HW containers on skid 3, in center back of 90-Day HWSA, located in the Maintenance Shop
Photo 36	HW label on container on skid 3, in center back of 90-Day HWSA, located in the Maintenance Shop
Photo 37	HW label on container on skid 3, in center back of 90-Day HWSA, located in the Maintenance Shop
Photo 38	HW label on container on skid 3, in center back of 90-Day HWSA, located in the Maintenance Shop
Photo 39	Inventory Sheet in HW container on skid 3, in center back of 90-Day HWSA, located in the Maintenance Shop
Photo 40	Inventory Sheet in HW container on skid 3, in center back of 90-Day HWSA, located in the Maintenance Shop
Photo 41	Inventory Sheet in HW container on skid 3, in center back of 90-Day HWSA, located in the Maintenance Shop
Photo 42	Inventory Sheet in HW container on skid 3, in center back of 90-Day HWSA, located in the Maintenance Shop
Photo 43	HW label on container on skid 4, in center back of 90-Day HWSA, located in the Maintenance Shop
Photo 44	Inventory Sheet in HW container on skid 4, in center back of 90-Day HWSA, located in the Maintenance Shop
Photo 45	Contents inside HW container for lab pack on skid 4, in center back of 90-Day HWSA, located in the Maintenance Shop
Photo 46	Label on HW container inside HW container for lab pack on skid 4, in center back of 90-Day HWSA, located in the Maintenance Shop
Photo 47	Right side of 90-Day HWSA, located in the Maintenance Shop

Photo 48	HW drums located on the right side back wall of 90-Day HWSA, located in the Maintenance Shop
Photo 49	Label on left HW drum located on the right side back wall of 90-Day HWSA, located in the Maintenance Shop
Photo 50	Label on right HW drum located on the right side back wall of 90-Day HWSA, located in the Maintenance Shop
Photo 51	Label on HW container located on the right side of 90-Day HWSA, located in the Maintenance Shop
Photo 52	Label on HW container located on the right side of 90-Day HWSA, located in the Maintenance Shop
Photo 53	HW SAA container in lab hood, located in Building 13, High Bay area
Photo 54	Label on HW SAA container in lab hood, located in Building 13, High Bay area
Photo 55	Label on HW SAA container in lab hood, located in Building 13, High Bay area
Photo 56	Contents in cabinet below lab hood, located in Building 13, High Bay area
Photo 57	Contents inside Pyrophoric Storage cabinet, located in Building 13, Prep Lab Room 4.4
Photo 58	Pyrophoric Storage cabinet, located in Building 13, Prep Lab Room 4.4
Photo 59	Flammable and Corrosive material located inside Pyrophoric Storage cabinet, located in Building 13, Prep Lab Room 4.4
Photo 60	Contents inside Pyrophoric Storage cabinet, located in Building 13, Prep Lab Room 4.4
Photo 61	3 containers of HW, located in Building 13, Prep Lab Room 4.4
Photo 62	Label on top box of 3 containers of HW, located in Building 13, Prep Lab Room 4.4
Photo 63	Label on blue container of 3 containers of HW, located in Building 13, Prep Lab Room 4.4
Photo 64	Label on blue container of 3 containers of HW, located in Building 13, Prep Lab Room 4.4
Photo 65	Universal Waste Fluorescent Bulbs area, and fluorescent bulb storage area, located in Building 13, QUV Lab
Photo 66	Signage for Universal Waste Fluorescent Bulbs area, located in Building 13, QUV Lab
Photo 67	Label on new fluorescent bulb box, located in Building 13, QUV Lab
Photo 68	Fluorescent bulb storage area for reuse of bulbs, located in Building 13, QUV Lab
Photo 69	SAA located in Building 13, Instrument Lab
Photo 70	Inventory sheet on SAA HW container, located in Building 13, Instrument Lab
Photo 71	Signage for SAA located in Building 13, Instrument Lab
Photo 72	Container labeled, "Pesticide Treated Samples to be wasted", located behind entry door located inside Building 13, Additives Storage Room
Photo 73	Top of container labeled, "Pesticide Treated Samples to be wasted", located behind entry door located inside Building 13, Additives Storage Room
Photo 74	"QUARANTINE TABLE" shelf on rack system, located inside Building 13, Additives Storage Room
Photo 75	Containers on "QUARANTINE TABLE" shelf on rack system, located inside Building 13, Additives Storage Room
Photo 76	Containers on "QUARANTINE TABLE" shelf on rack system, located inside Building 13, Additives Storage Room
Photo 77	Containers on "QUARANTINE TABLE" shelf on rack system, located inside Building 13, Additives Storage Room

Photo 78	Inventory sheet located on "MSDS/Slef Life, LEVEL 2" shelf on rack system, located inside Building 13, Additives Storage Room
Photo 79	Inventory sheet located on "MSDS/Slef Life, LEVEL 2" shelf on rack system, located inside Building 13, Additives Storage Room
Photo 80	SAA in hood, located in Building 13, Wet Lab 22
Photo 81	HW Label on SAA container in hood, located in Building 13, Wet Lab 22
Photo 82	Five lab pack boxes, located in Building 13, Wet Lab 22
Photo 83	Contents inside one of five lab pack boxes, located in Building 13, Wet Lab 22
Photo 84	Contents inside one of five lab pack boxes, located in Building 13, Wet Lab 22
Photo 85	Contents inside one of five lab pack boxes, located in Building 13, Wet Lab 22
Photo 86	SAA container, located in Building 13, Wet Lab 22
Photo 87	Inventory sheet on SAA HW container, located in Building 13, Wet Lab 22
Photo 88	Contents inside blue corrosive storage cabinets, located in Shipping and Receiving Area on Floor 1
Photo 89	Contents inside blue corrosive storage cabinets, located in Shipping and Receiving Area on Floor 1
Photo 90	Contents inside blue corrosive storage cabinets, located in Shipping and Receiving Area on Floor 1
Photo 91	Contents inside blue corrosive storage cabinets, located in Shipping and Receiving Area on Floor 1
Photo 92	Two containers for waste batteries, one "Li-ion" and one 'USED BATTERIES", located in Shipping and Receiving Area on Floor 1
Photo 93	Two containers for waste batteries, one "Li-ion" and one 'USED BATTERIES", located in Shipping and Receiving Area on Floor 1
Photo 94	Container for waste "Li-ion" batteries, located in Shipping and Receiving Area on Floor 1
Photo 95	Contents inside container for waste "Li-ion" batteries, located in Shipping and Receiving Area on Floor 1
Photo 96	Container for waste "USED BATTERIES", located in Shipping and Receiving Area on Floor 1
Photo 97	Contents inside container for waste "USED BATTERIES", located in Shipping and Receiving Area on Floor 1
Photo 98	SAA, located in Analytical Lab, Lab 238, on Floor 2
Photo 99	Label on HW container in SAA, located in Analytical Lab, Lab 238, on Floor 2
Photo 100	Signage at SAA, located in Analytical Lab, Lab 238, on Floor 2
Photo 101	SAA, located in Titrations and Classical Analysis Lab, on Floor 2
Photo 102	Label on HW container in SAA, located in Titrations and Classical Analysis Lab, on Floor 2
Photo 103	Signage at SAA, located in Titrations and Classical Analysis Lab, on Floor 2
Photo 104	Red lab pack container on shelf located in Titrations and Classical Analysis Lab, on Floor 2
Photo 105	Contents inside red lab pack container on shelf located in Titrations and Classical Analysis Lab, on Floor 2
Photo 106	SAA in hood, located in Titrations and Classical Analysis Lab, on Floor 2
Photo 107	Glass container labelled, "Acetone Waste" in hood, located in Titrations and Classical Analysis Lab, on Floor 2

Photo 108	Signage at SAA in hood, located in Titrations and Classical Analysis Lab, on Floor 2
Photo 109	HW label on SAA container in hood, located in Titrations and Classical Analysis Lab, on Floor 2
Photo 110	SAA located in NMR & IR Preparations Lab, on Floor 2
Photo 111	One HW container and signage for SAA located in NMR & IR Preparations Lab, on Floor 2
Photo 112	One HW container and signage for SAA located in NMR & IR Preparations Lab, on Floor 2
Photo 113	One HW container and signage for SAA located in NMR & IR Preparations Lab, on Floor 2
Photo 114	HW label on HW SAA container, located in NMR & IR Preparations Lab, on Floor 2
Photo 115	HW label on HW SAA container, located in NMR & IR Preparations Lab, on Floor 2
Photo 116	One HW container and signage for SAA located in NMR & IR Preparations Lab, on Floor 2
Photo 117	HW label on HW SAA container, located in NMR & IR Preparations Lab, on Floor 2
Photo 118	SAA in hood, located in Analytical Separations Prep Lab, on Floor 2
Photo 119	HW container in SAA in hood, located in Analytical Separations Prep Lab, on Floor 2
Photo 120	Signage at SAA in hood, located in Analytical Separations Prep Lab, on Floor 2
Photo 121	Feed containers, feeding Size Exclusion Chromatography instrument, located in Analytical Separations Lab, Lab 234, on Floor 2
Photo 122	Feed containers, feeding Size Exclusion Chromatography instrument, located in Analytical Separations Lab, Lab 234, on Floor 2
Photo 123	Waste containers collecting waste from Size Exclusion Chromatography instrument, located in Analytical Separations Lab, Lab 234, on Floor 2
Photo 124	Signage at waste containers collecting waste from Size Exclusion Chromatography instrument, located in Analytical Separations Lab, Lab 234, on Floor 2
Photo 125	SAA HW container collecting THF waste from another Size Exclusion Chromatography instrument, located in Analytical Separations Lab, Lab 234 on Floor 2
Photo 126	Signage at SAA HW container collecting THF waste from another Size Exclusion Chromatography instrument, located in Analytical Separations Lab, Lab 234, on Floor 2
Photo 127	SAA with two containers collecting HW for two instruments, located in Analytical Separations Lab, Lab 234, on Floor 2
Photo 128	Signage at SAA with two containers collecting HW for two instruments, located in Analytical Separations Lab, Lab 234, on Floor 2
Photo 129	HW container at SAA with two containers collecting HW for two instruments, located in Analytical Separations Lab, Lab 234, on Floor 2
Photo 130	Red lab pack container on shelf located in Analytical Separations Lab, Lab 234, on Floor 2
Photo 131	Contents inside red lab pack container on shelf located in Analytical Separations Lab, Lab 234 on Floor 2
Photo 132	SAA in hood located in Separations Prep Lab, Lab 232, on Floor 2
Photo 133	Label on SAA HW container, located in Separations Prep Lab, Lab 232, on Floor 2
Photo 134	Inventory sheet on SAA HW container, located in Separations Prep Lab, Lab 232, on Floor 2
Photo 135	Label on SAA HW container, located in Separations Prep Lab, Lab 232, on Floor 2
Photo 136	HW container on floor, dated "09/03/22" awaiting moving to 90-HWSA, located in Separations Prep Lab, Lab 232, on Floor 2

Photo 137	Label on HW container on floor, dated "09/03/22" awaiting moving to 90-HWSA, located in Separations Prep Lab, Lab 232, on Floor 2
Photo 138	Container collecting "DILUTE HCL/HNO3" waste from ICP-OES instrument, located in Room 203, on Floor 2
Photo 139	Label on container collecting "DILUTE HCL/HNO3" waste from ICP-OES instrument, located in Room 203, on Floor 2
Photo 140	HW container collecting waste from MP-AES instrument, located in Room 203, on Floor 2
Photo 141	HW container collecting waste from MP-AES instrument, located in Room 203, on Floor 2
Photo 142	HW container collecting waste from ICP-OES instrument, located in Room 203, on Floor 2
Photo 143	SAA located in Thermal Analysis, Physical Chemistry Lab, on Floor 2
Photo 144	Plastic bottle in hood labelled, "waste solvent Haseltine, 3/14/2014, flamable", located in Scanning Electron Microscope, Room 224, on Floor 2
Photo 145	Plastic bottle in hood labelled, "waste solvent Haseltine, 3/14/2014, flamable", located in Scanning Electron Microscope, Room 224, on Floor 2
Photo 146	SAA located in Room 222, on Floor 2
Photo 147	HW Label on blue container in SAA, located in Room 222, on Floor 2
Photo 148	HW Label on red container in SAA, located in Room 222, on Floor 2
Photo 149	HW Label on blue container in SAA, located in Room 222, on Floor 2
Photo 150	SAA located in Room 218, on Floor 2
Photo 151	HW container in hood, located in Room 218, on Floor 2
Photo 152	SAA located in Room 218, on Floor 2
Photo 153	SAA located in Room 218, on Floor 2
Photo 154	SAA located in hood in Room 216, on Floor 2
Photo 155	HW container with inventory log, located in hood in Room 216, on Floor 2
Photo 156	Signage at SAA located in hood in Room 216, on Floor 2
Photo 157	HW container in hood, located in Room 216, on Floor 2
Photo 158	SAA located in Room 216, on Floor 2
Photo 159	Label on one of two containers in SAA, located in Room 216, on Floor 2
Photo 160	Label on two of two containers in SAA, located in Room 216, on Floor 2
Photo 161	SAA under bench, located in Room 215, on Floor 2
Photo 162	Glass container labelled, Derivatives waste, flammable, toluene, located in Room 215, on Floor 2
Photo 163	HW container collecting waste from instrument, located in Room 215, on Floor 2
Photo 164	Label on HW container collecting waste from instrument, located in Room 215, on Floor 2
Photo 165	SAA located under bench in Room 217, on Floor 2
Photo 166	HW label on container in SAA located under bench in Room 217, on Floor 2
Photo 167	Inventory sheet on HW container in SAA located under bench in Room 217, on Floor 2
Photo 168	SAA located in room 318, on Floor 3
Photo 169	Label on one container in SAA, located in room 318, on Floor 3
Photo 170	Label on one container in SAA, located in room 318, on Floor 3
Photo 171	SAA under table, located in Room 317, on Floor 3

Photo 172	Labels on HW containers in SAA under table, located in Room 317, on Floor 3
Photo 173	HW label on one container in SAA under table, located in Room 317, on Floor 3
Photo 174	HW label on one container in SAA under table, located in Room 317, on Floor 3
Photo 175	SAA in hood, located in Room 330.2, on Floor 3
Photo 176	SAA in hood, located in Room 330.2, on Floor 3
Photo 177	Label on SAA HW container on right side of hood, located in Room 330.2, on Floor 3
Photo 178	Label on SAA HW container on left side of hood, located in Room 330.2, on Floor 3
Photo 179	SAA on bench, located in Room 330.2, on Floor 3
Photo 180	Label on HW container in SAA on bench, located in Room 330.2, on Floor 3
Photo 181	SAA in hood, located in Room 332, on Floor 3
Photo 182	SAA on floor, located in Room 332, on Floor 3
Photo 183	HW containers and signage in SAA on floor, located in Room 332, on Floor 3
Photo 184	HW containers and signage in SAA on floor, located in Room 332, on Floor 3
Photo 185	HW label on HW container in SAA on floor, located in Room 332, on Floor 3
Photo 186	HW inventory label on HW container in SAA on floor, located in Room 332, on Floor 3
Photo 187	HW label on HW container in SAA on floor, located in Room 332, on Floor 3
Photo 188	HW label on HW container in SAA on floor, located in Room 332, on Floor 3
Photo 189	HW label on HW container in SAA on floor, located in Room 332, on Floor 3
Photo 190	HW label on HW container in SAA on floor, located in Room 332, on Floor 3
Photo 191	SAA in hood, located in Room 333, Robotics and Automation Lab on Floor 3
Photo 192	Containers in SAA in hood, located in Room 333, Robotics and Automation Lab on Floor 3
Photo 193	Container in SAA in hood, located in Room 333, on Floor 3
Photo 194	SAA on floor, located in Room 333, Robotics and Automation Lab, on Floor 3
Photo 195	HW label on SAA container on floor, 333, Robotics and Automation Lab, on Floor 3
Photo 196	HW label on SAA container on floor, 333, Robotics and Automation Lab, on Floor 3
Photo 197	HW container in hood, located in Room 333, Robotics and Automation Lab, on Floor 3
Photo 198	HW container in hood, located in Room 333, Robotics and Automation Lab, on Floor 3
Photo 199	SAA on floor, located in Room 335, HEL Lab, on Floor 3
Photo 200	Red lab pack container in hood, located in Room 335, HEL Lab, on Floor 3
Photo 201	Waste batteries container in hood, located in Room 335, HEL Lab, on Floor 3
Photo 202	Inventory sheet for red lab pack container in hood, located in Room 335, HEL Lab, on Floor 3
Photo 203	SAA on floor, located in Room 440, Alumina Separation Lab, on Floor 4
Photo 204	Container and signage at SAA on floor, located in Room 440, Alumina Separation Lab, on Floor 4
Photo 205	Container and signage at SAA on floor, located in Room 440, Alumina Separation Lab, on Floor 4
Photo 206	HW container on floor, at SAA located in Room 440, Alumina Separation

Photo 207	Label on SAA container at SAA on floor, located in Room 440, Alumina Separation Lab, on Floor 4
Photo 208	Label on SAA container at SAA on floor, located in Room 440, Alumina Separation Lab, on Floor 4
Photo 209	Label on HW container on floor, at SAA located in Room 440, Alumina Separation
Photo 210	Two containers, one storing odorous aqueous waste and one storing odorous organic waste in hood, located in Room 430, Minerals Metallurgy Lab, on Floor 4
Photo 211	Two containers, one storing odorous aqueous waste and one storing odorous organic waste in hood, located in Room 430, Minerals Metallurgy Lab, on Floor 4
Photo 212	Yellow container holding small containers, some waste cyanide in hood, located in Room 430, Minerals Metallurgy Lab, on Floor 4
Photo 213	Yellow container holding small containers, some waste cyanide in hood, located in Room 430, Minerals Metallurgy Lab, on Floor 4
Photo 214	Some containers inside yellow container holding small containers, some waste cyanide in hood, located in Room 430, Minerals Metallurgy Lab, on Floor 4
Photo 215	Some containers inside yellow container holding small containers, some waste cyanide in hood, located in Room 430, Minerals Metallurgy Lab, on Floor 4
Photo 216	White container holding containers, one waste hydrogen peroxide in hood, located in Room 430, Minerals Metallurgy Lab, on Floor 4

Photo 1

Electronic waste collection area located in the Maintenance Shop

Photo 2

Inside electronic waste collection containers in the Maintenance Shop

Photo 3

HW Aerosols SAA, non-HW lab debris and Used Oil collection point located in the Maintenance Shop

Photo 4

Signage for HW Aerosols SAA located in the Maintenance Shop

Photo 5

Signage for Non-HW lab debris located in the Maintenance Shop

Photo 6

Signage for Used Oil located in the Maintenance Shop

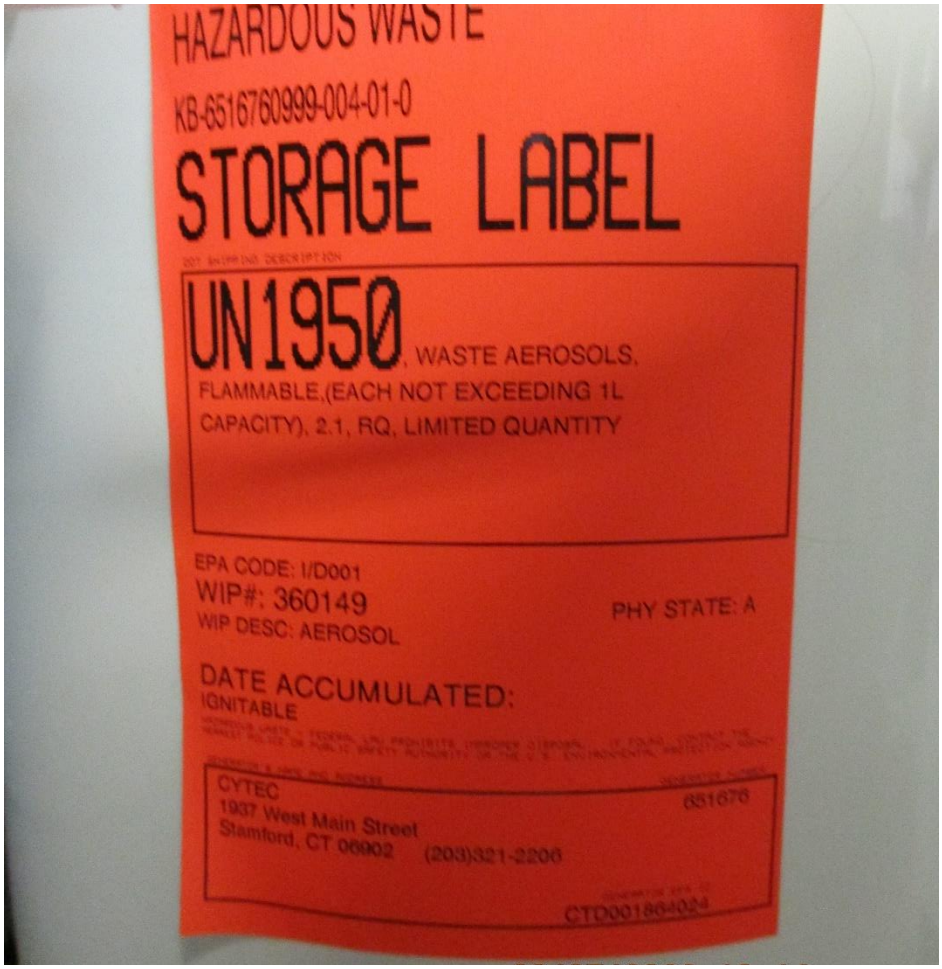


Photo 7

Label on HW container located in the Maintenance Shop

Photo 8

Entry doors into 90-Day HWSA, located in the Maintenance Shop

Photo 9

Signage on entry doors into 90-Day HWSA, located in the Maintenance Shop

Photo 10

Left side corner of 90-Day HWSA, located in the Maintenance Shop

Photo 11

HW containers on left side corner of 90-Day HWSA, located in the Maintenance Shop

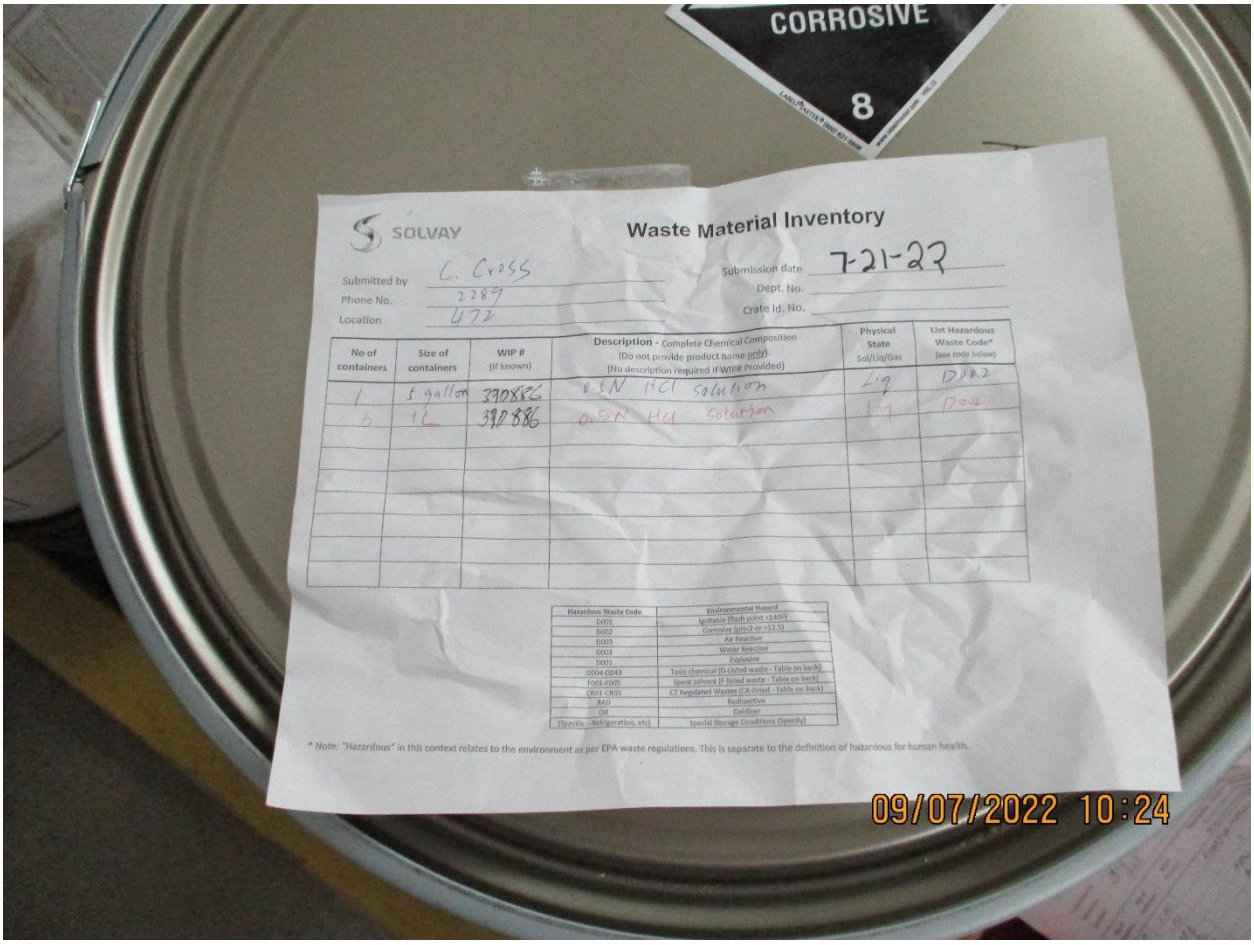


Photo 12

Inventory Sheet on HW container on left side corner of 90-Day HWSA, located in the Maintenance Shop

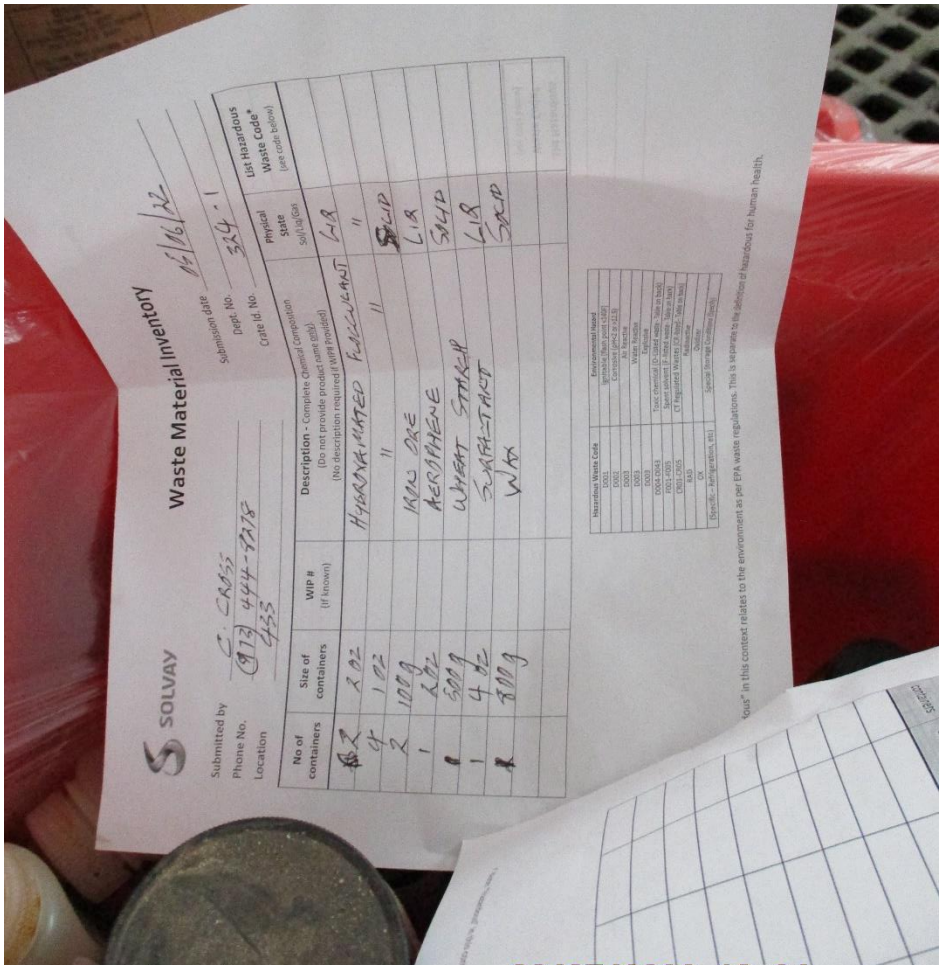


Photo 13

Inventory Sheet on HW container on left side corner of 90-Day HWSA, located in the Maintenance Shop

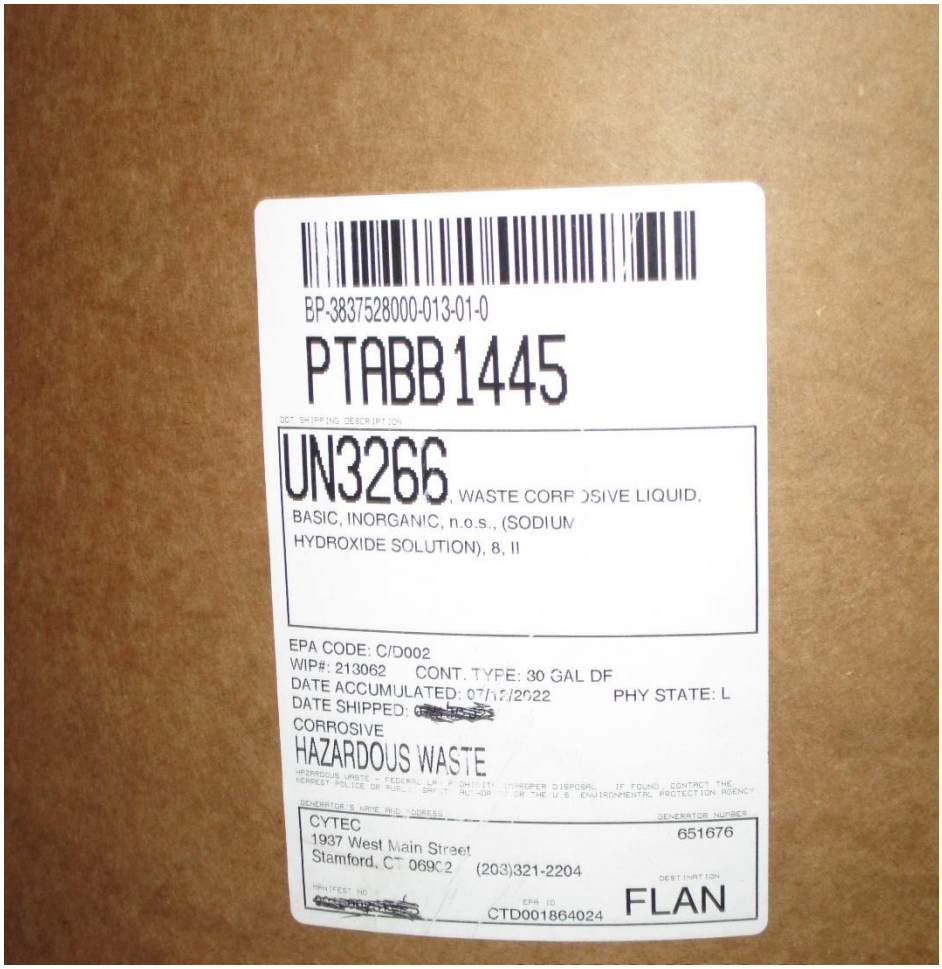


Photo 14

Label on HW container located on left side corner of 90-Day HWSA, located in the Maintenance Shop

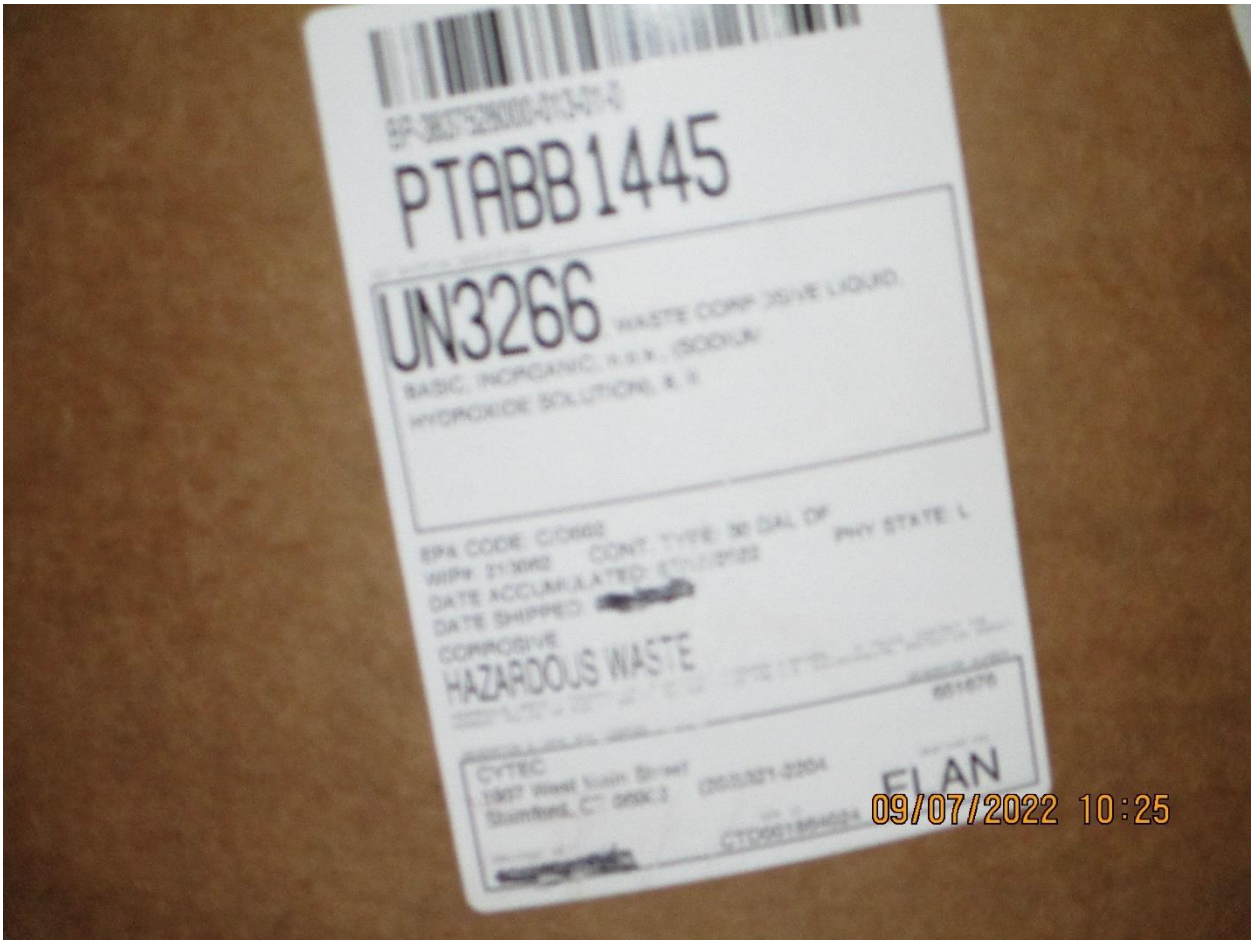


Photo 15

Label on HW container located on left side corner of 90-Day HWSA, located in the Maintenance Shop

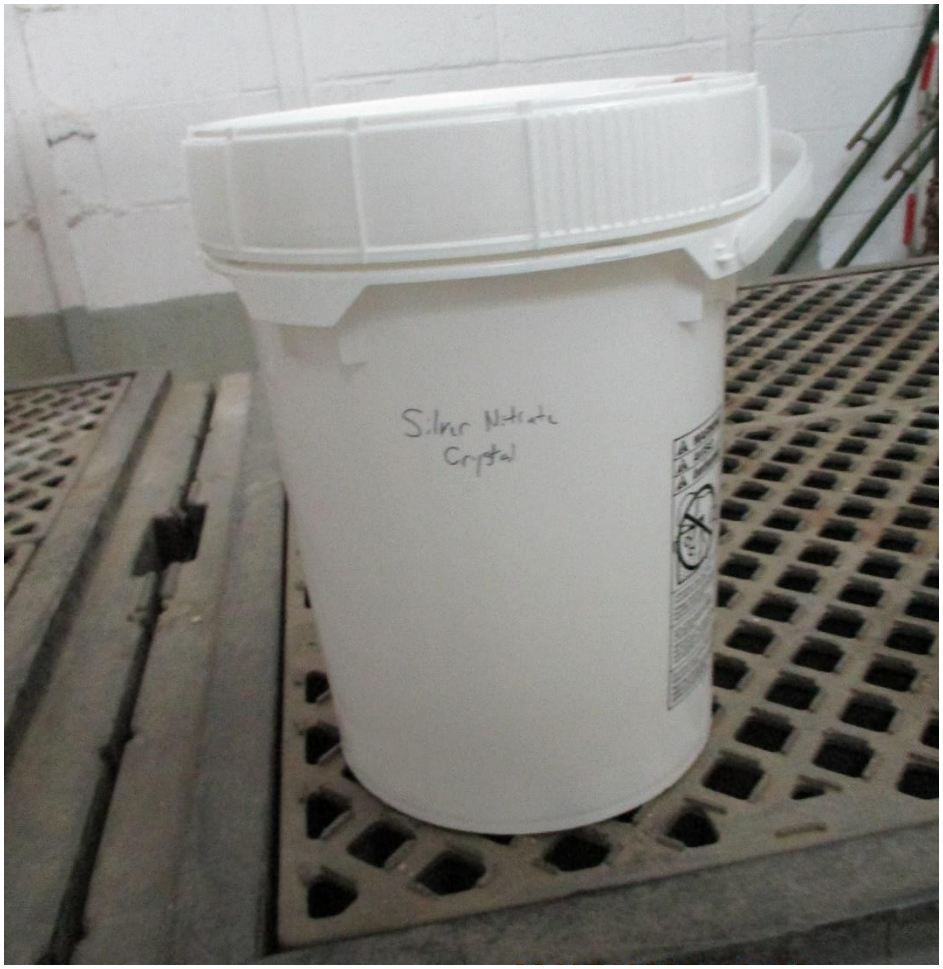


Photo 16

HW container on left side corner of 90-Day HWSA, located in the Maintenance Shop

Photo 17

Signage on wall located on left side corner of 90-Day HWSA, located in the Maintenance Shop

Photo 18

HW containers on skid 1, in left back side corner of 90-Day HWSA, located in the Maintenance Shop

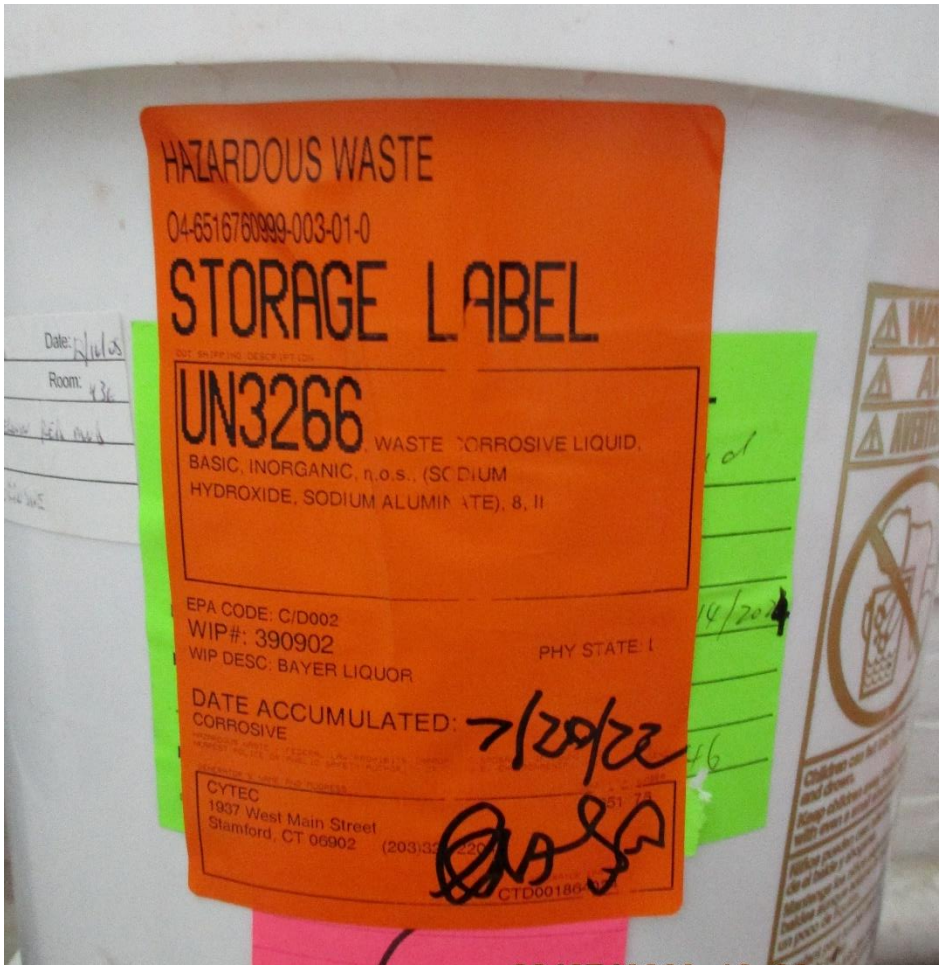


Photo 19

HW label on container on skid 1, in left back side corner of 90-Day HWSA, located in the Maintenance Shop

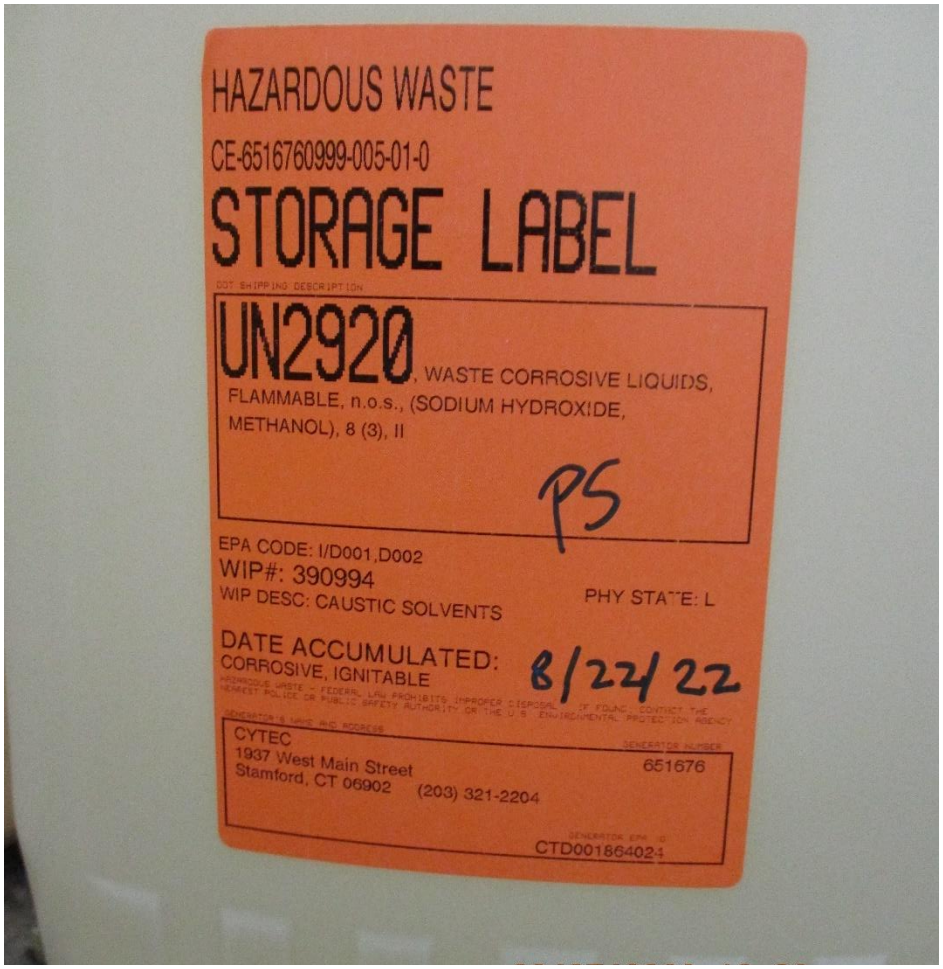


Photo 20

HW label on container on skid 1, in left back side corner of 90-Day HWSA, located in the Maintenance Shop

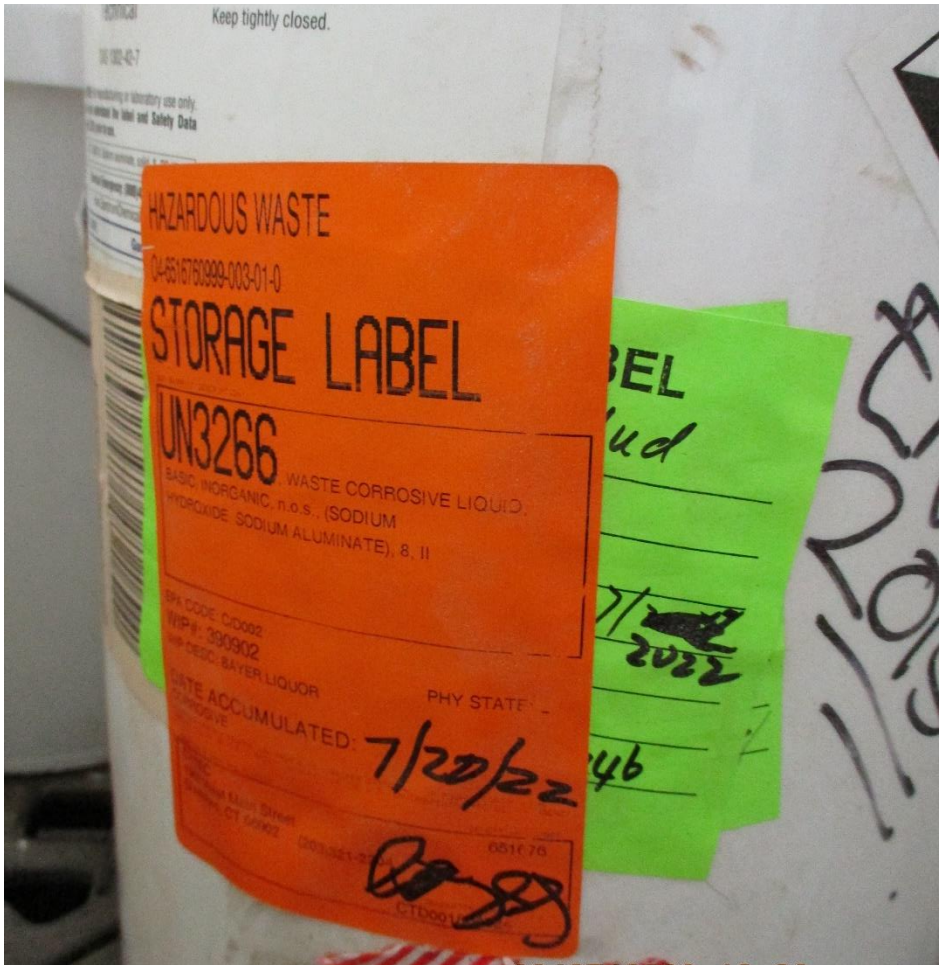


Photo 21

HW label on container on skid 1, in left back side corner of 90-Day HWSA, located in the Maintenance Shop

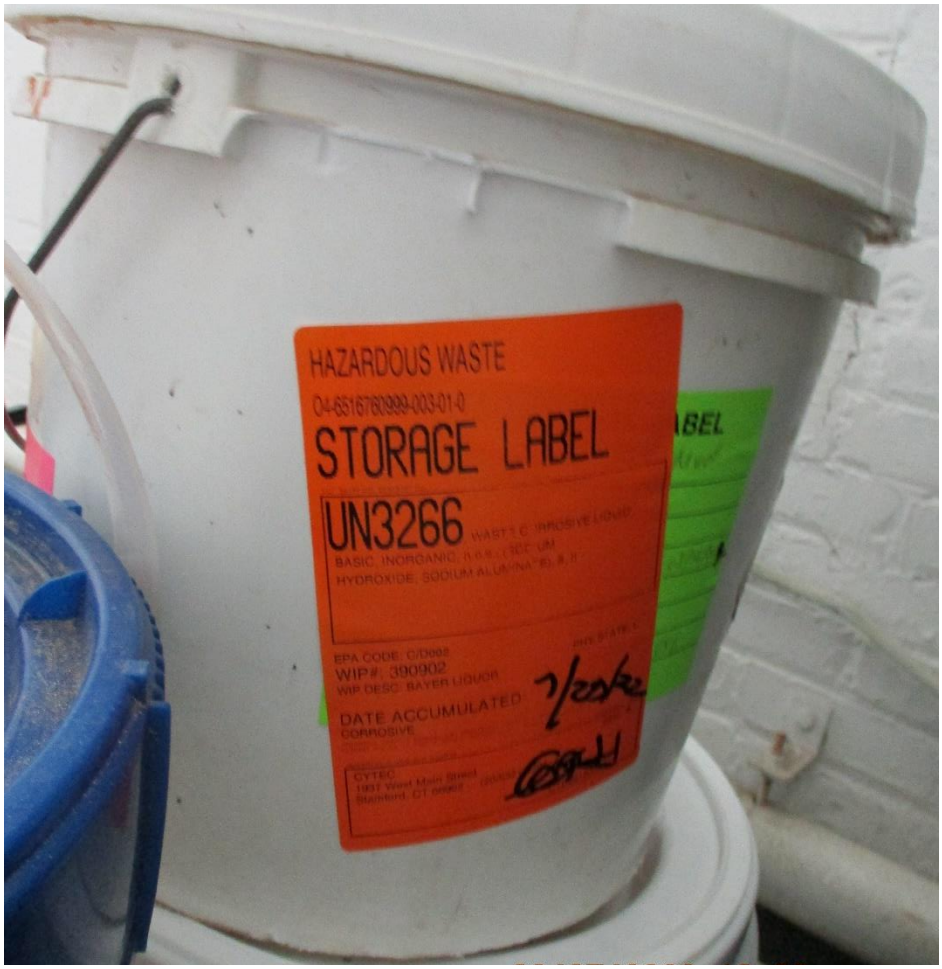


Photo 22

HW label on container on skid 1, in left back side corner of 90-Day HWSA, located in the Maintenance Shop

Photo 23

HW containers on skid 1 and skid 2, in left back side corner of 90-Day HWSA, located in the Maintenance Shop

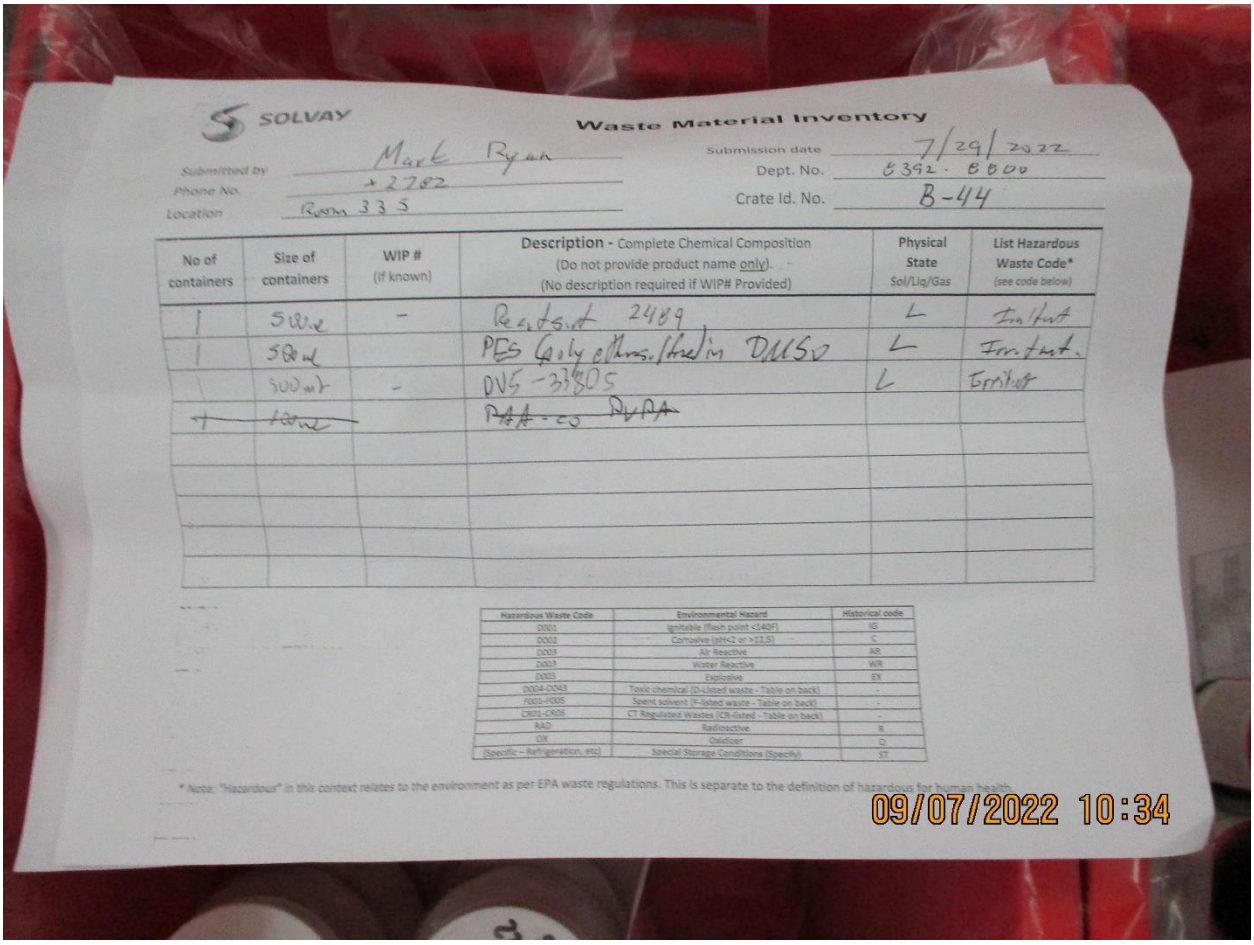


Photo 24

Inventory Sheet in HW container on skid 2, in left back side corner of 90-Day HWSA, located in the Maintenance Shop

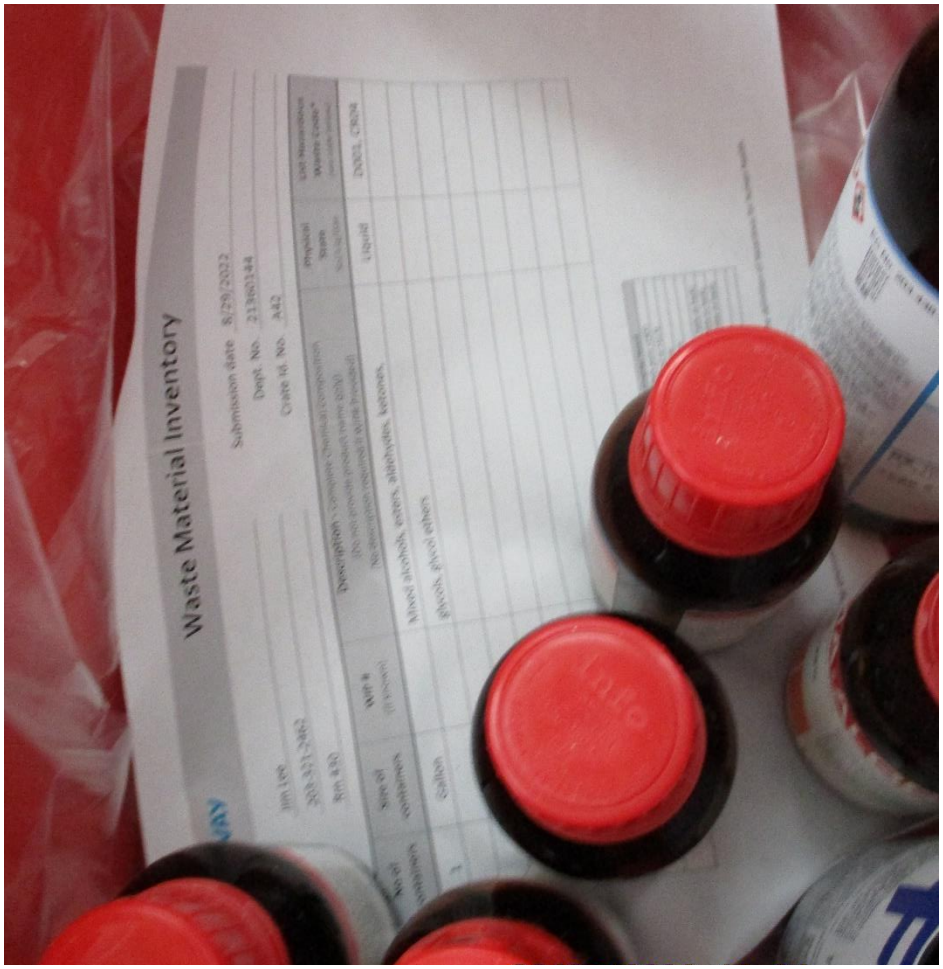


Photo 25

Inventory Sheet in HW container on skid 2, in left back side corner of 90-Day HWSA, located in the Maintenance Shop

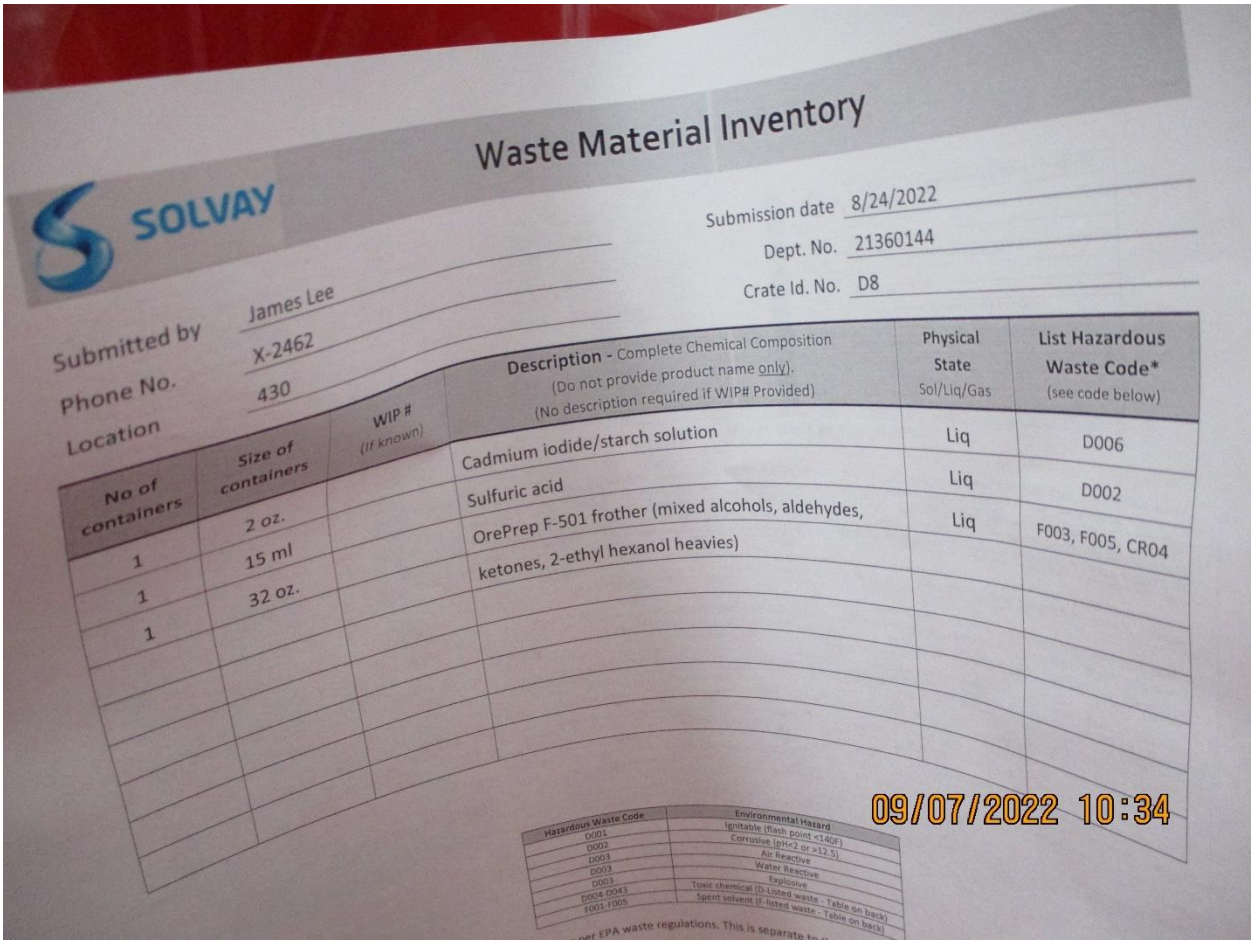


Photo 26

Inventory Sheet in HW container on skid 2, in left back side corner of 90-Day HWSA, located in the Maintenance Shop

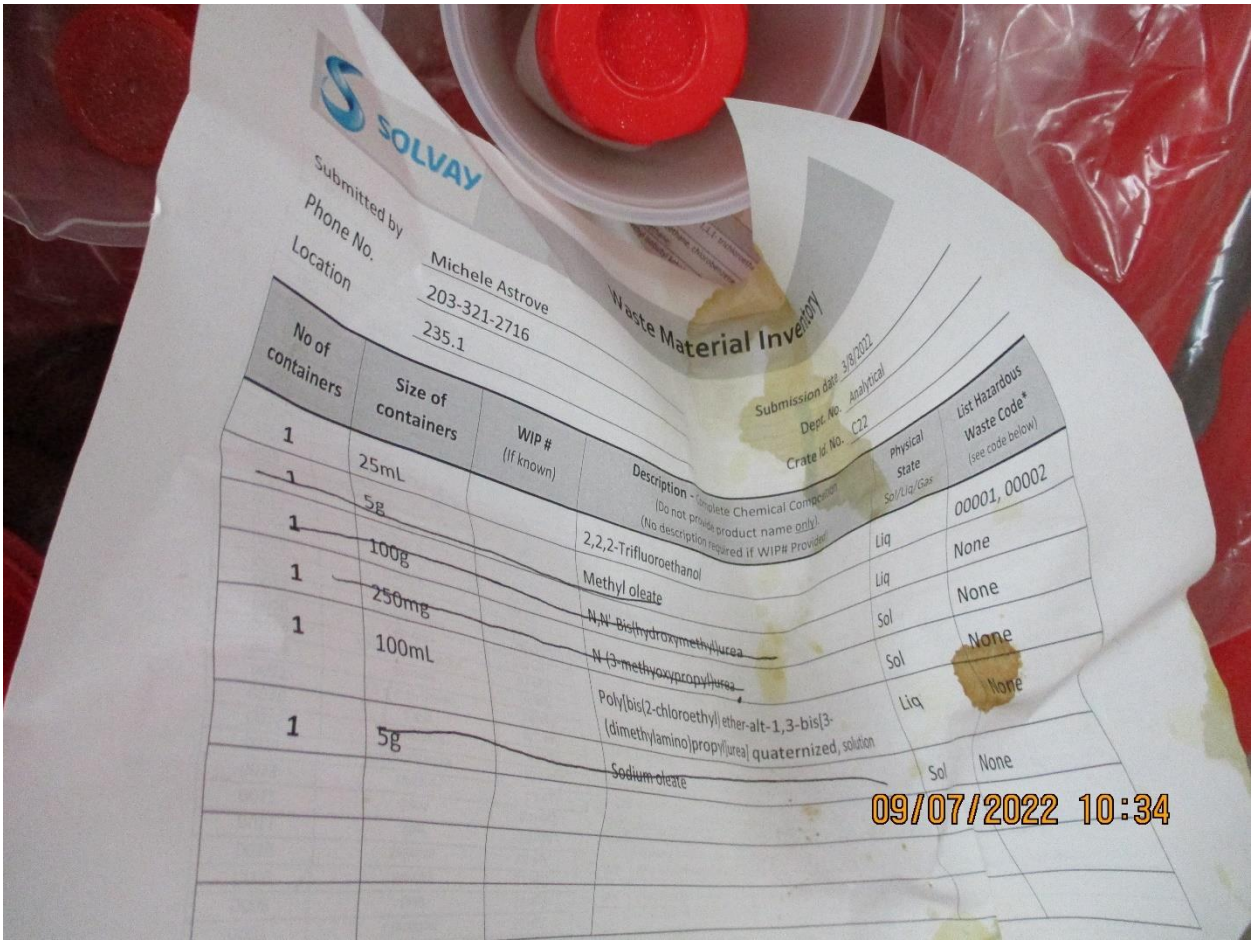


Photo 27

Inventory Sheet in HW container on skid 2, in left back side corner of 90-Day HWSA, located in the Maintenance Shop

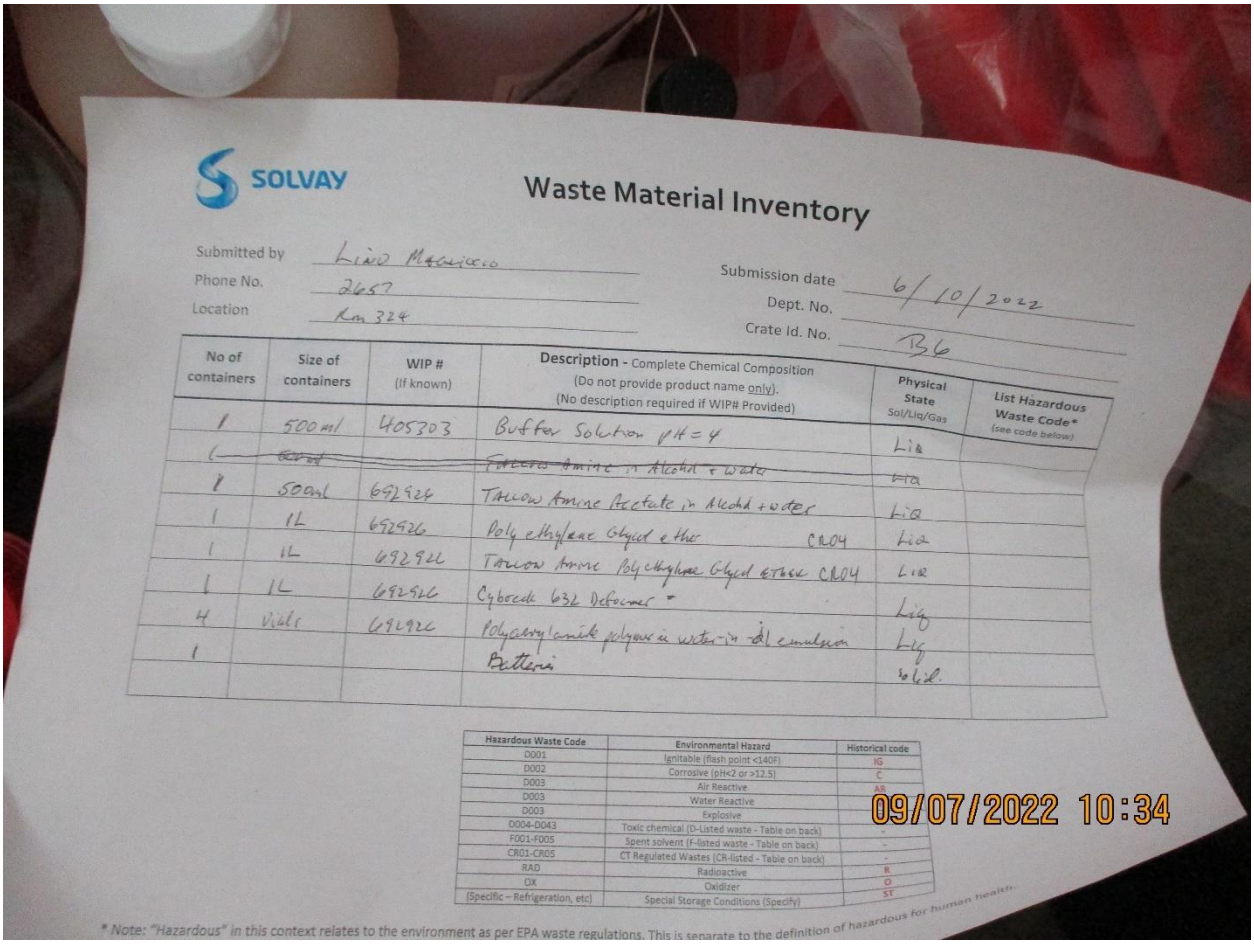


Photo 28

Inventory Sheet in HW container on skid 2, in left back side corner of 90-Day HWSA, located in the Maintenance Shop

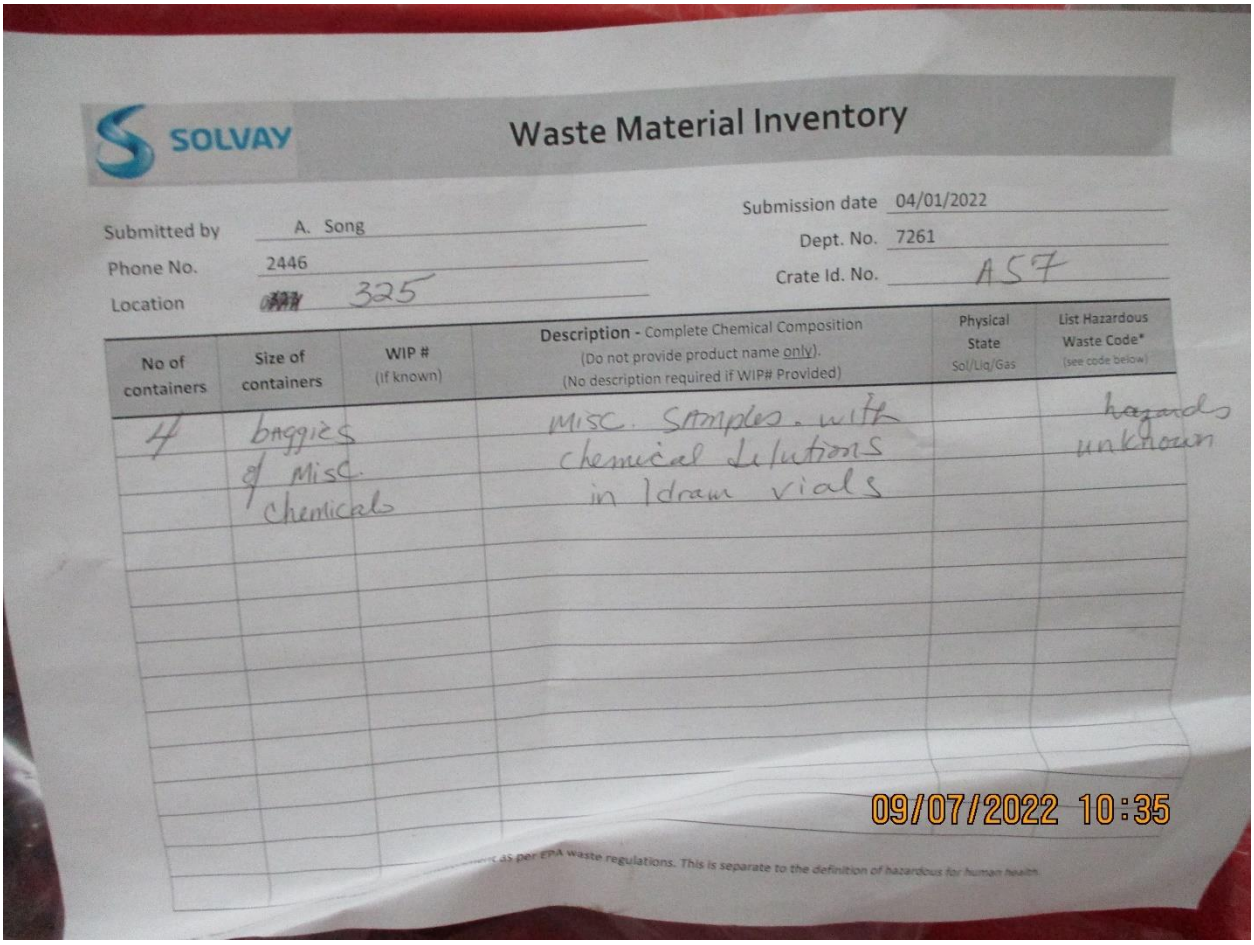


Photo 29

Inventory Sheet in HW container on skid 2, in left back side corner of 90-Day HWSA, located in the Maintenance Shop

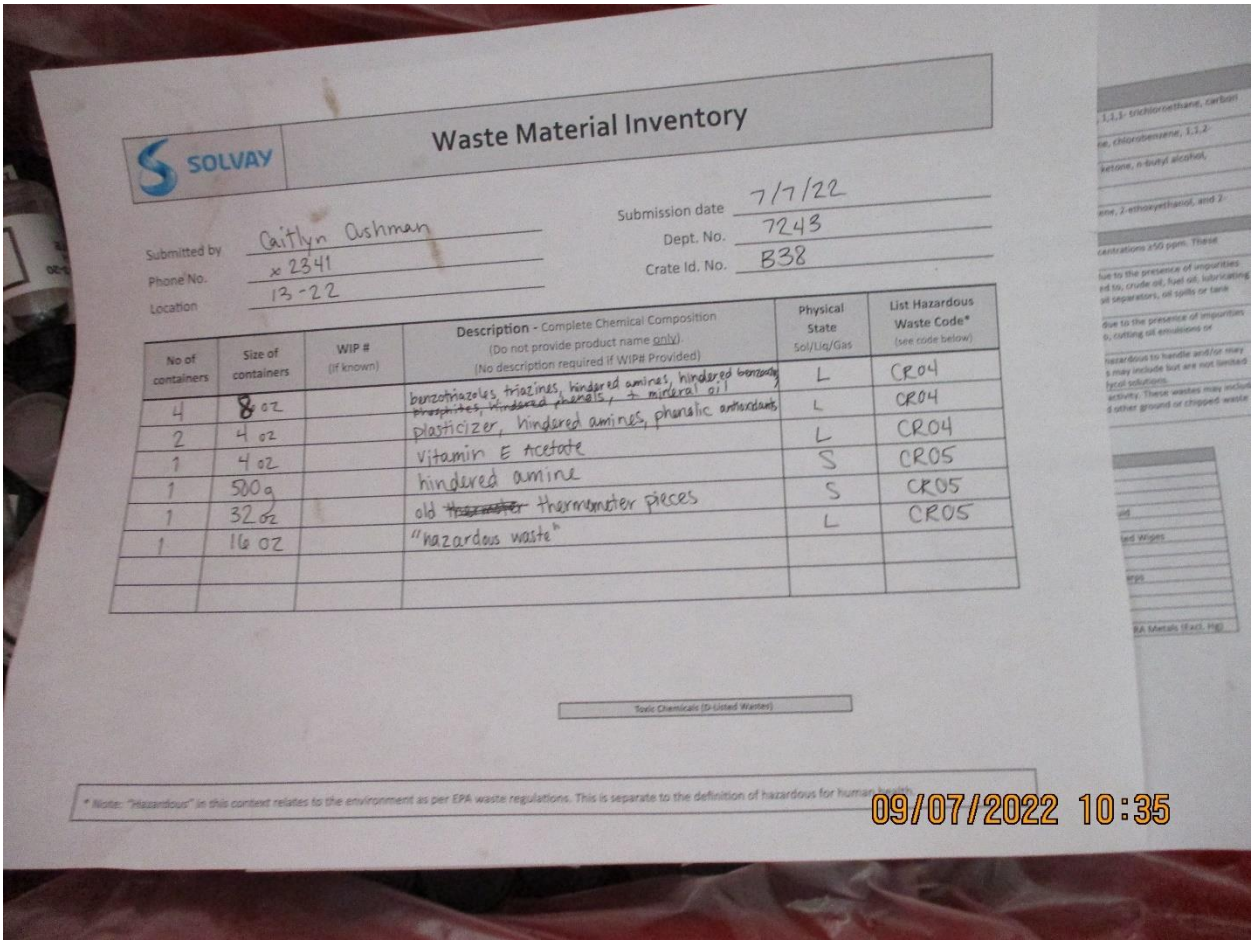
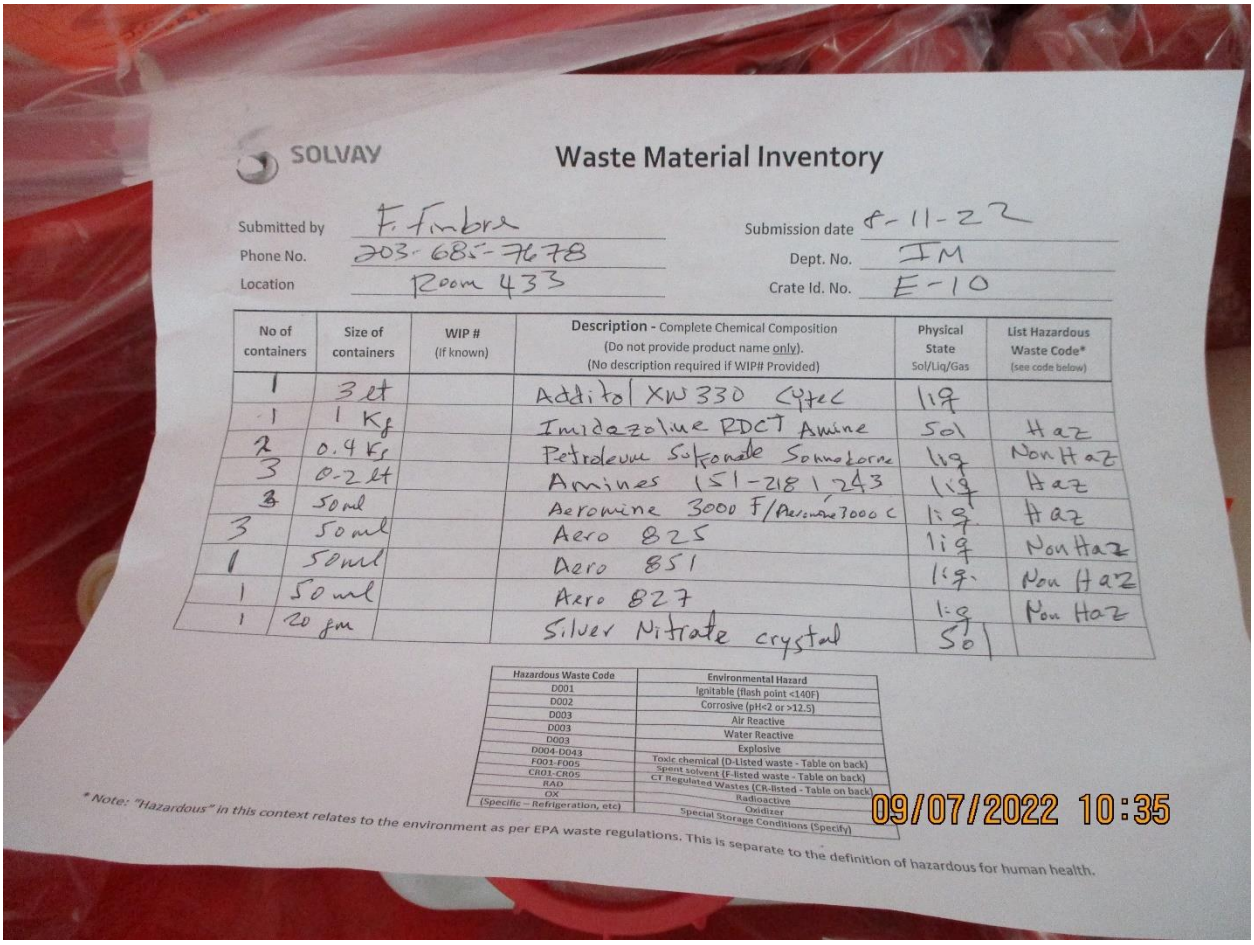


Photo 30

Inventory Sheet in HW container on skid 2, in left back side corner of 90-Day HWSA, located in the Maintenance Shop

Photo 31

HW containers on skid 2, in left back side corner of 90-Day HWSA, located in the Maintenance Shop



SOLVAY

Waste Material Inventory

Submitted by F. Fimbre
Phone No. 203-685-7678
Location Room 433
Submission date 8-11-22
Dept. No. IM
Crate Id. No. E-10

No of containers	Size of containers	WIP # (if known)	Description - Complete Chemical Composition (Do not provide product name only). (No description required if WIP# Provided)	Physical State Sol/Liq/Gas	List Hazardous Waste Code* (see code below)
1	3 Lt		Additol XW 330 Cytec	liq	
1	1 Kg		Imidazoline RDCT Amine	sol	Haz
2	0.4 Kg		Petroleum Sulfonate Sonneborne	liq	Non Haz
3	0.2 Lt		Amines 151-218 1243	liq	Haz
3	50 ml		Aeromine 3000 F/Aeromine 3000 C	liq	Haz
3	50 ml		Aero 825	liq	Non Haz
1	50 ml		Aero 851	liq	Non Haz
1	50 ml		Aero 827	liq	Non Haz
1	20 gm		Silver Nitrate crystal	Sol	

Hazardous Waste Code	Environmental Hazard
D001	Ignitable (flash point <140F)
D002	Corrosive (pH<2 or >12.5)
D003	Air Reactive
D003	Water Reactive
D003	Explosive
D004-D043	Toxic chemical (D-Listed waste - Table on back)
F001-F005	Spent solvent (F-listed waste - Table on back)
CR01-CR05	CT Regulated Wastes (CR-listed - Table on back)
RAD	Radioactive
OX	Oxidizer
(Specific – Refrigeration, etc)	Special Storage Conditions (Specify)

*Note: "Hazardous" in this context relates to the environment as per EPA waste regulations. This is separate to the definition of hazardous for human health.

09/07/2022 10:35

Photo 32

Inventory Sheet on HW container on skid 2, in left back side corner of 90-Day HWSA, located in the Maintenance Shop

Photo 33

Contents inside HW container for lab pack on skid 2, in left back side corner of 90-Day HWSA, located in the Maintenance Shop

Photo 34

HW containers on skid 3 and skid 4, in center back of 90-Day HWSA, located in the Maintenance Shop

Photo 35

HW containers on skid 3, in center back of 90-Day HWSA, located in the Maintenance Shop

Photo 36

HW label on container on skid 3, in center back of 90-Day HWSA, located in the Maintenance Shop

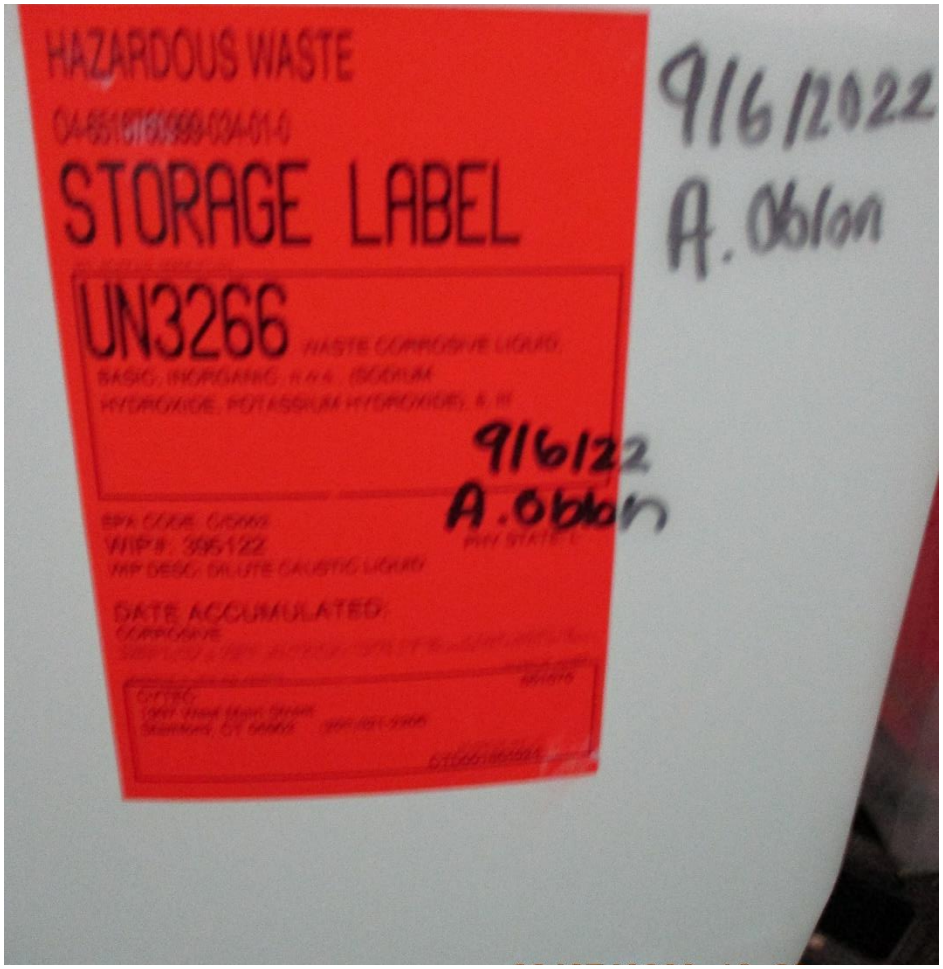


Photo 37

HW label on container on skid 3, in center back of 90-Day HWSA, located in the Maintenance Shop

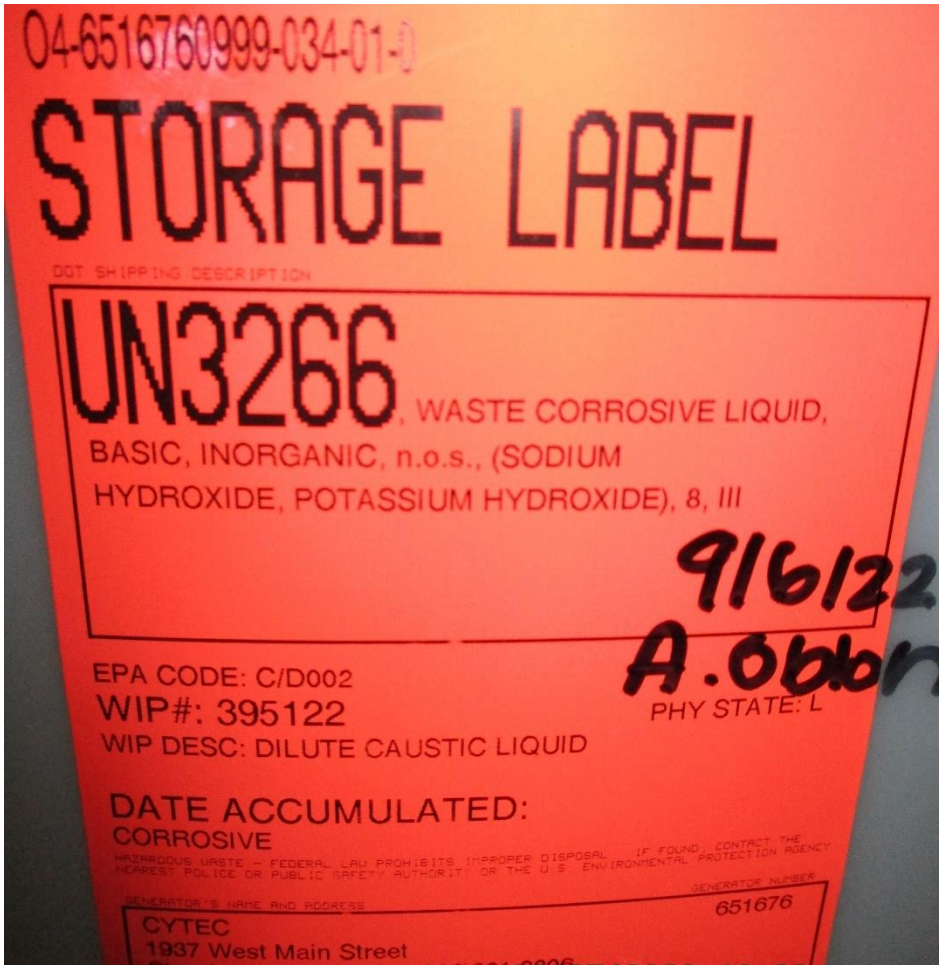


Photo 38

HW label on container on skid 3, in center back of 90-Day HWSA, located in the Maintenance Shop

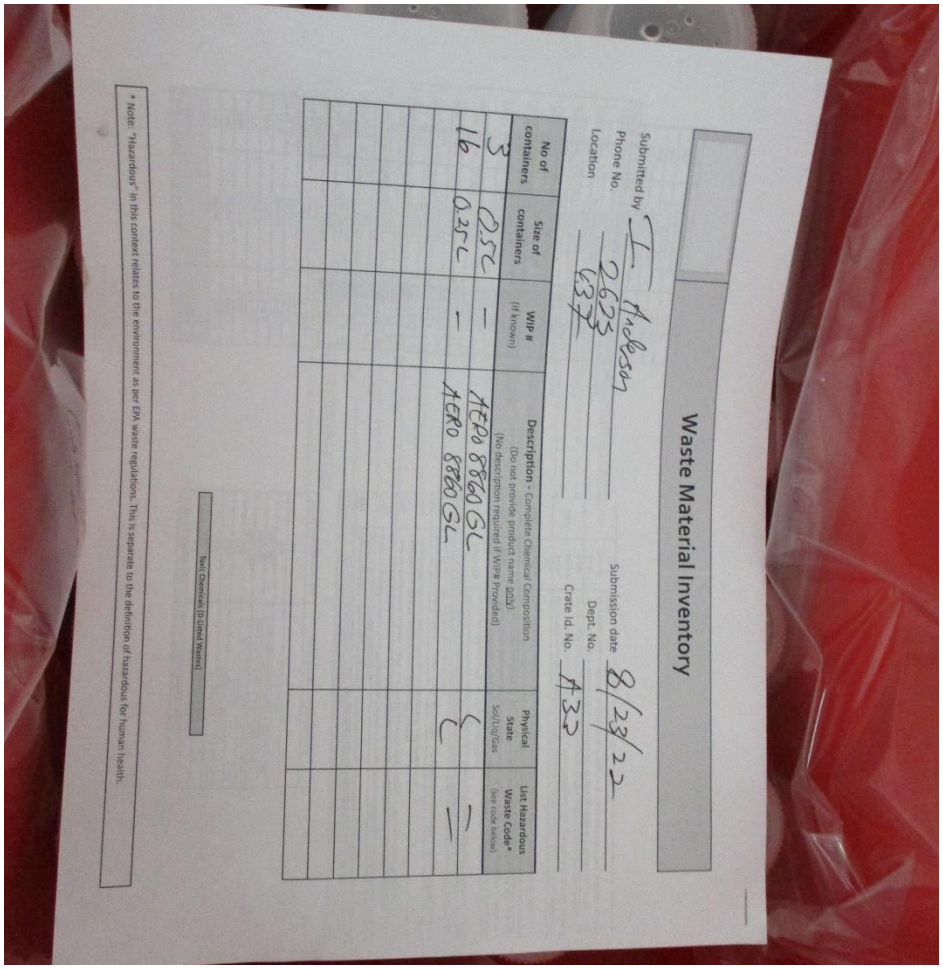


Photo 39

Inventory Sheet in HW container on skid 3, in center back of 90-Day HWSA, located in the Maintenance Shop

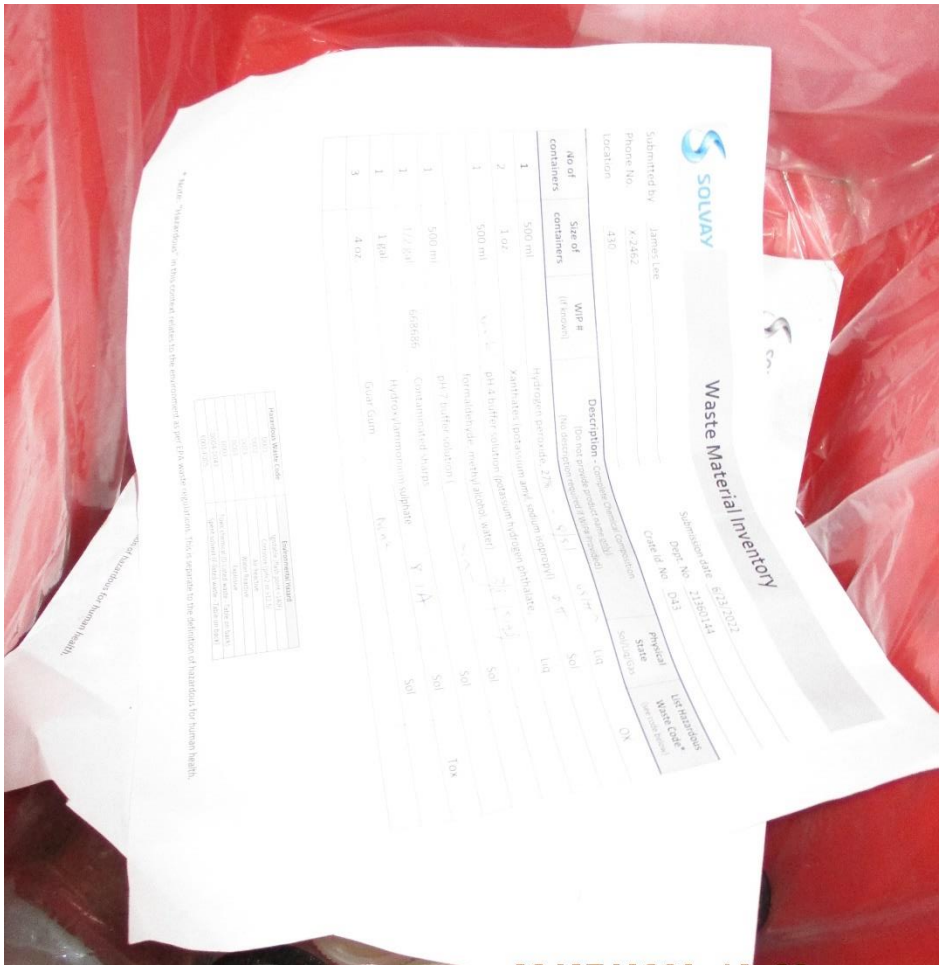


Photo 40

Inventory Sheet in HW container on skid 3, in center back of 90-Day HWSA, located in the Maintenance Shop

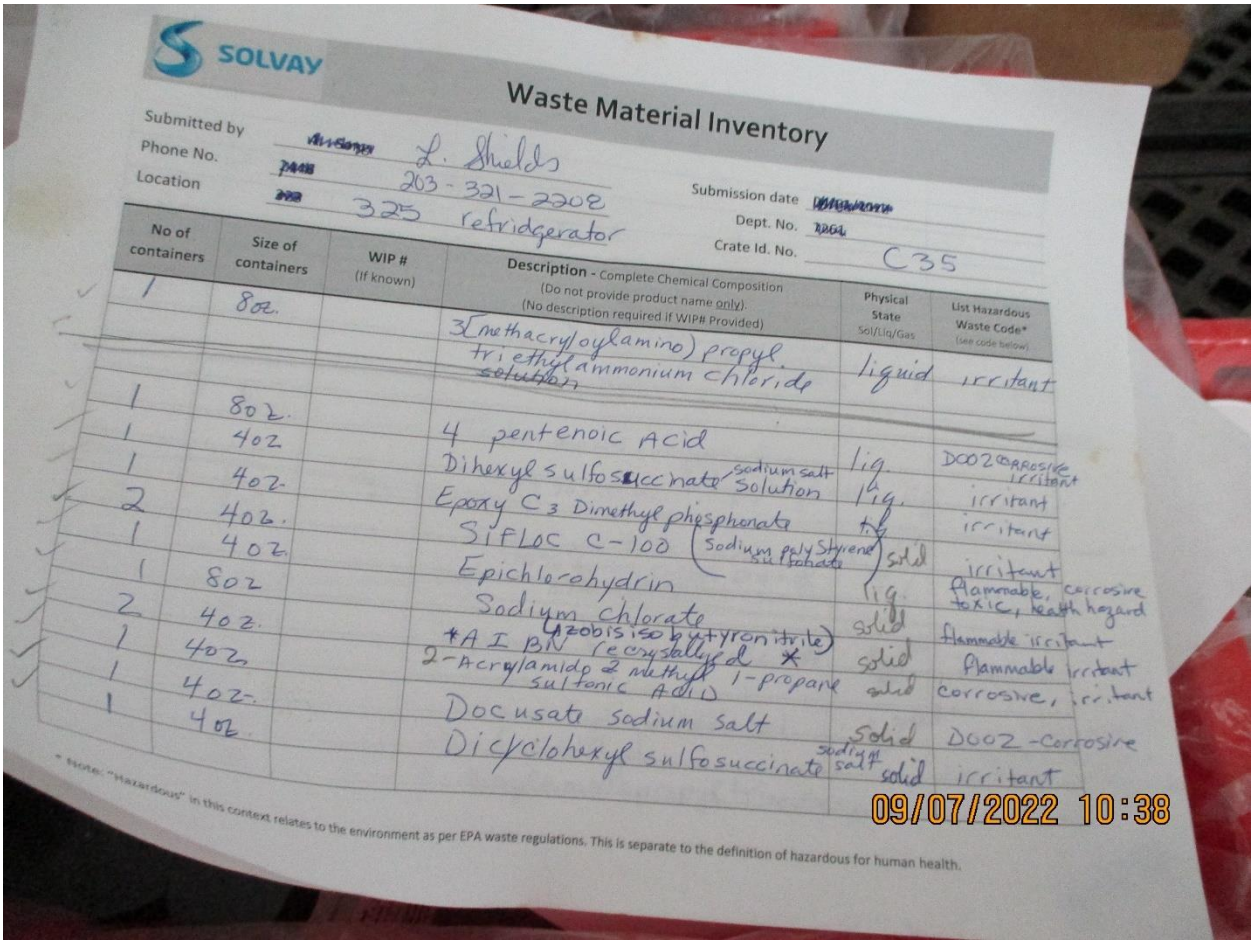


Photo 41

Inventory Sheet in HW container on skid 3, in center back of 90-Day HWSA, located in the Maintenance Shop

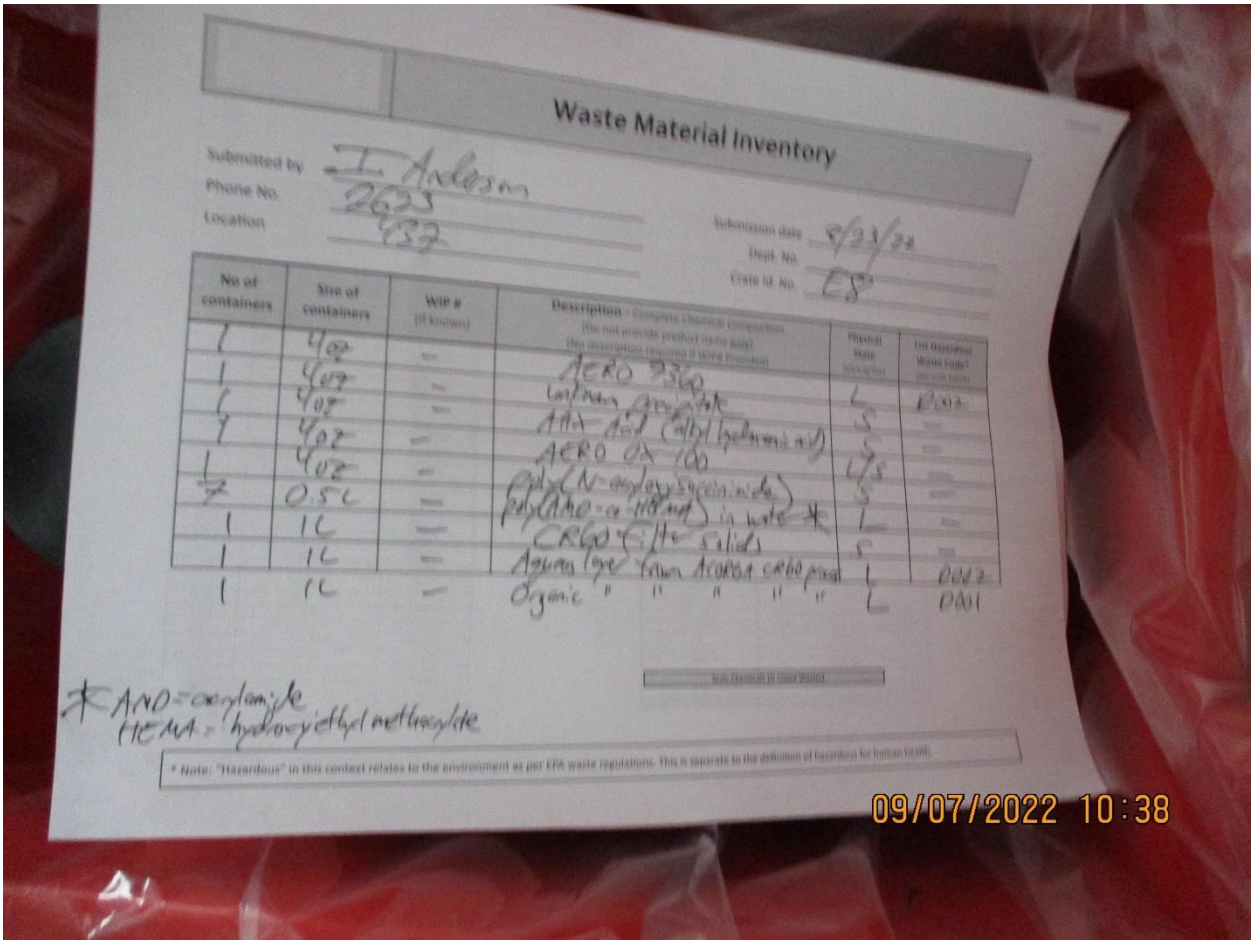
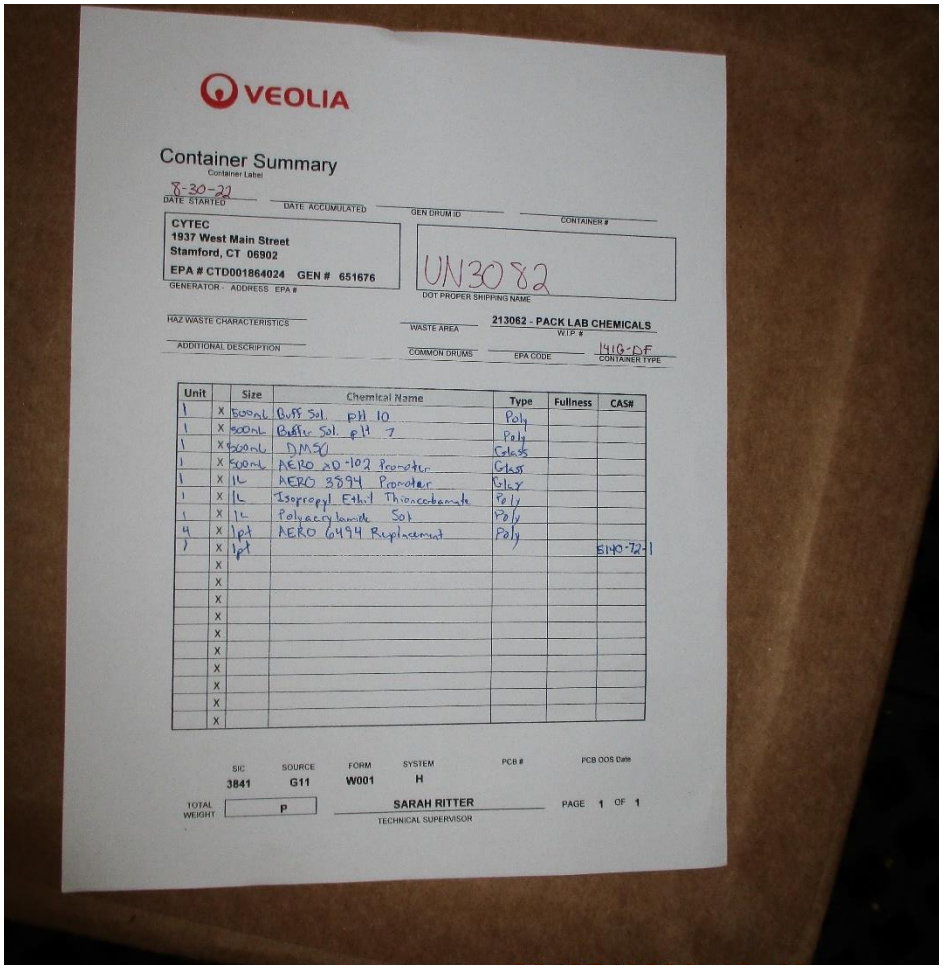


Photo 42

Inventory Sheet in HW container on skid 3, in center back of 90-Day HWSA, located in the Maintenance Shop

Photo 43

HW label on container on skid 4, in center back of 90-Day HWSA, located in the Maintenance Shop



VEOLIA

Container Summary

Container Label

8-30-22
DATE STARTED

DATE ACCUMULATED

GEN DRUM ID

CONTAINER #

CYTEC
1937 West Main Street
Stamford, CT 06902
EPA # CTD001864024 GEN # 651676
GENERATOR - ADDRESS EPA #

UN3082
DOT PROPER SHIPPING NAME

HAZ WASTE CHARACTERISTICS

WASTE AREA

213062 - PACK LAB CHEMICALS
W.I.P. #

ADDITIONAL DESCRIPTION

COMMON DRUMS

EPA CODE

141G-DF
CONTAINER TYPE

Unit		Size	Chemical Name	Type	Fullness	CAS#
1	X	500mL	Buff Sol. pH 10	Poly		
1	X	500mL	Buffer Sol. pH 7	Poly		
1	X	500mL	DMSO	Glass		
1	X	500mL	AERO xD-102 Promoter	Glass		
1	X	1L	AERO 3894 Promoter	Glass		
1	X	1L	Isopropyl Ethyl Thionocarbamate	Poly		
1	X	1L	Polyacrylamide Sol	Poly		
4	X	1pt	AERO 6494 Replacement	Poly		
1	X	1pt				5140-72-1
	X					
	X					
	X					
	X					
	X					
	X					
	X					
	X					
	X					

SIC: 3841
SOURCE: G11
FORM: W001
SYSTEM: H
PCB #
PCB OOS Date

TOTAL WEIGHT: P

SARAH RITTER
TECHNICAL SUPERVISOR

PAGE 1 OF 1

Photo 44

Inventory Sheet in HW container on skid 4, in center back of 90-Day HWSA, located in the Maintenance Shop

Photo 45

Contents inside HW container for lab pack on skid 4, in center back of 90-Day HWSA, located in the Maintenance Shop

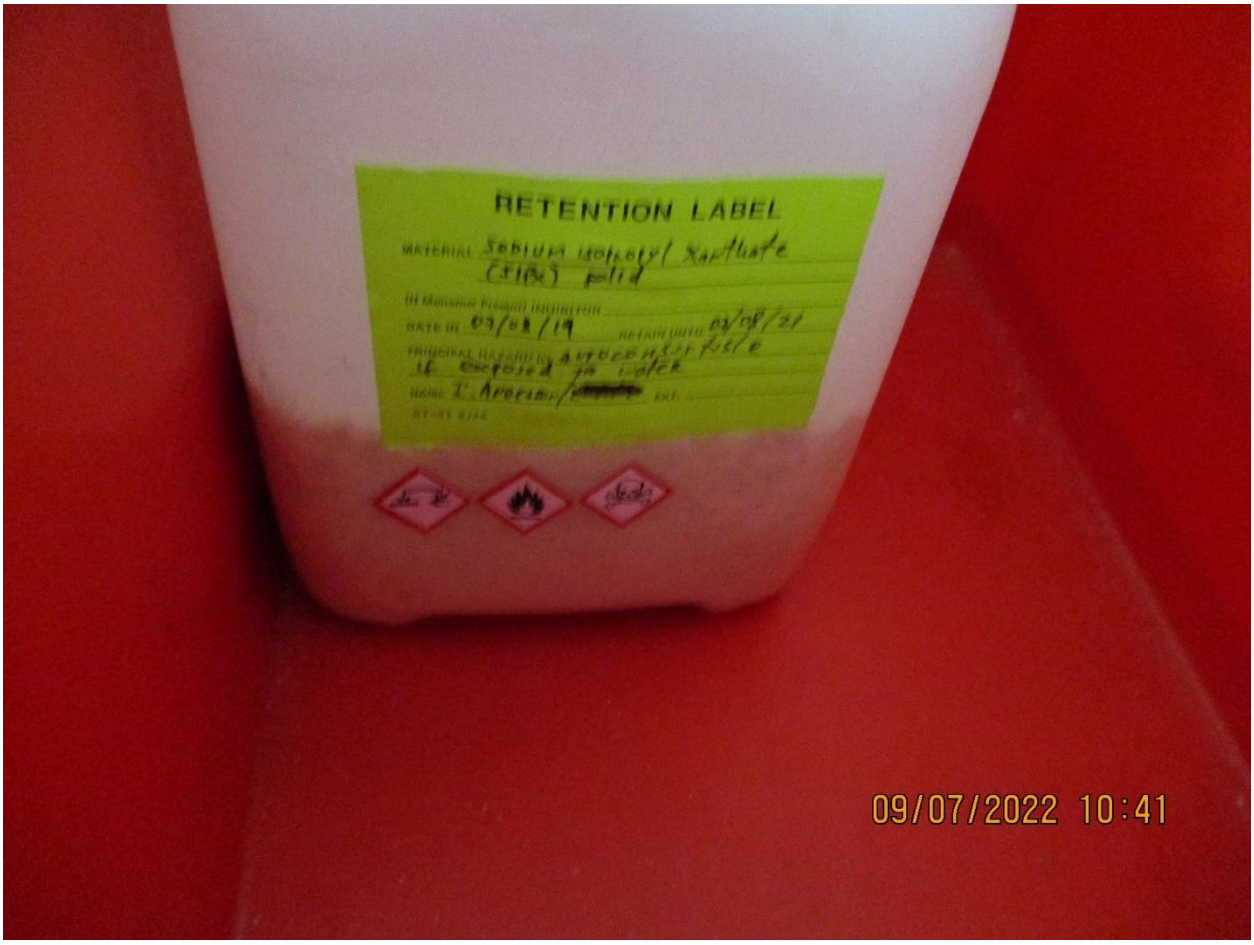


Photo 46

Label on HW container inside HW container for lab pack on skid 4, in center back of 90-Day HWSA, located in the Maintenance Shop

Photo 47

Right side of 90-Day HWSA, located in the Maintenance Shop

Photo 48

HW drums located on the right side back wall of 90-Day HWSA, located in the Maintenance Shop

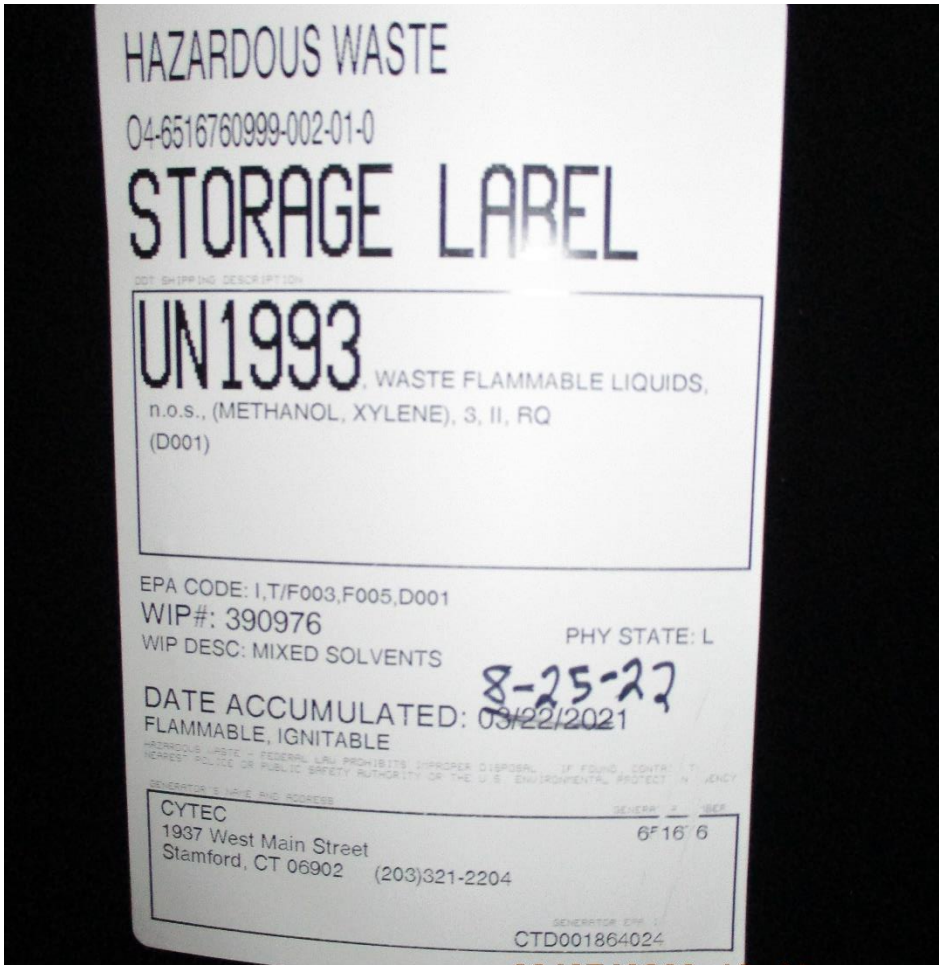


Photo 49

Label on left HW drum located on the right side back wall of 90-Day HWSA, located in the Maintenance Shop

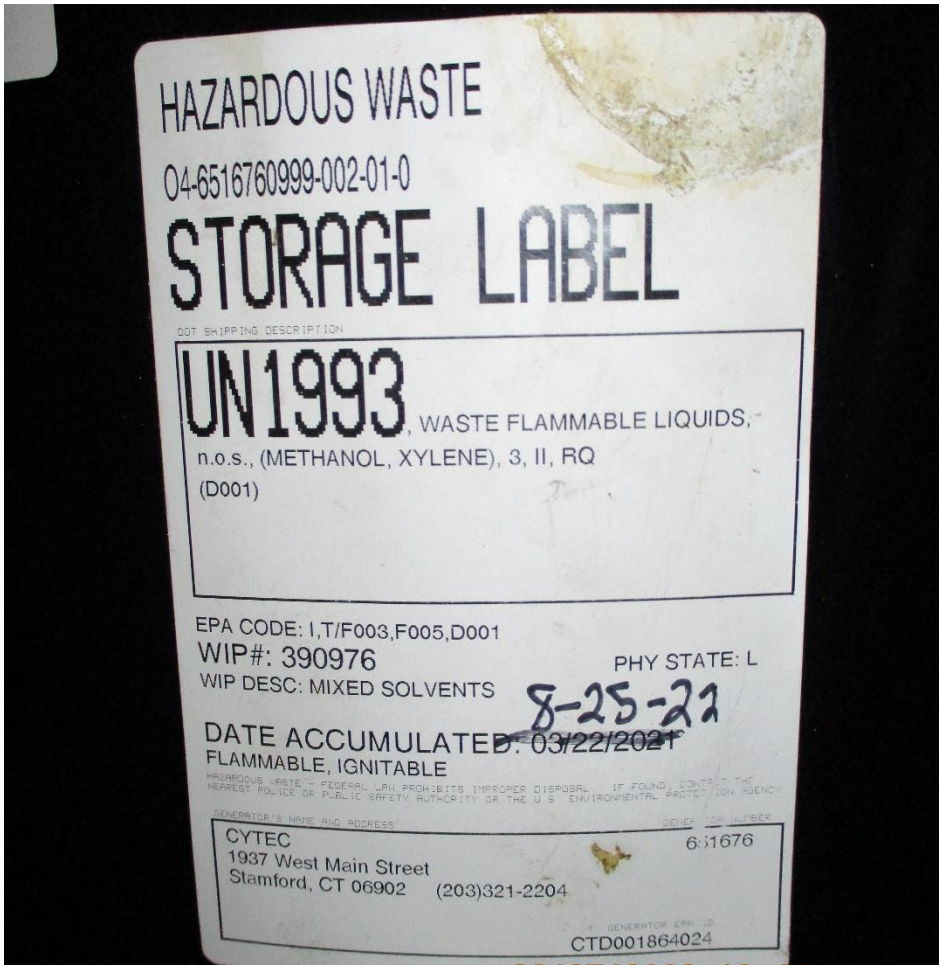


Photo 50

Label on right HW drum located on the right side back wall of 90-Day HWSA, located in the Maintenance Shop

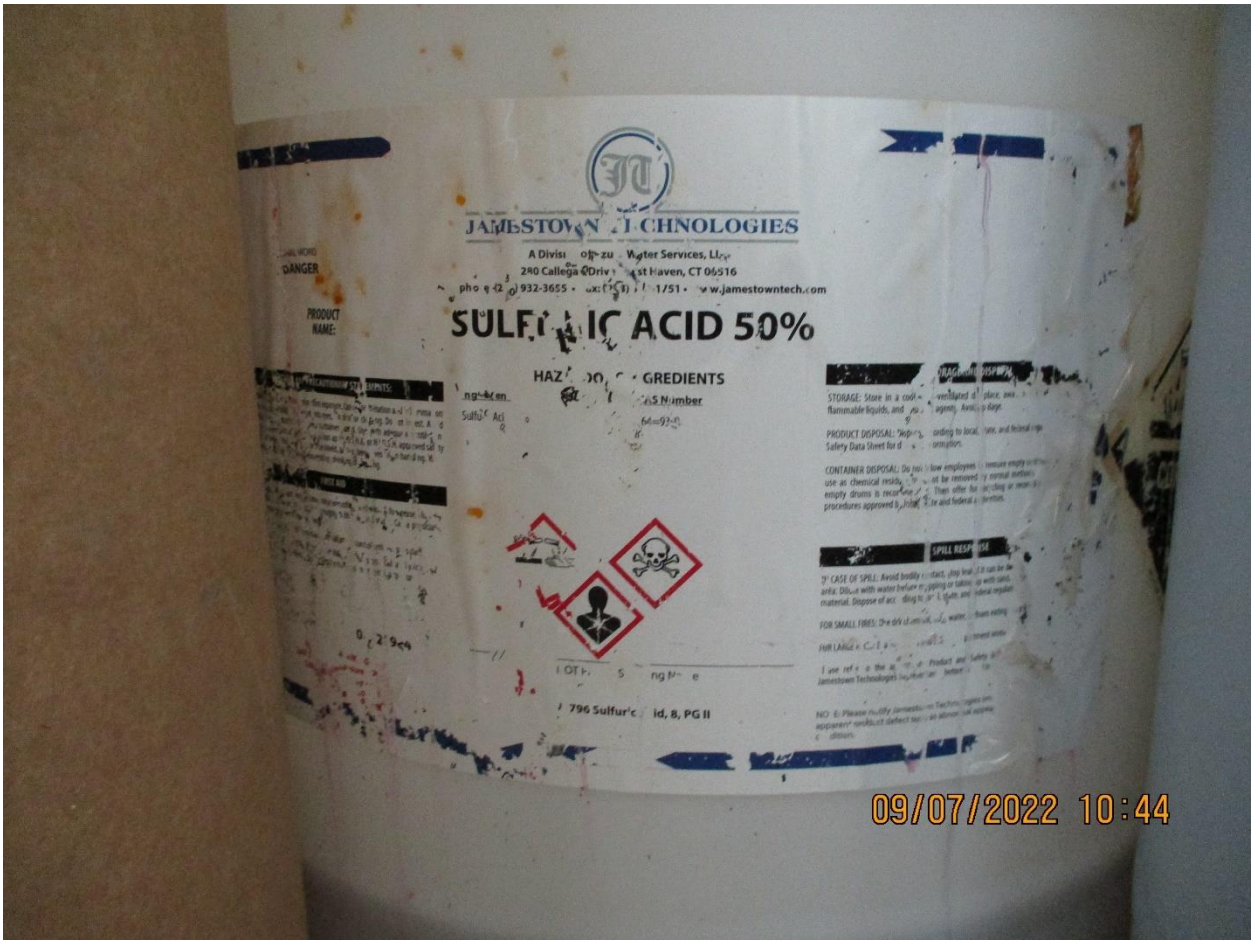


Photo 51

Label on HW container located on the right side of 90-Day HWSA, located in the Maintenance Shop

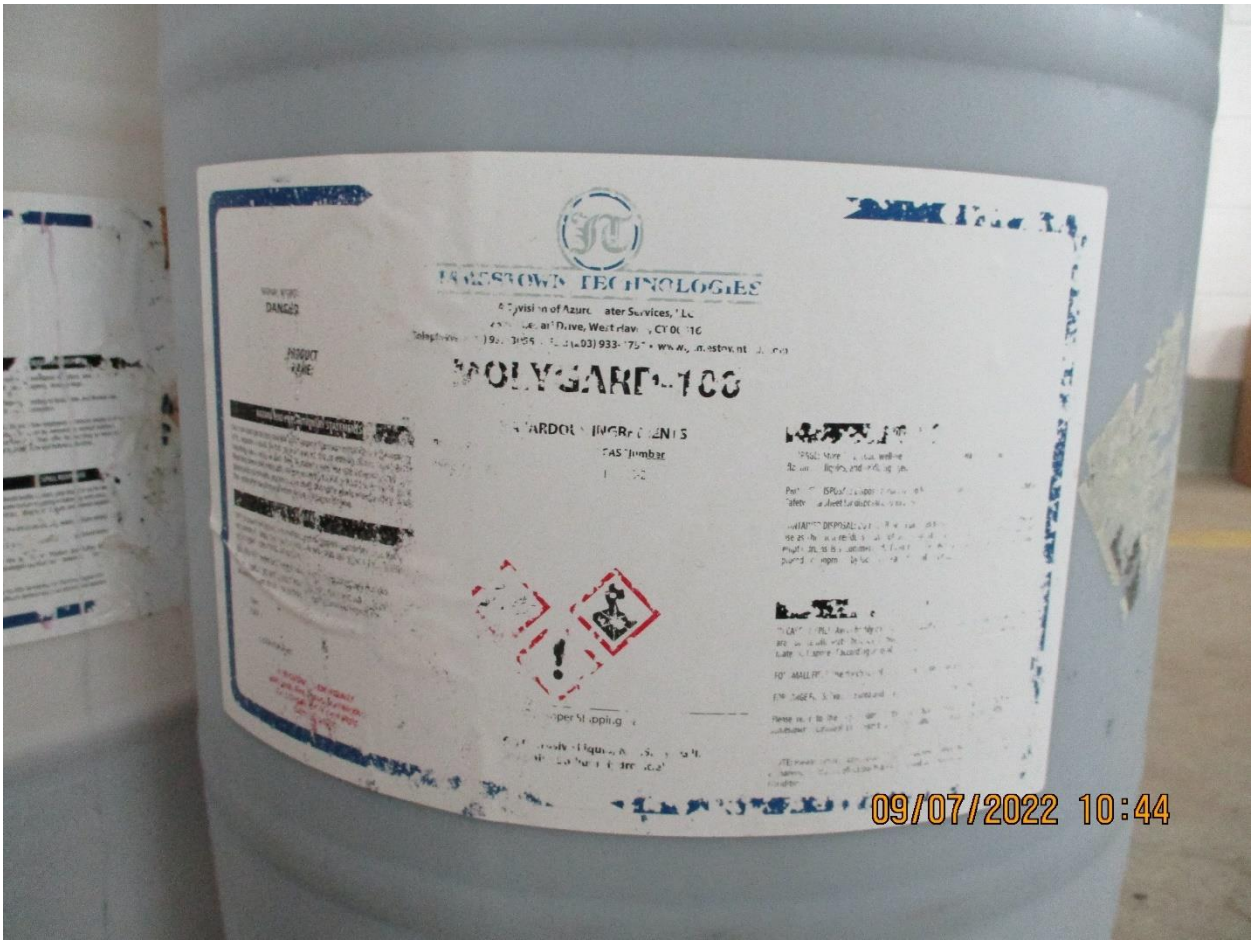


Photo 52

Label on HW container located on the right side of 90-Day HWSA, located in the Maintenance Shop

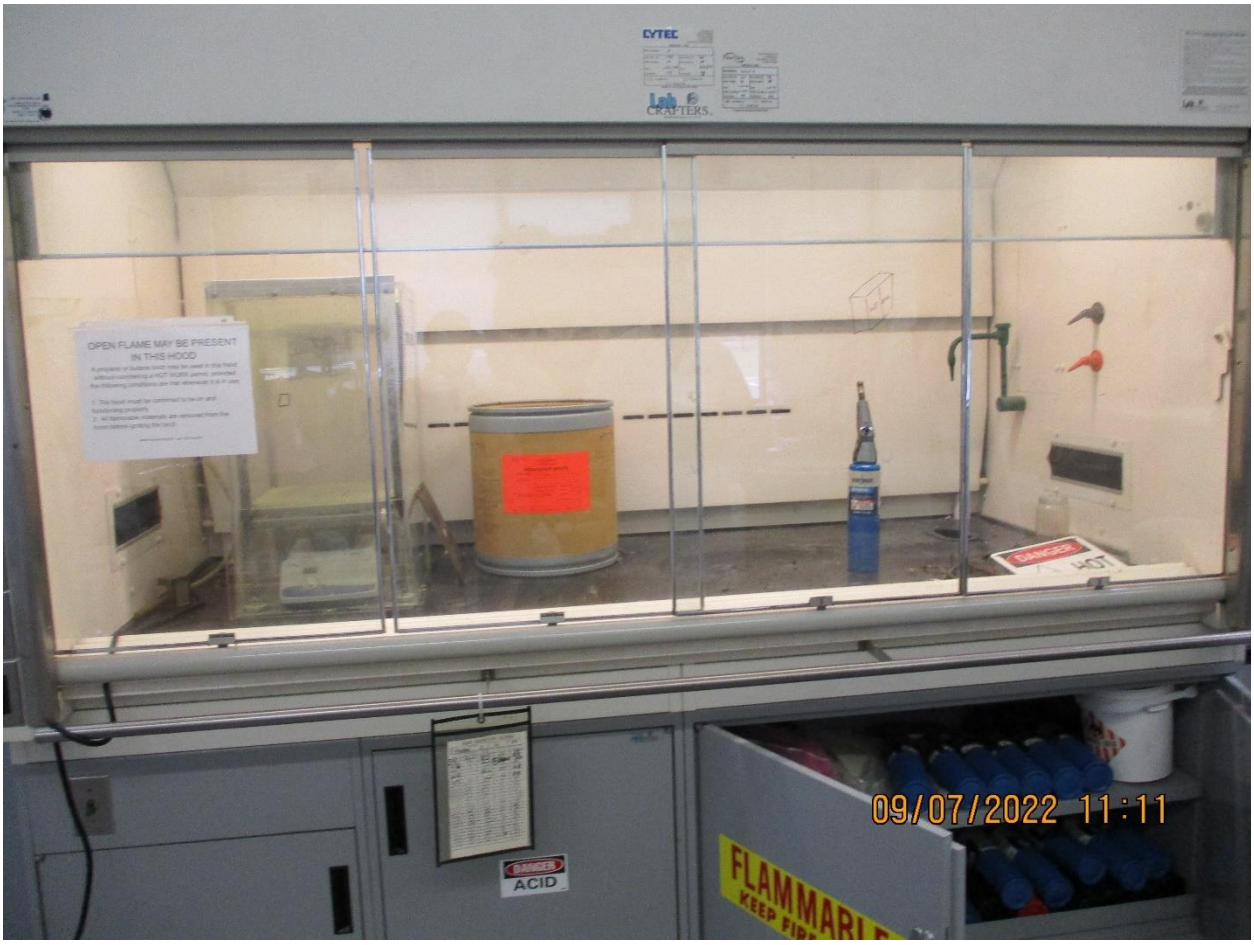


Photo 53

HW SAA container in lab hood, located in Building 13, High Bay area

Photo 54

Label on HW SAA container in lab hood, located in Building 13, High Bay area

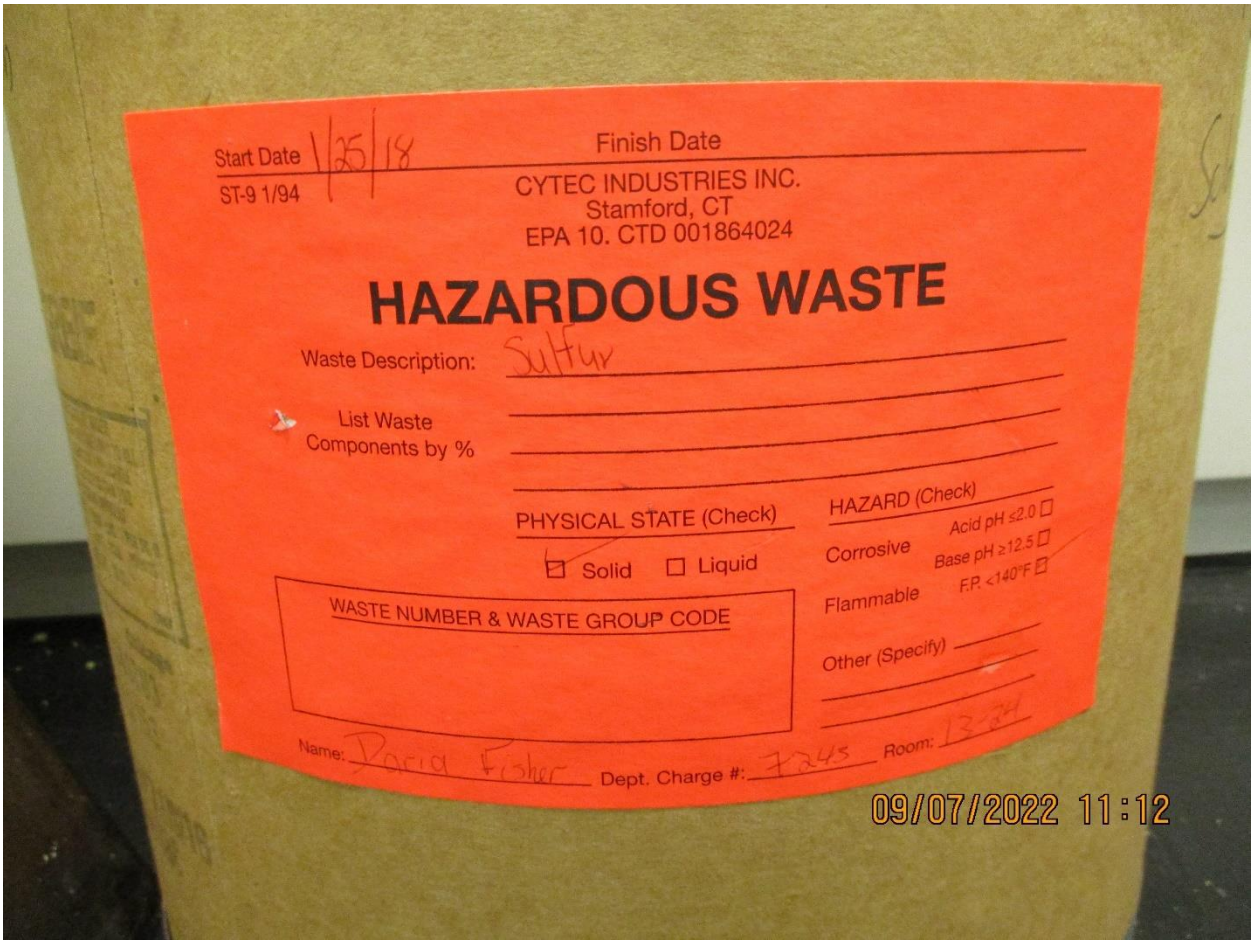


Photo 55

Label on HW SAA container in lab hood, located in Building 13, High Bay area

Photo 56

Contents in cabinet below lab hood, located in Building 13, High Bay area

Photo 57

Contents inside Pyrophoric Storage cabinet, located in Building 13, Prep Lab Room 4.4

Photo 58

Pyrophoric Storage cabinet, located in Building 13, Prep Lab Room 4.4

Photo 59

Flammable and Corrosive material located inside Pyrophoric Storage cabinet, located in Building 13, Prep Lab Room 4.4

Photo 60

Contents inside Pyrophoric Storage cabinet, located in Building 13, Prep Lab Room 4.4

Photo 61

3 containers of HW, located in Building 13, Prep Lab Room 4.4

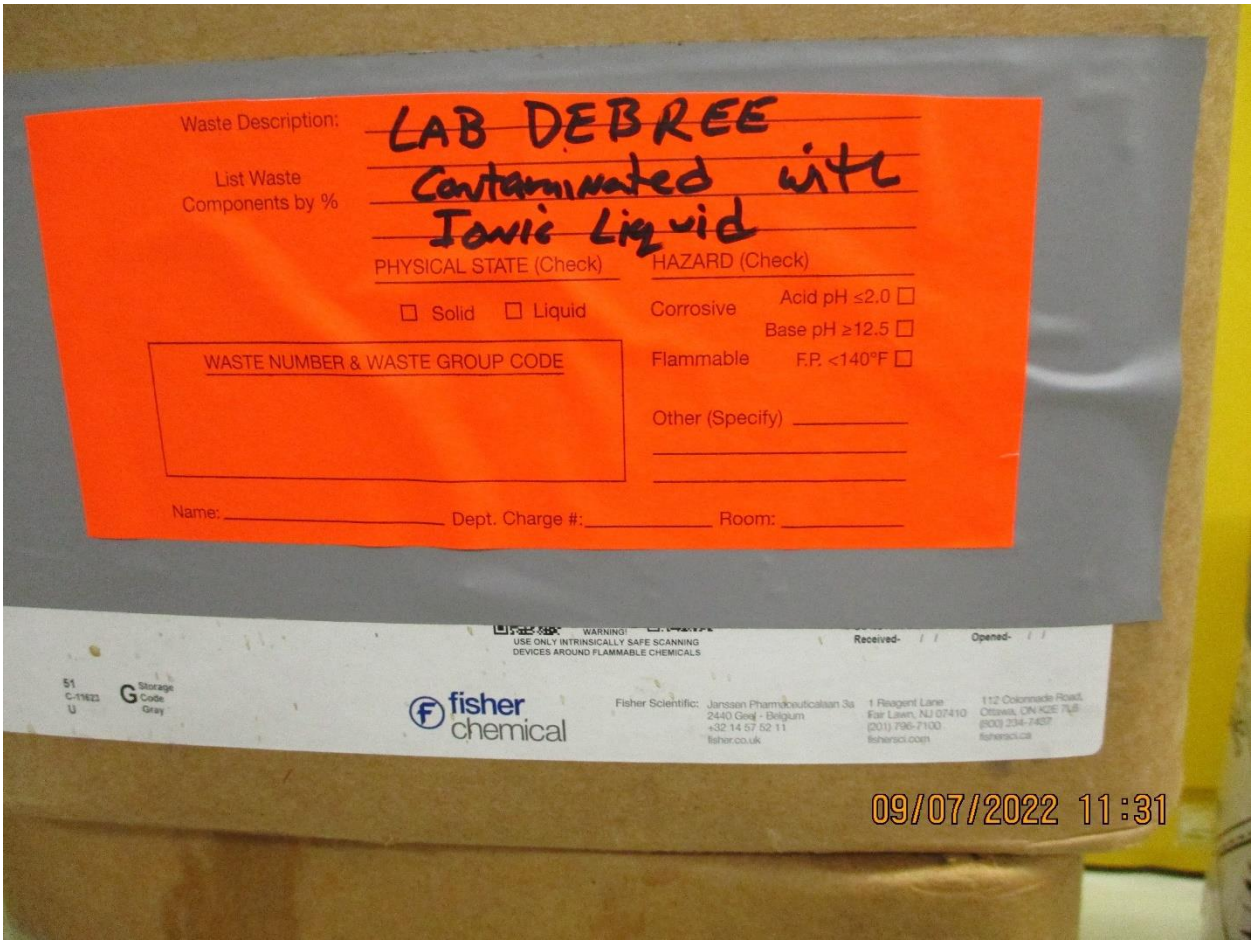


Photo 62

Label on top box of 3 containers of HW, located in Building 13, Prep Lab Room 4.4

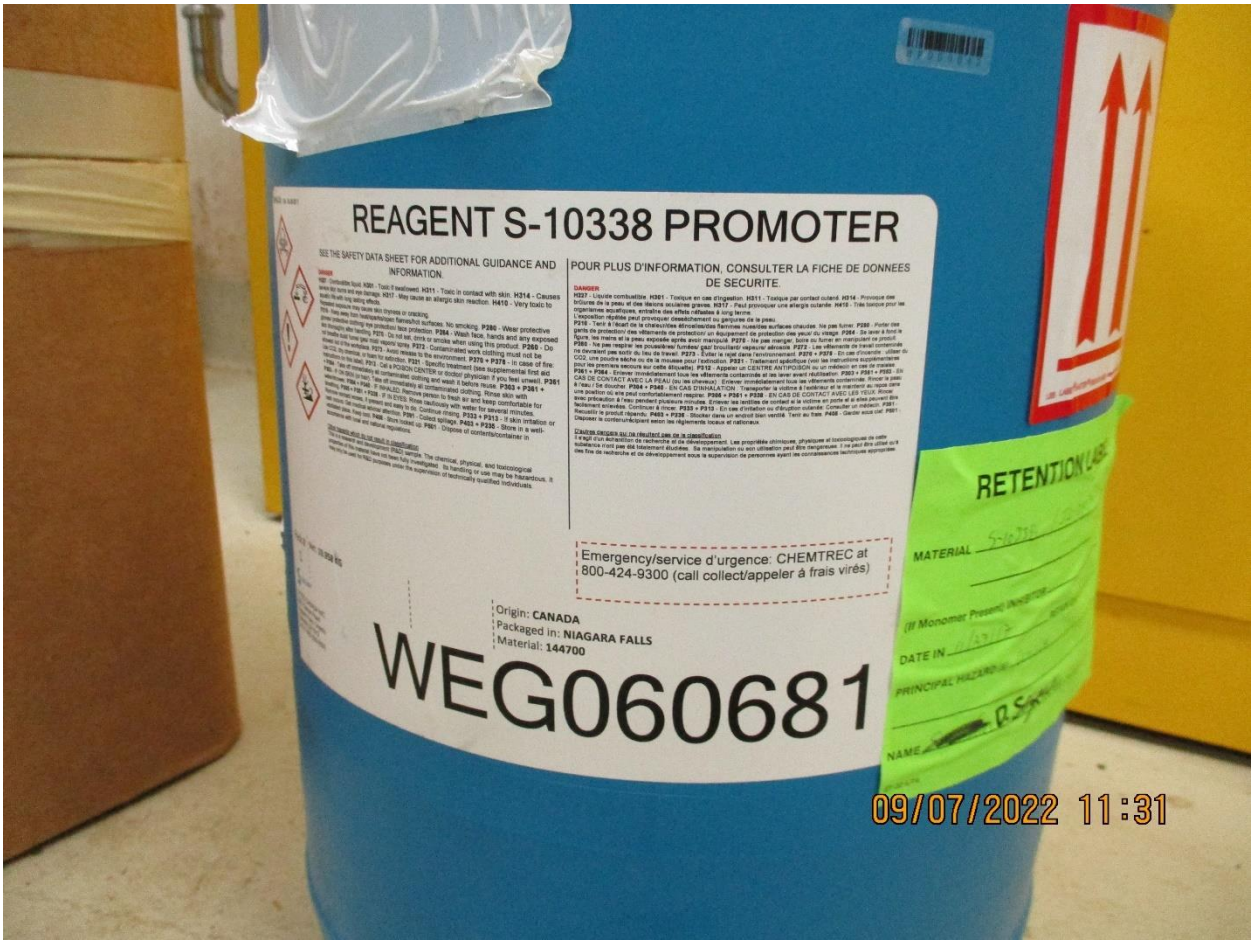


Photo 63

Label on blue container of 3 containers of HW, located in Building 13, Prep Lab Room 4.4

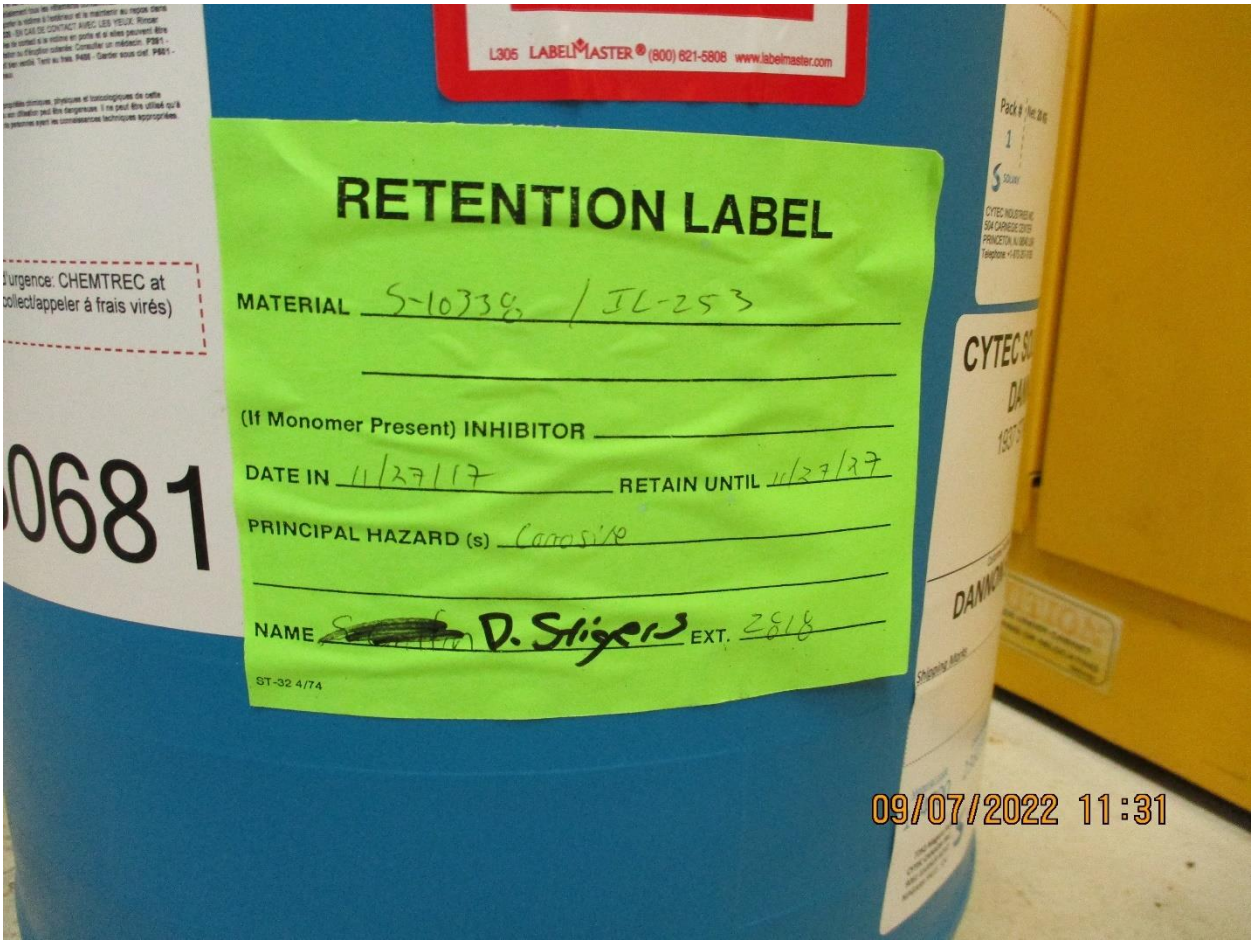


Photo 64

Label on blue container of 3 containers of HW, located in Building 13, Prep Lab Room 4.4

Photo 65

Universal Waste Fluorescent Bulbs area, and fluorescent bulb storage area, located in Building 13, QUV Lab

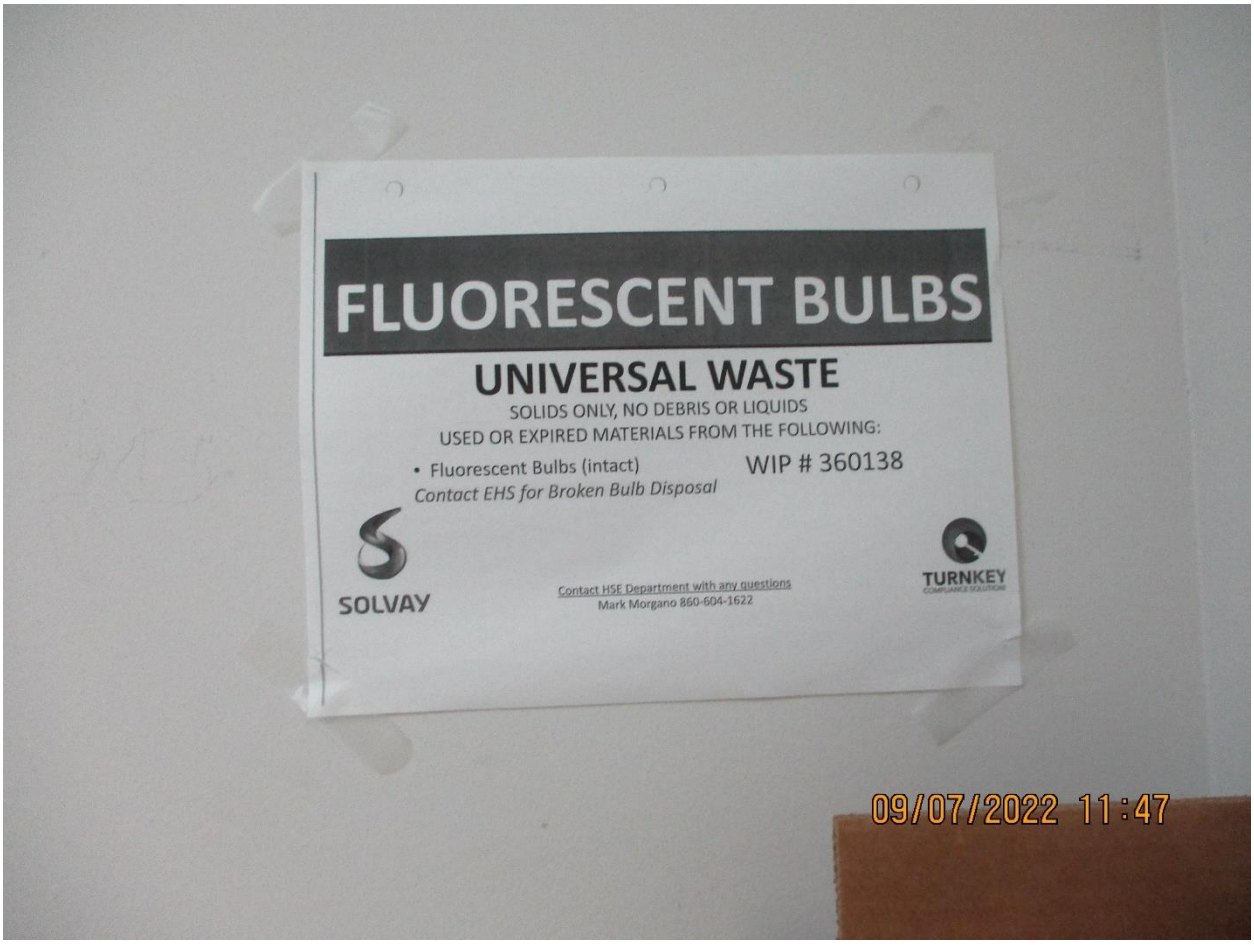


Photo 66

Signage for Universal Waste Fluorescent Bulbs area, located in Building 13, QUV Lab

Photo 67

Label on new fluorescent bulb box, located in Building 13, QUV Lab

Photo 68

Fluorescent bulb storage area for reuse of bulbs, located in Building 13, QUV Lab

Photo 69

SAA located in Building 13, Instrument Lab

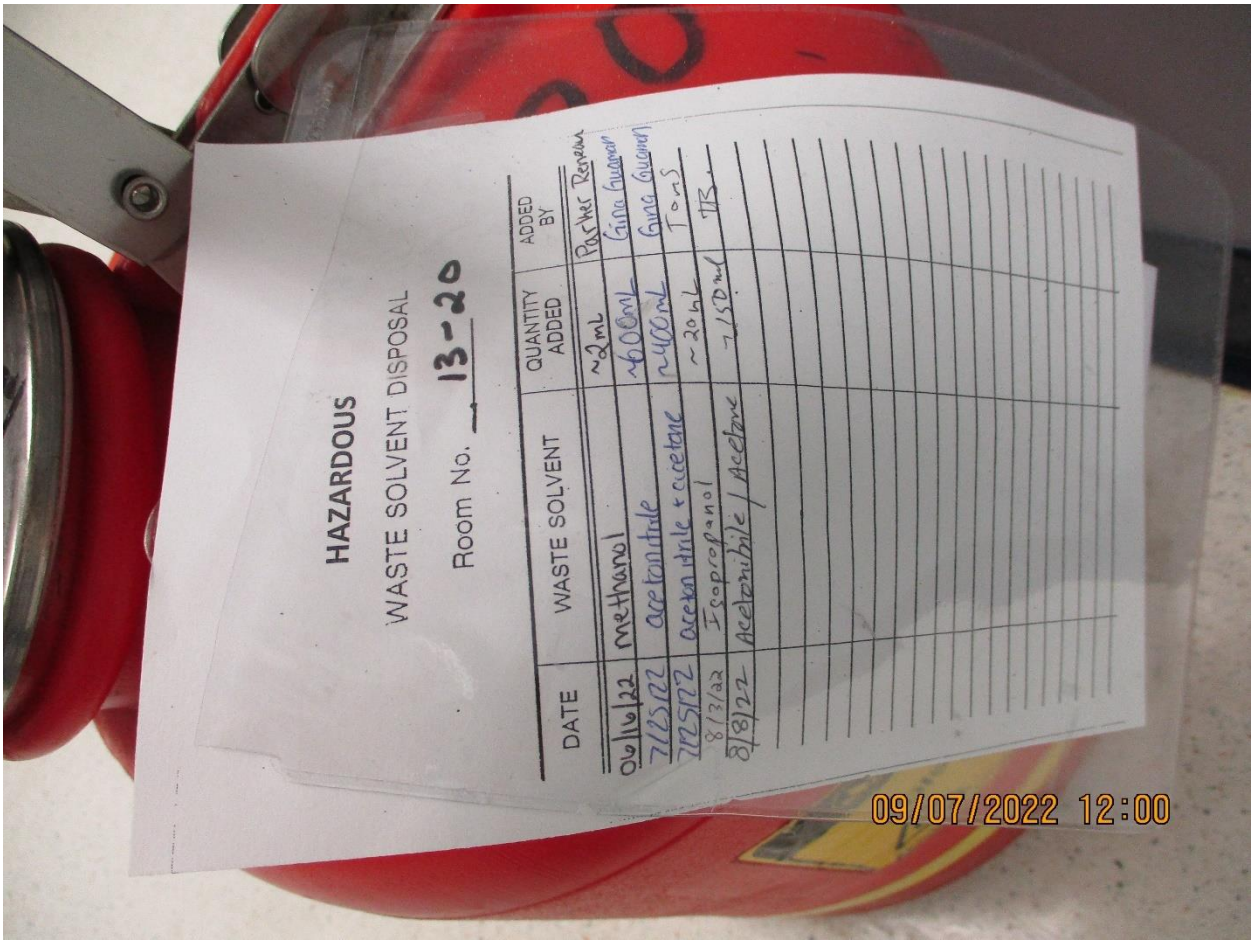


Photo 70

Inventory sheet on SAA HW container, located in Building 13, Instrument Lab

Photo 71

Signage for SAA located in Building 13, Instrument Lab

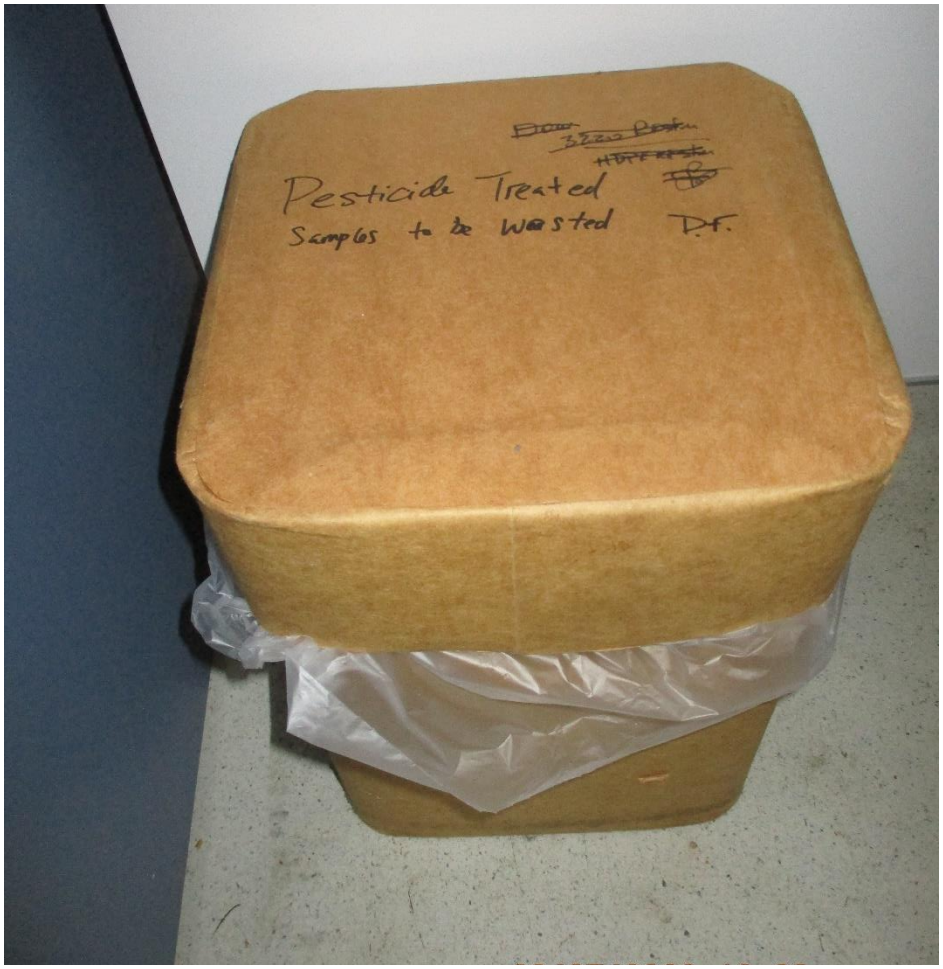


Photo 72

Container labeled, "Pesticide Treated Samples to be wasted", located behind entry door located inside Building 13, Additives Storage Room

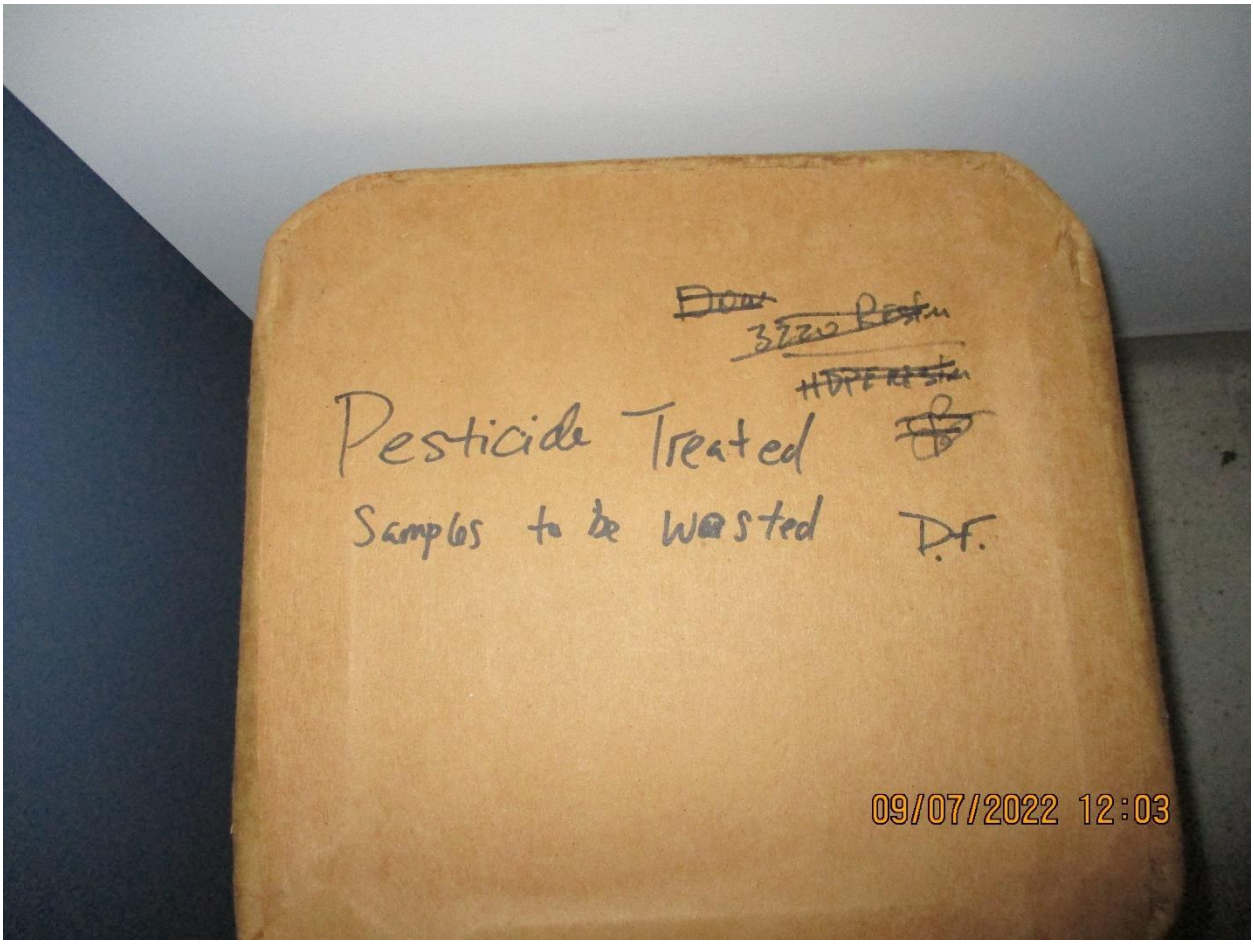


Photo 73

Top of container labeled, "Pesticide Treated Samples to be wasted", located behind entry door located inside Building 13, Additives Storage Room

Photo 74

"QUARANTINE TABLE" shelf on rack system, located inside Building 13, Additives Storage Room

Photo 75

Containers on "QUARANTINE TABLE" shelf on rack system, located inside Building 13, Additives Storage Room

Photo 76

Containers on "QUARANTINE TABLE" shelf on rack system, located inside Building 13, Additives Storage Room

Photo 77

Containers on "QUARANTINE TABLE" shelf on rack system, located inside Building 13, Additives Storage Room

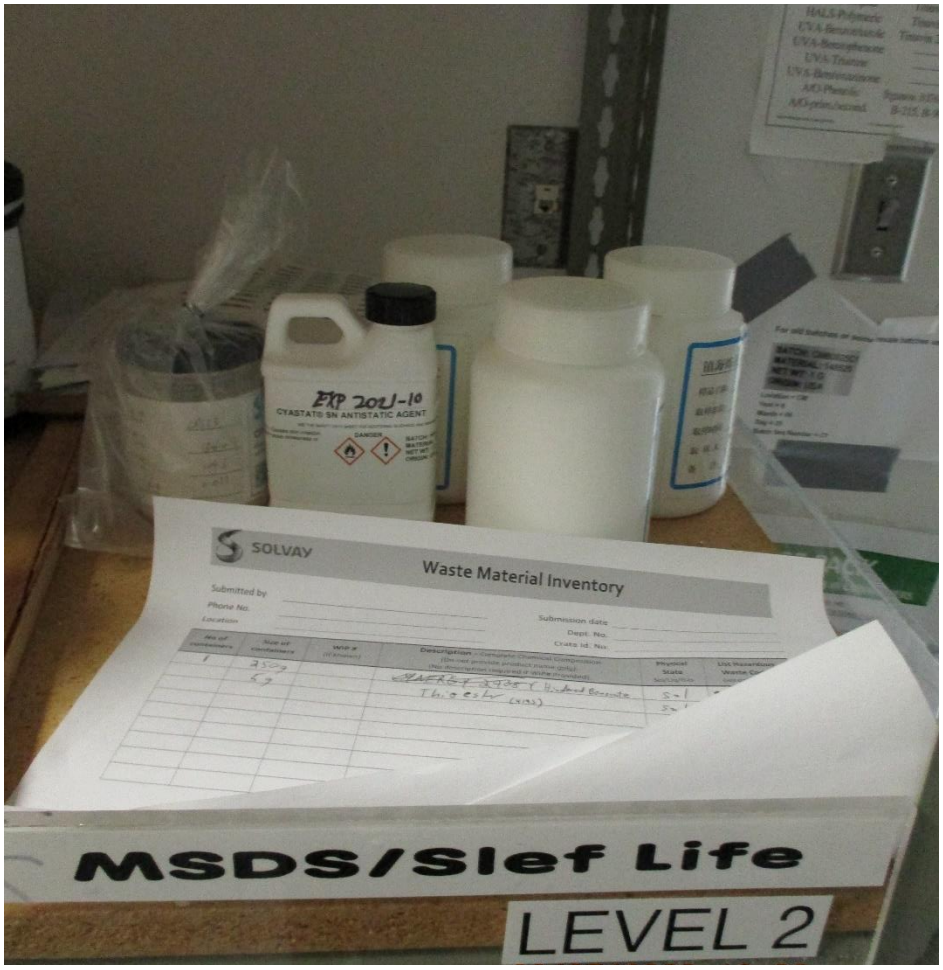


Photo 78

Inventory sheet located on "MSDS/Slef Life, LEVEL 2" shelf on rack system, located inside Building 13, Additives Storage Room

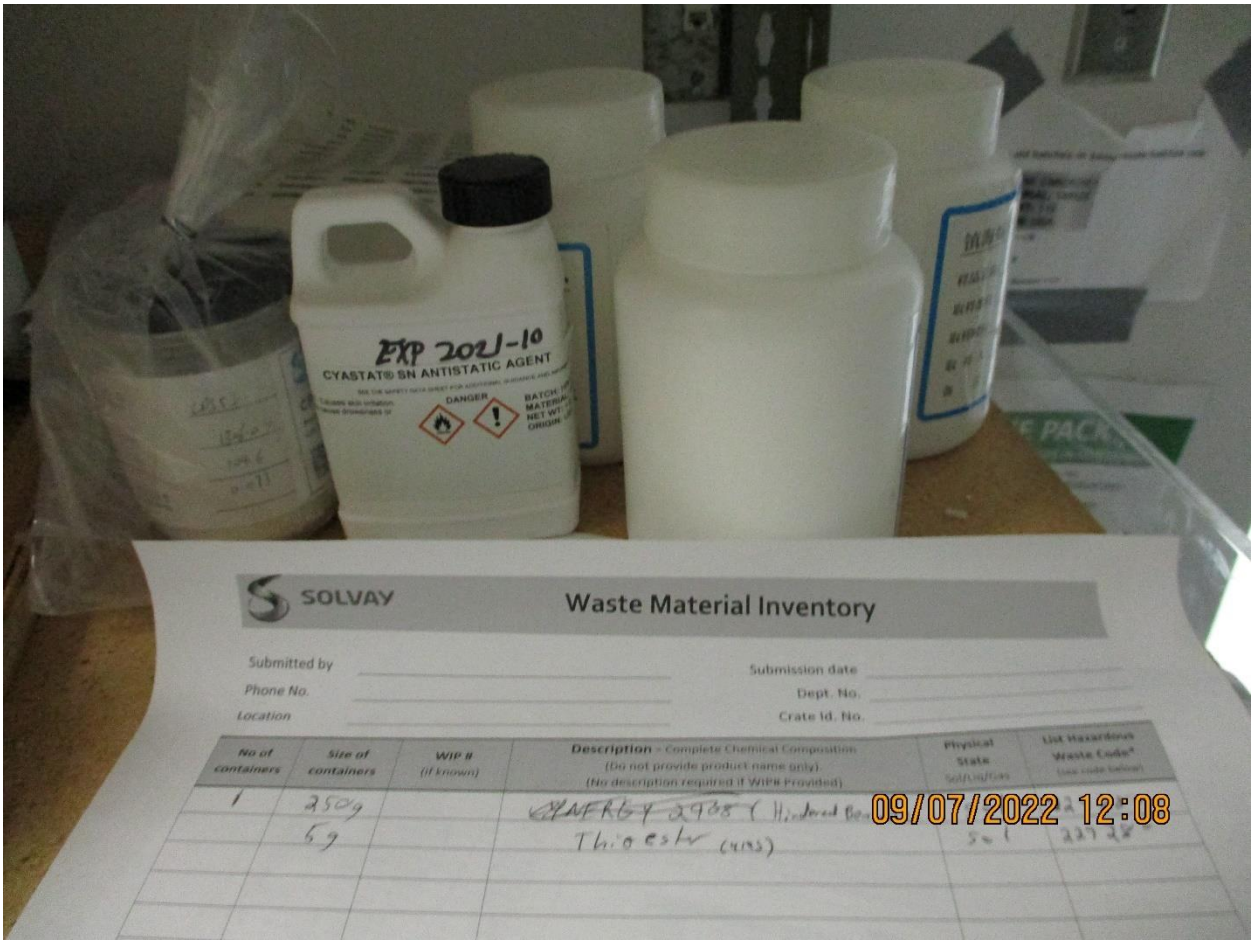


Photo 79

Inventory sheet located on "MSDS/Slef Life, LEVEL 2" shelf on rack system, located inside Building 13, Additives Storage Room

Photo 80

SAA in hood, located in Building 13, Wet Lab 22

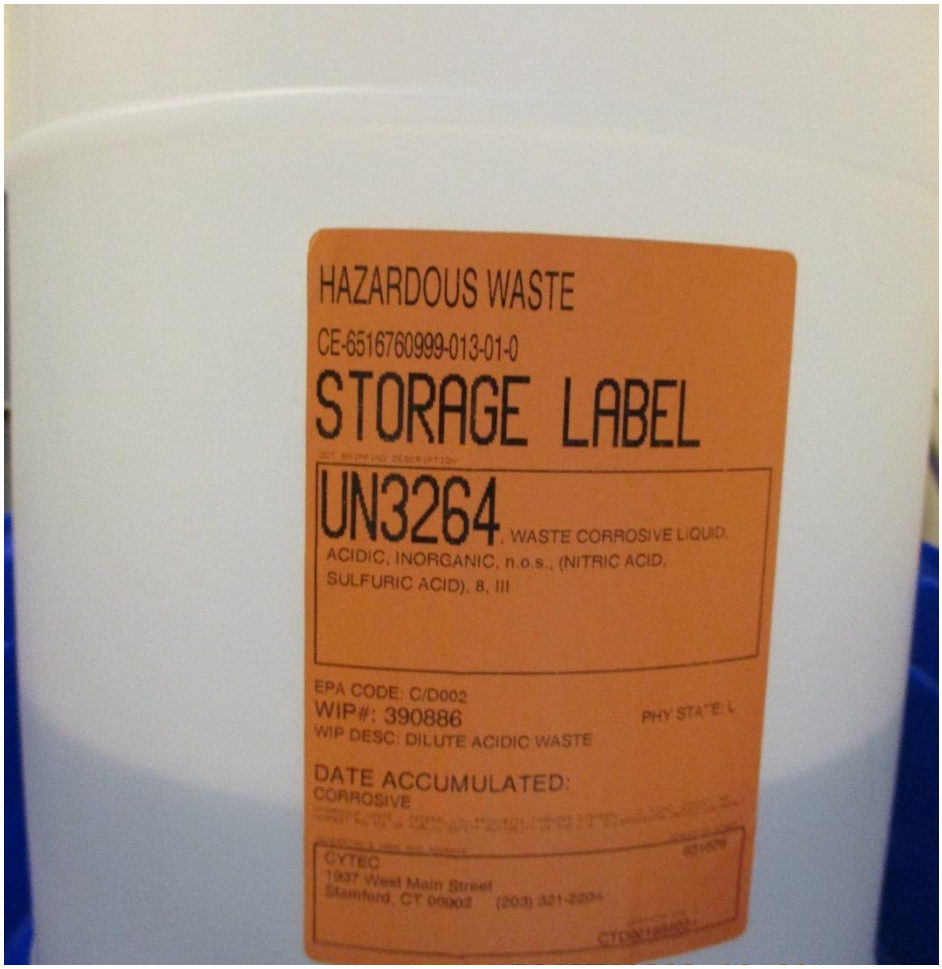


Photo 81

HW Label on SAA container in hood, located in Building 13, Wet Lab 22

Photo 82

Five lab pack boxes, located in Building 13, Wet Lab 22

Photo 83

Contents inside one of five lab pack boxes, located in Building 13, Wet Lab 22

Photo 84

Contents inside one of five lab pack boxes, located in Building 13, Wet Lab 22

Photo 85

Contents inside one of five lab pack boxes, located in Building 13, Wet Lab 22

Photo 86

SAA container, located in Building 13, Wet Lab 22

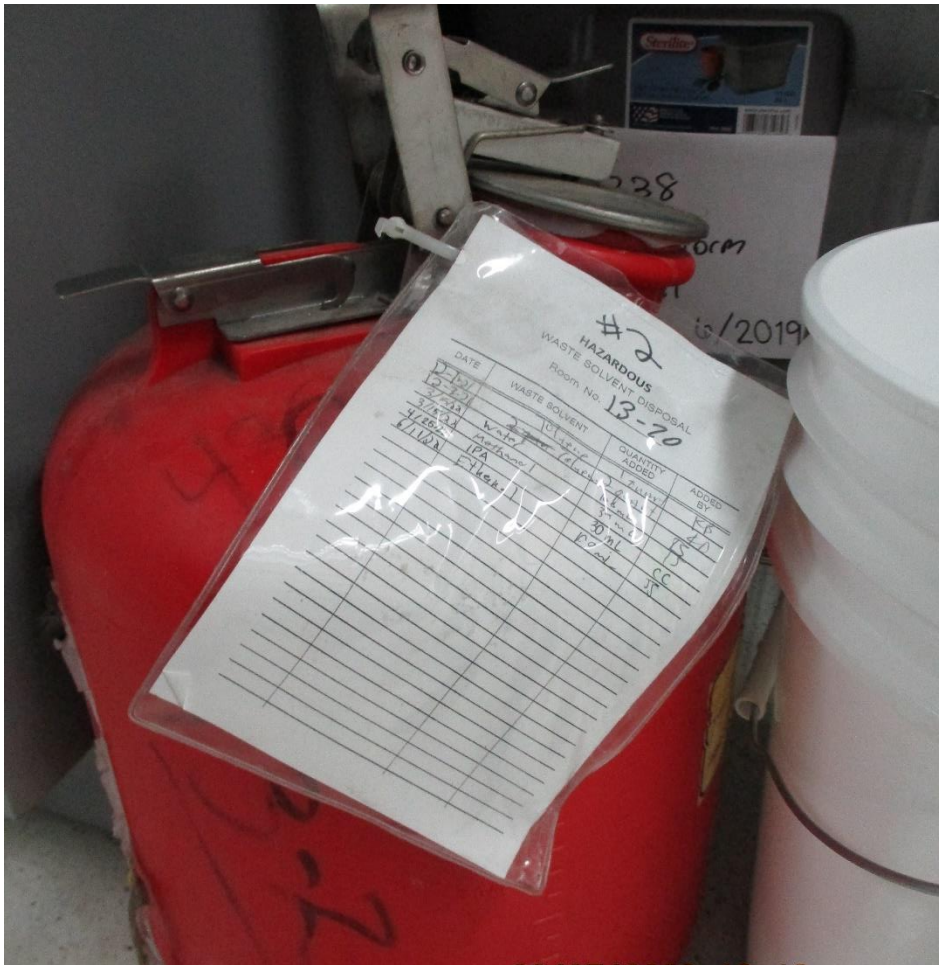


Photo 87

Inventory sheet on SAA HW container, located in Building 13, Wet Lab 22

Photo 88

Contents inside blue corrosive storage cabinets, located in Shipping and Receiving Area on Floor 1

Photo 89

Contents inside blue corrosive storage cabinets, located in Shipping and Receiving Area on Floor 1

Photo 90

Contents inside blue corrosive storage cabinets, located in Shipping and Receiving Area on Floor 1

Photo 91

Contents inside blue corrosive storage cabinets, located in Shipping and Receiving Area on Floor 1

Photo 92

Two containers for waste batteries, one "Li-ion" and one 'USED BATTERIES", located in Shipping and Receiving Area on Floor 1

Photo 93

Two containers for waste batteries, one "Li-ion" and one 'USED BATTERIES", located in Shipping and Receiving Area on Floor 1

Photo 94

Container for waste "Li-ion" batteries, located in Shipping and Receiving Area on Floor 1

Photo 95

Contents inside container for waste "Li-ion" batteries, located in Shipping and Receiving Area on Floor 1

Photo 96

Container for waste "USED BATTERIES", located in Shipping and Receiving Area on Floor 1

Photo 97

Contents inside container for waste "USED BATTERIES", located in Shipping and Receiving Area on Floor 1

Photo 98

SAA, located in Analytical Lab, Lab 238, on Floor 2

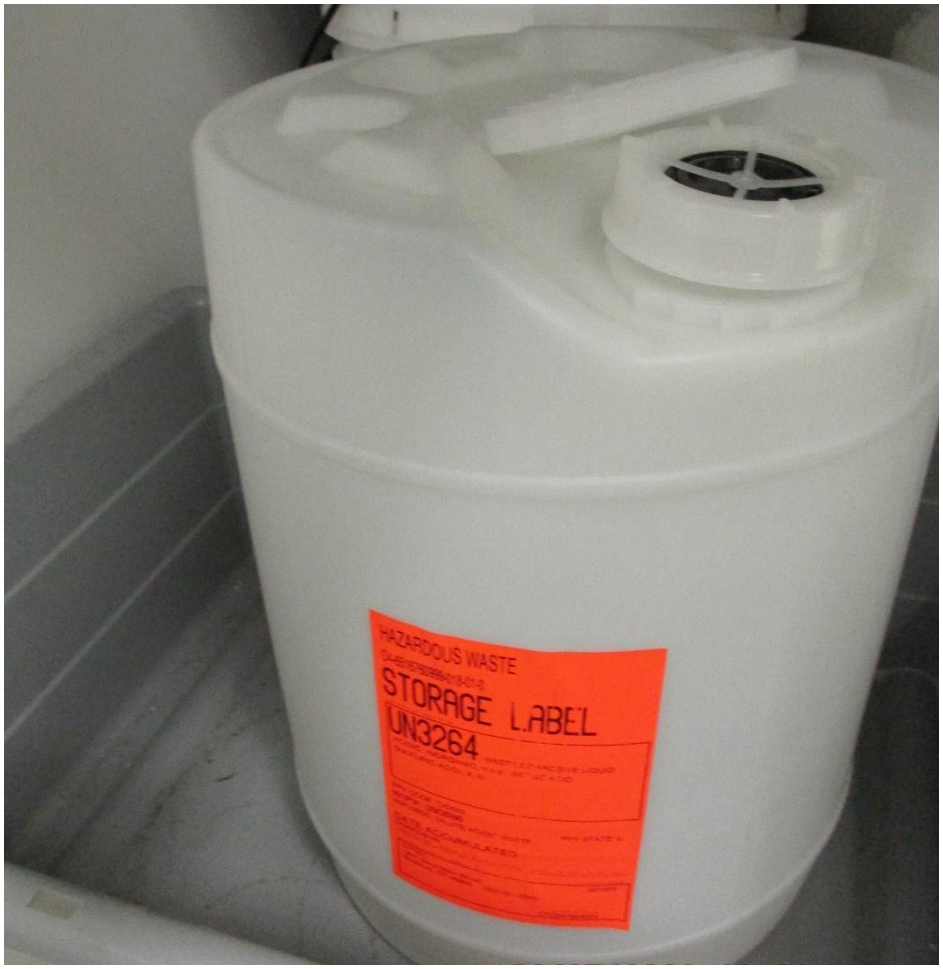


Photo 99

Label on HW container in SAA, located in Analytical Lab, Lab 238, on Floor 2

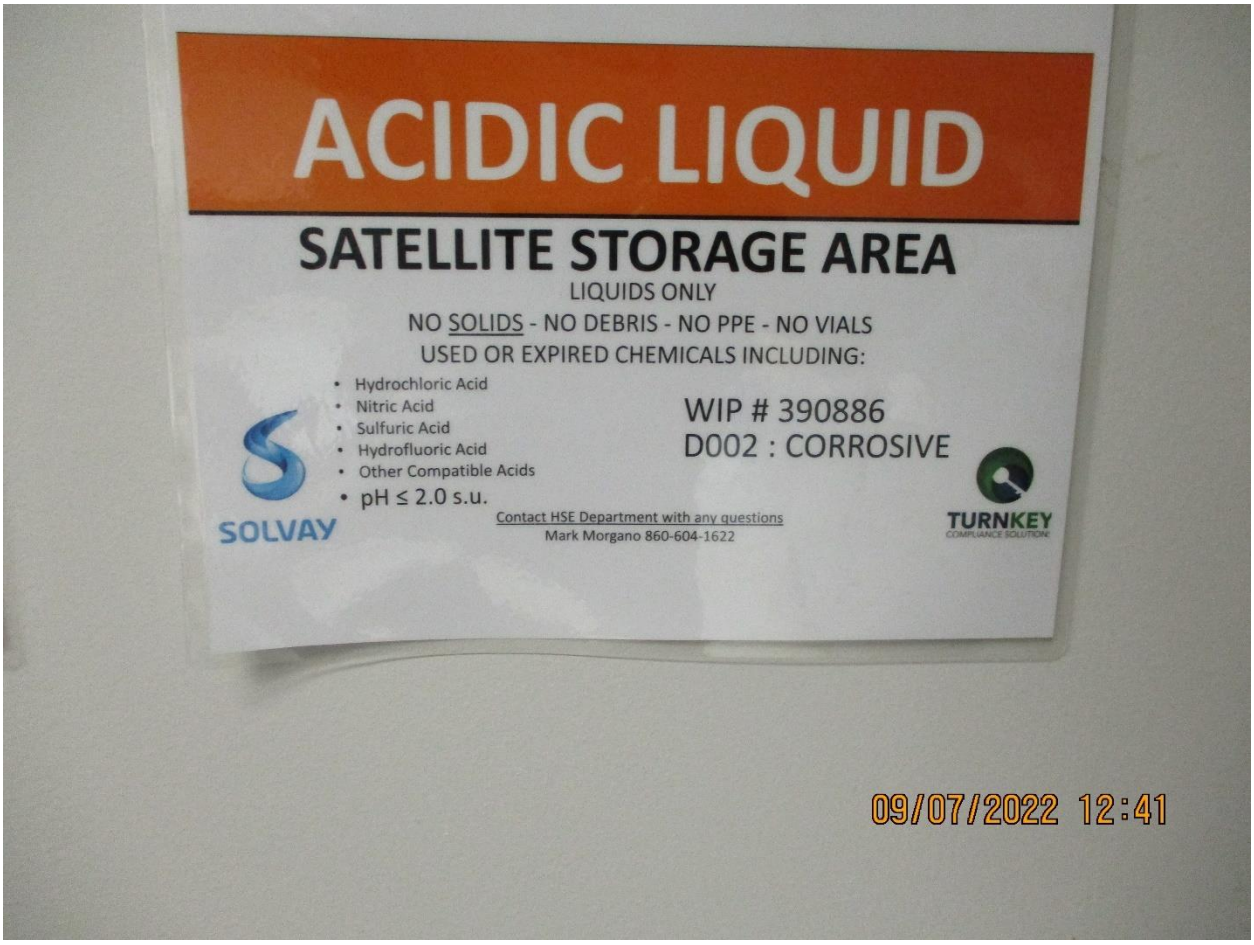


Photo 100

Signage at SAA, located in Analytical Lab, Lab 238, on Floor 2

Photo 101

SAA, located in Titrations and Classical Analysis Lab, on Floor 2

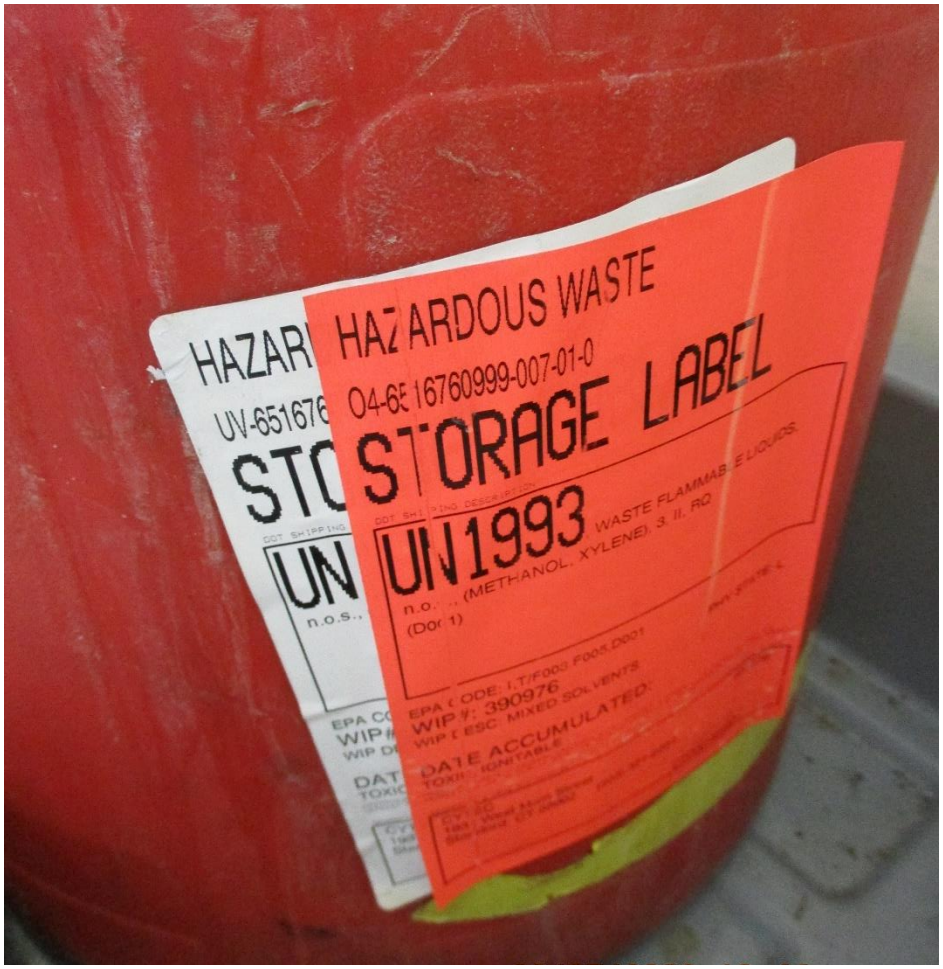


Photo 102

Label on HW container in SAA, located in Titrations and Classical Analysis Lab, on Floor 2

Photo 103

Signage at SAA, located in Titrations and Classical Analysis Lab, on Floor 2

Photo 104

Red lab pack container on shelf located in Titrations and Classical Analysis Lab, on Floor 2

Photo 105

Contents inside red lab pack container on shelf located in Titrations and Classical Analysis Lab, on Floor 2

Photo 106

SAA in hood, located in Titrations and Classical Analysis Lab, on Floor 2

Photo 107

Glass container labelled, "Acetone Waste" in hood, located in Titrations and Classical Analysis Lab, on Floor 2

Photo 108

Signage at SAA in hood, located in Titrations and Classical Analysis Lab, on Floor 2

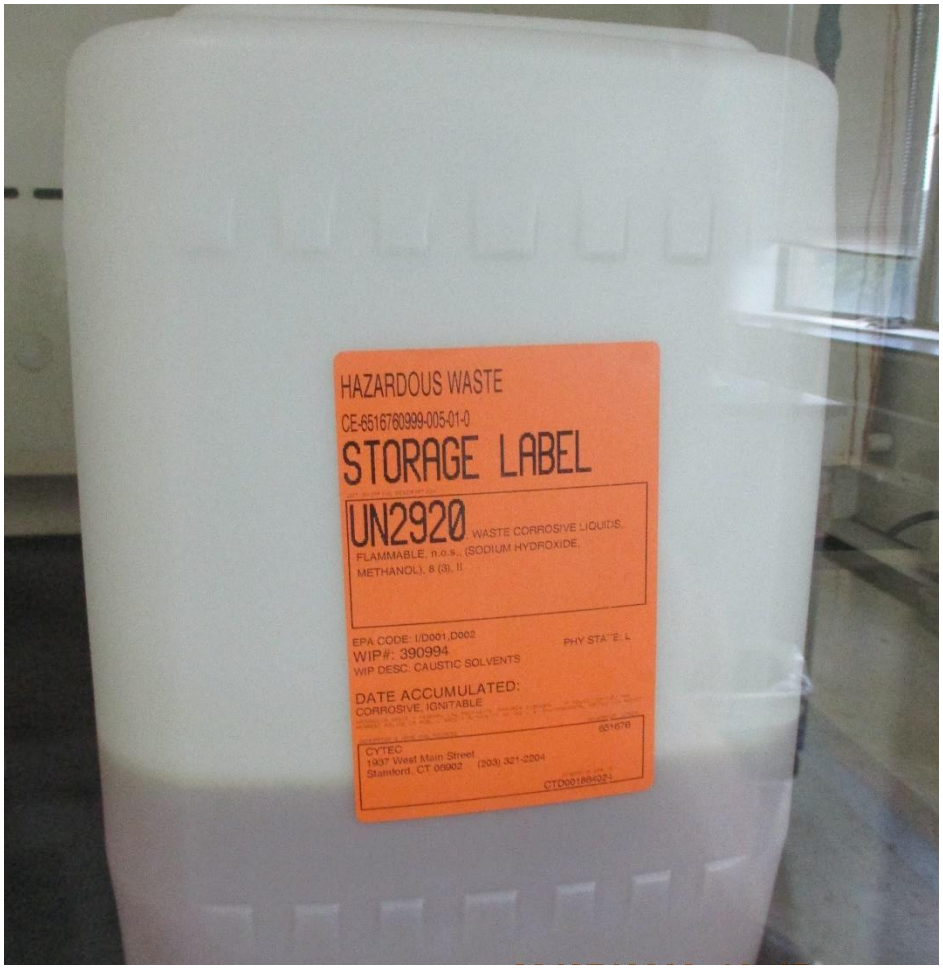


Photo 109

HW label on SAA container in hood, located in Titrations and Classical Analysis Lab, on Floor 2

Photo 110

SAA located in NMR & IR Preparations Lab, on Floor 2

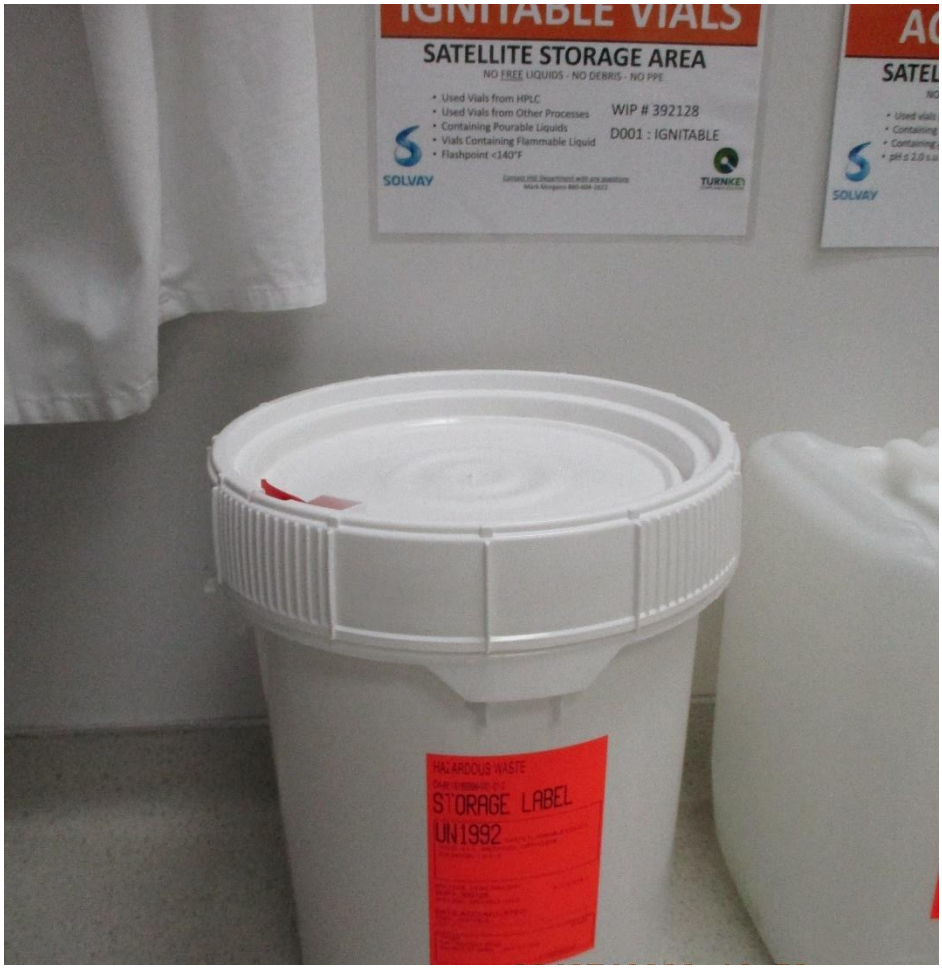


Photo 111

One HW container and signage for SAA located in NMR & IR Preparations Lab, on Floor 2

Photo 112

One HW container and signage for SAA located in NMR & IR Preparations Lab, on Floor 2

Photo 113

One HW container and signage for SAA located in NMR & IR Preparations Lab, on Floor 2

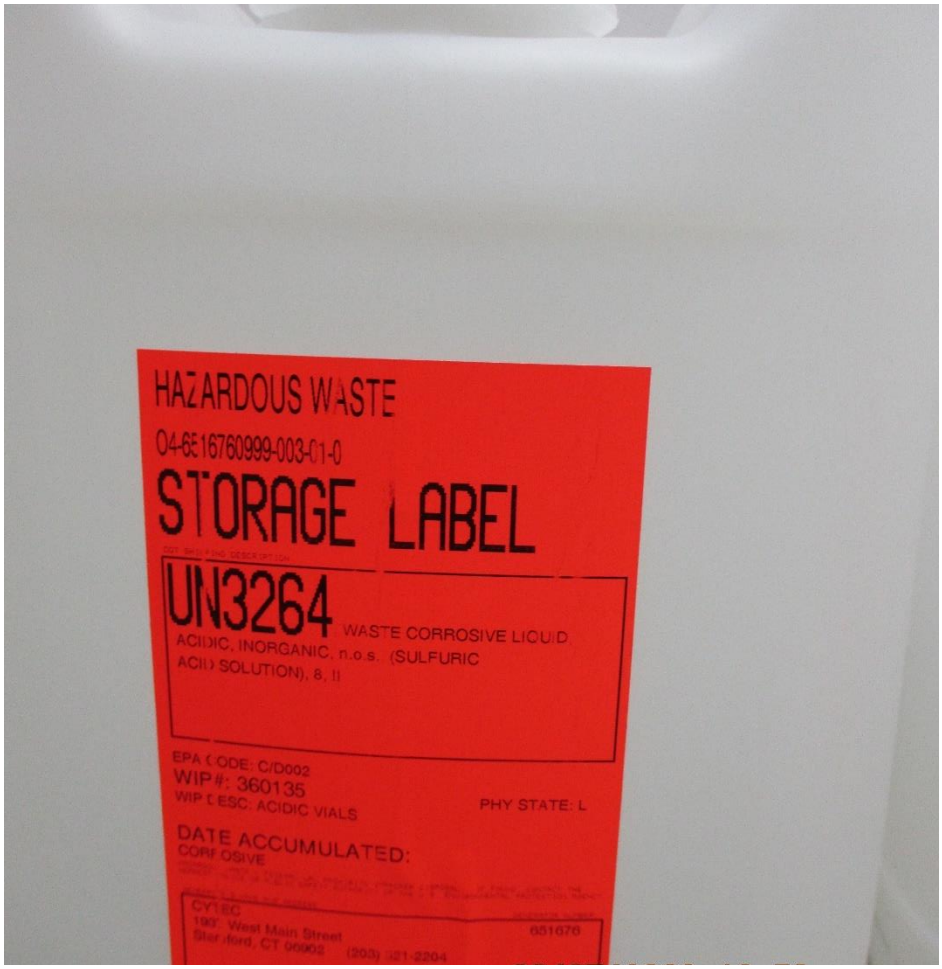


Photo 114

HW label on HW SAA container, located in NMR & IR Preparations Lab, on Floor 2

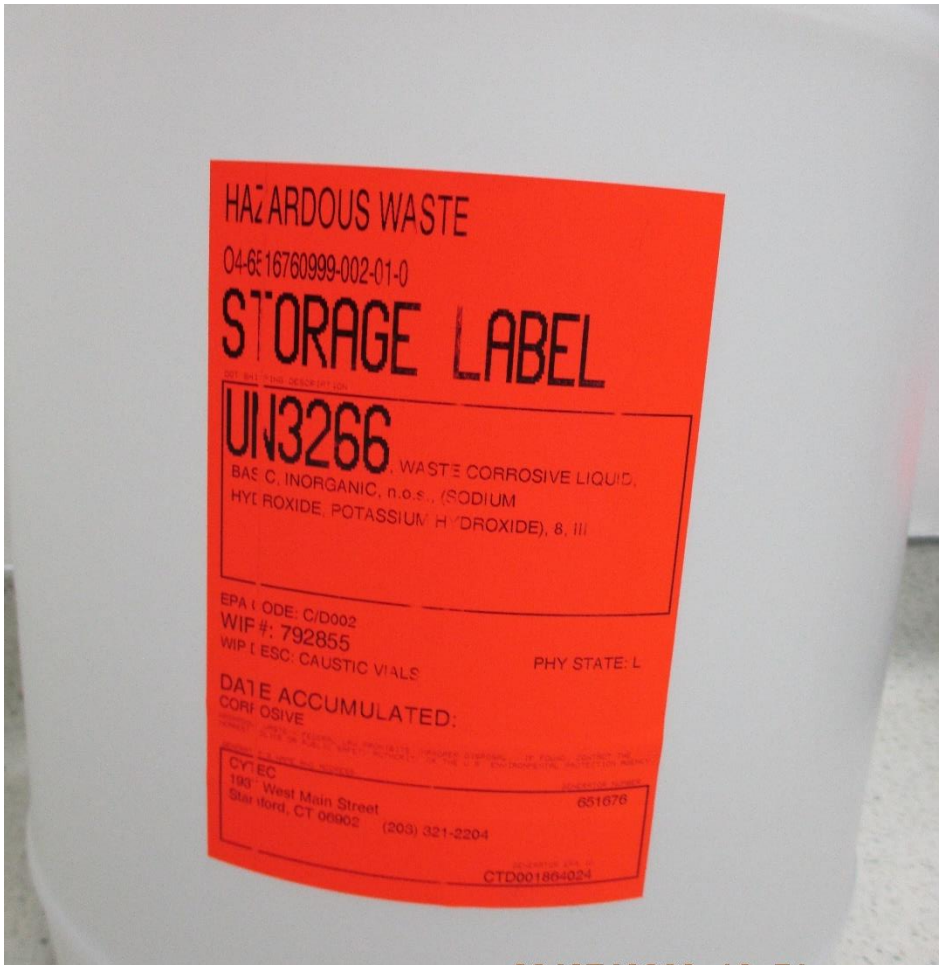


Photo 115

HW label on HW SAA container, located in NMR & IR Preparations Lab, on Floor 2

Photo 116

One HW container and signage for SAA located in NMR & IR Preparations Lab, on Floor 2

Photo 117

HW label on HW SAA container, located in NMR & IR Preparations Lab, on Floor 2

Photo 118

SAA in hood, located in Analytical Separations Prep Lab, on Floor 2

Photo 119

HW container in SAA in hood, located in Analytical Separations Prep Lab, on Floor 2

Photo 120

Signage at SAA in hood, located in Analytical Separations Prep Lab, on Floor 2

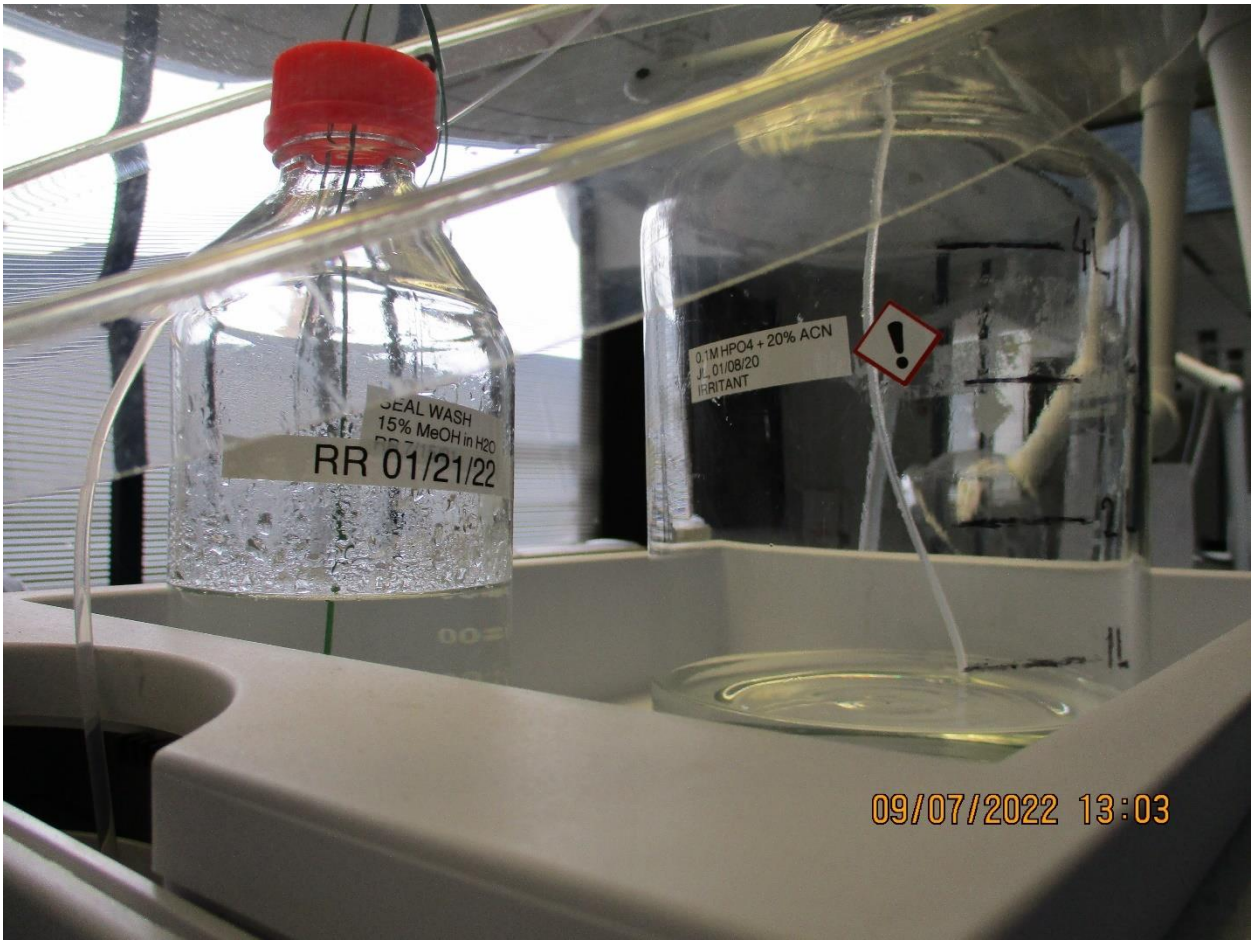


Photo 121

Feed containers, feeding Size Exclusion Chromatography instrument, located in Analytical Separations Lab, Lab 234, on Floor 2

Photo 122

Feed containers, feeding Size Exclusion Chromatography instrument, located in Analytical Separations Lab, Lab 234, on Floor 2

Photo 123

Waste containers collecting waste from Size Exclusion Chromatography instrument, located in Analytical Separations Lab, Lab 234, on Floor 2

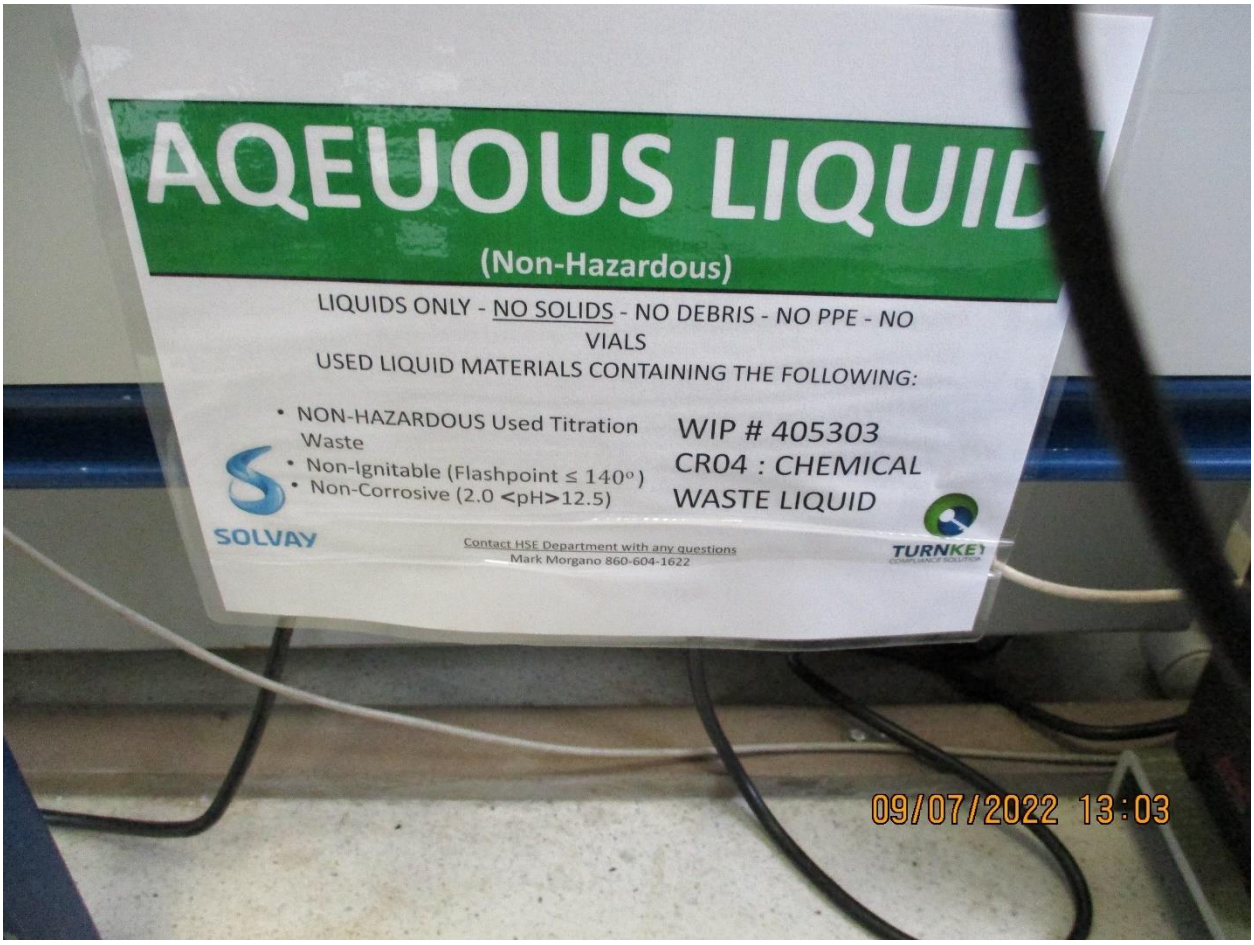


Photo 124

Signage at waste containers collecting waste from Size Exclusion Chromatography instrument, located in Analytical Separations Lab, Lab 234, on Floor 2

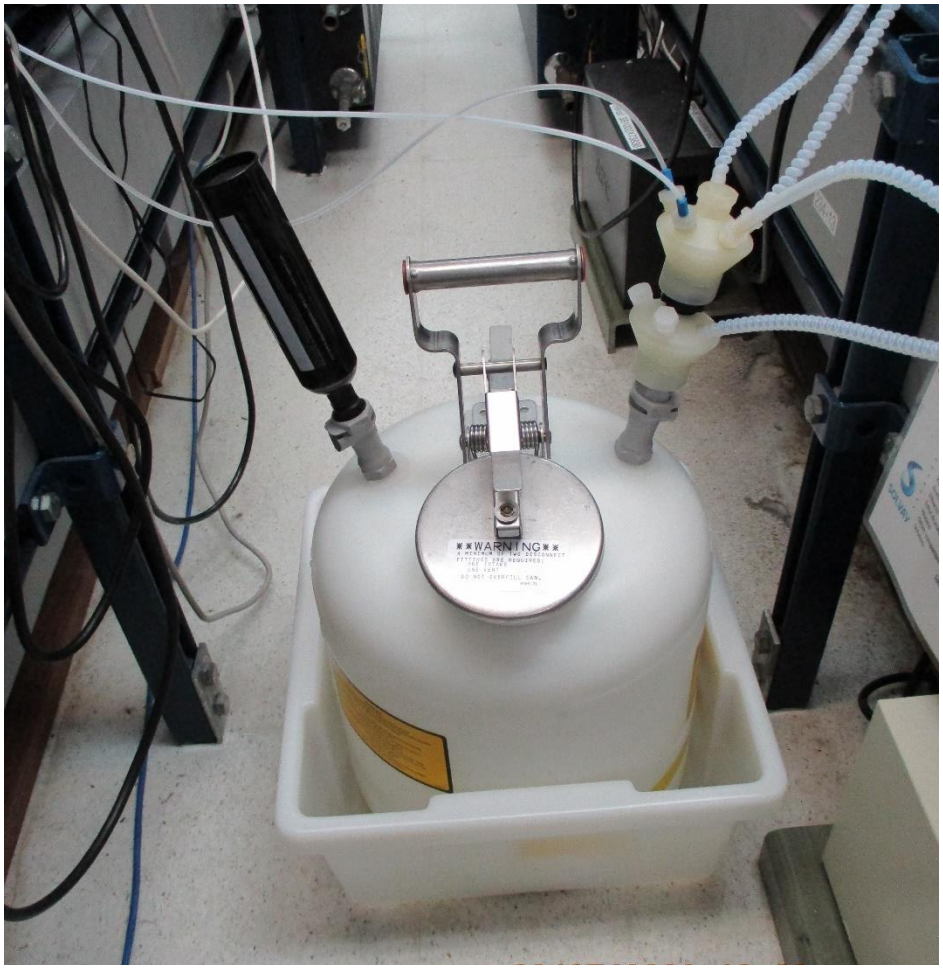


Photo 125

SAA HW container collecting THF waste from another Size Exclusion Chromatography instrument, located in Analytical Separations Lab, Lab 234 on Floor 2

Photo 126

Signage at SAA HW container collecting THF waste from another Size Exclusion Chromatography instrument, located in Analytical Separations Lab, Lab 234, on Floor 2

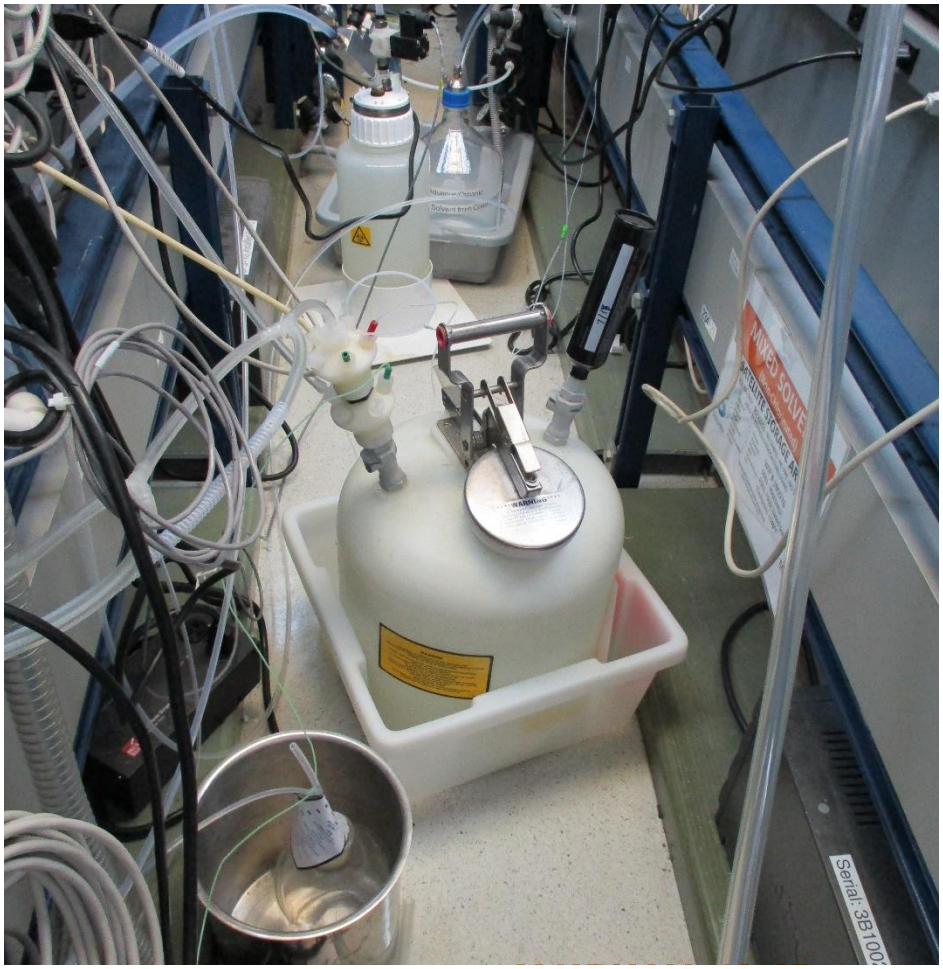


Photo 127

SAA with two containers collecting HW for two instruments, located in Analytical Separations Lab, Lab 234, on Floor 2

Photo 128

Signage at SAA with two containers collecting HW for two instruments, located in Analytical Separations Lab, Lab 234, on Floor 2

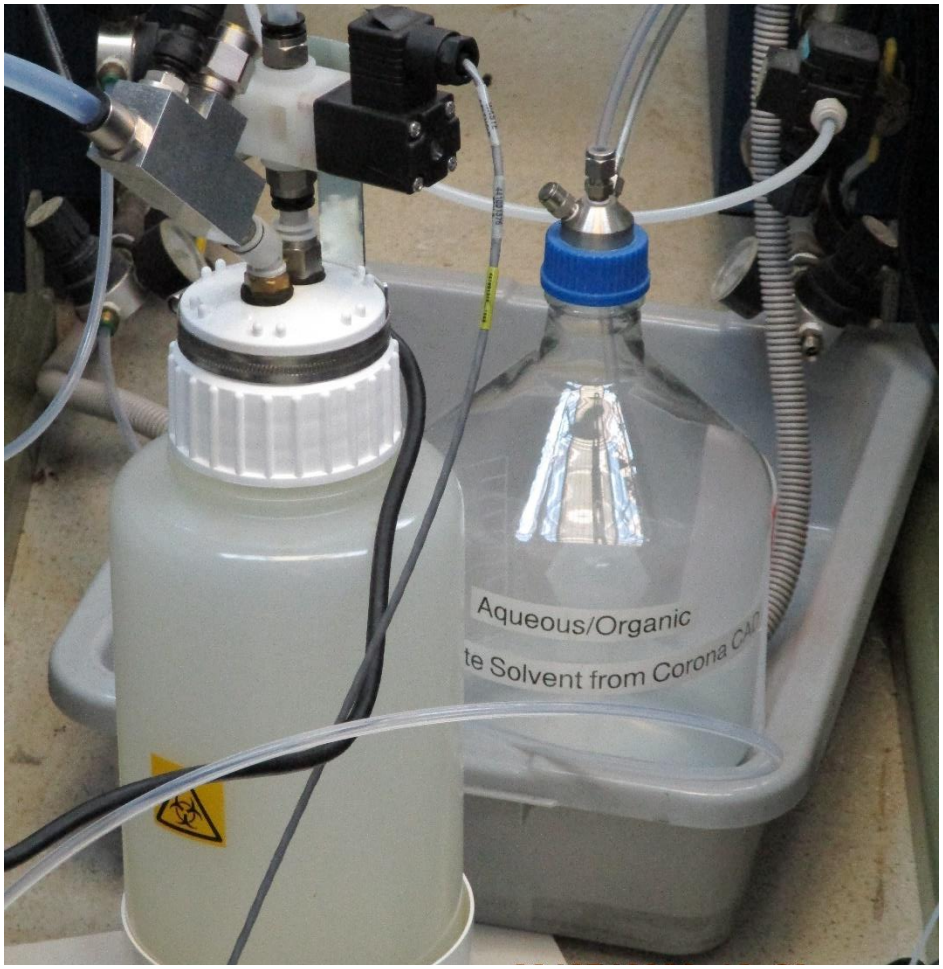


Photo 129

HW container at SAA with two containers collecting HW for two instruments, located in Analytical Separations Lab, Lab 234, on Floor 2

Photo 130

Red lab pack container on shelf located in Analytical Separations Lab, Lab 234, on Floor 2

Photo 131

Contents inside red lab pack container on shelf located in Analytical Separations Lab, Lab 234 on Floor 2

Photo 132

SAA in hood located in Separations Prep Lab, Lab 232, on Floor 2

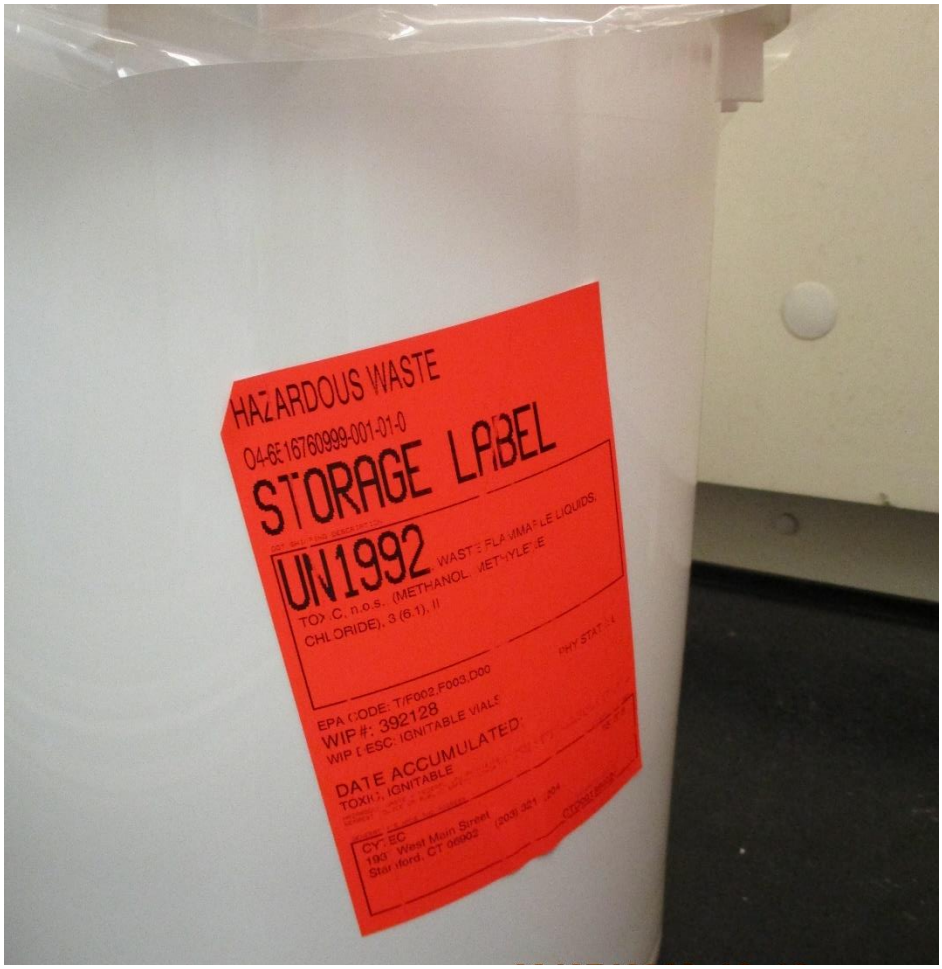


Photo 133

Label on SAA HW container, located in Separations Prep Lab, Lab 232, on Floor 2

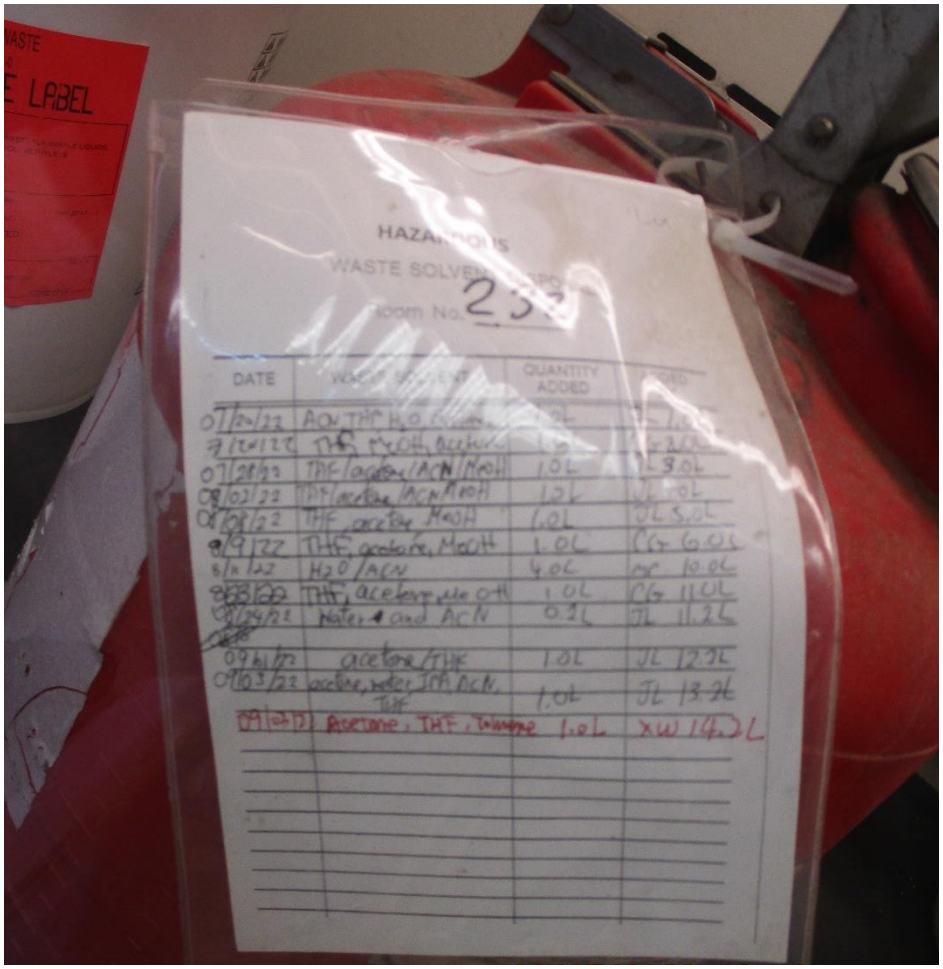


Photo 134

Inventory sheet on SAA HW container, located in Separations Prep Lab, Lab 232, on Floor 2

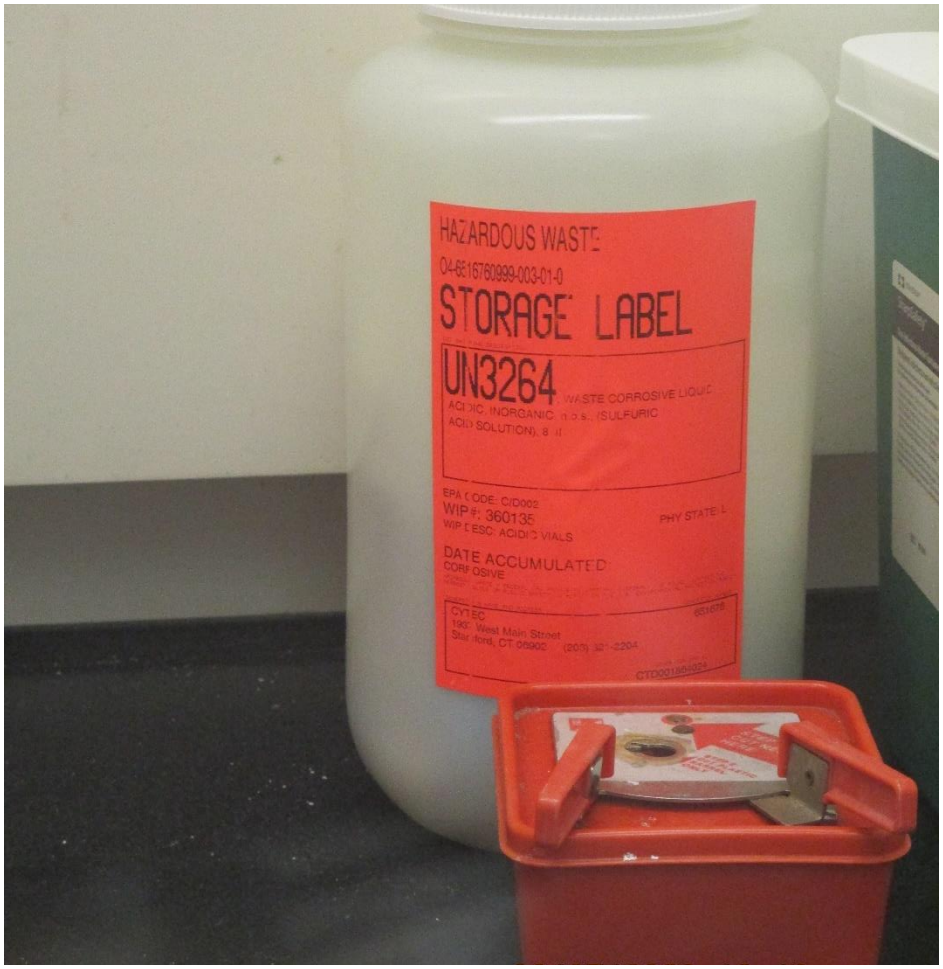


Photo 135

Label on SAA HW container, located in Separations Prep Lab, Lab 232, on Floor 2

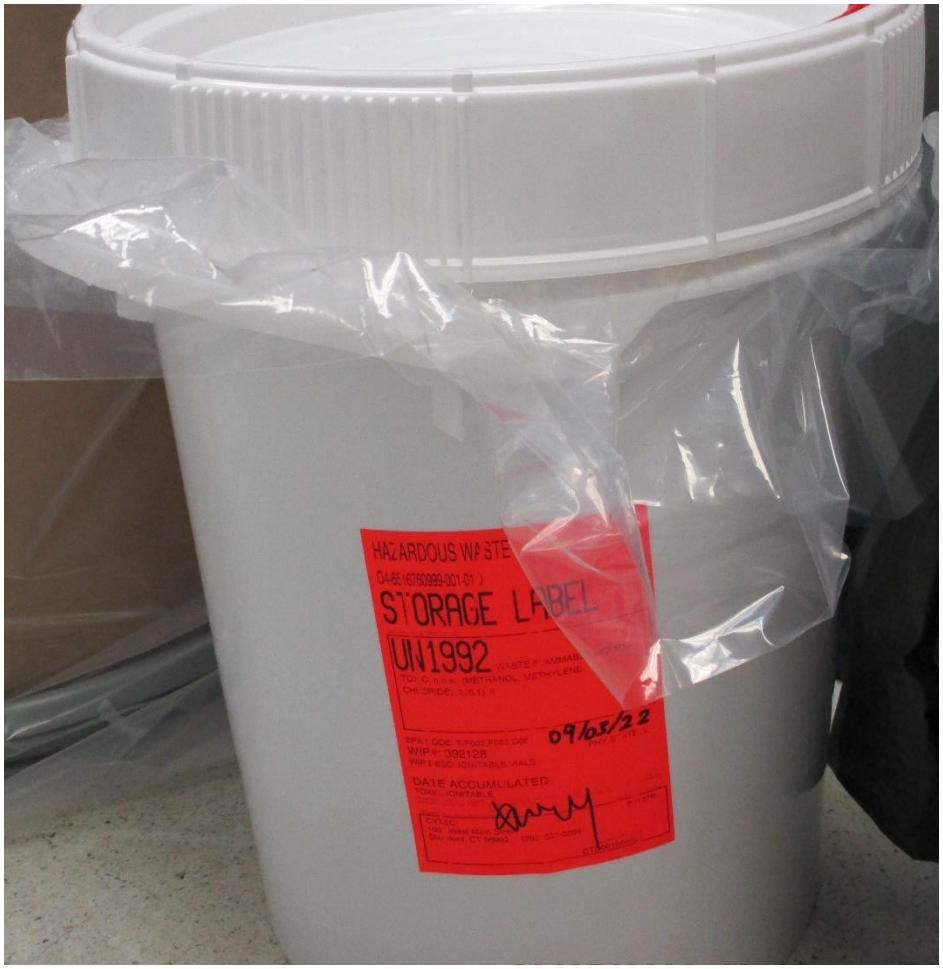


Photo 136

HW container on floor, dated "09/03/22" awaiting moving to 90-HWSA, located in Separations Prep Lab, Lab 232, on Floor 2

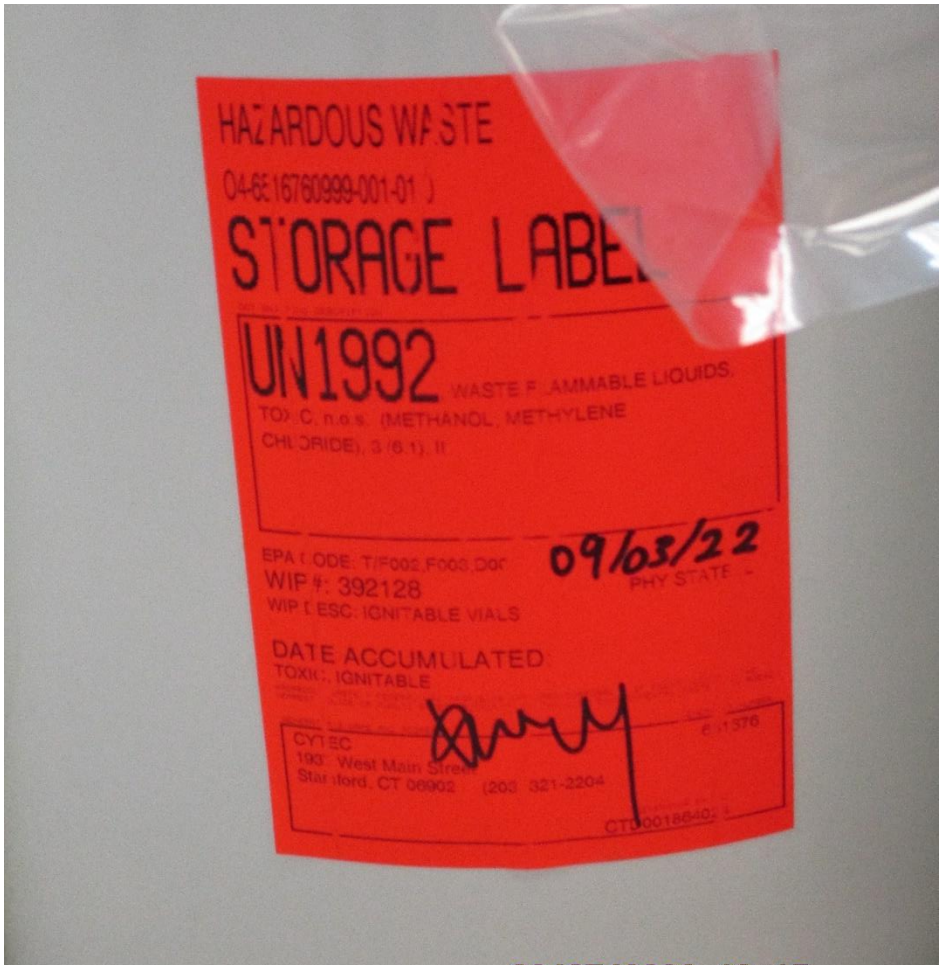


Photo 137

Label on HW container on floor, dated "09/03/22" awaiting moving to 90-HWSA, located in Separations Prep Lab, Lab 232, on Floor 2

Photo 138

Container collecting "DILUTE HCL/HNO3" waste from ICP-OES instrument, located in Room 203, on Floor 2

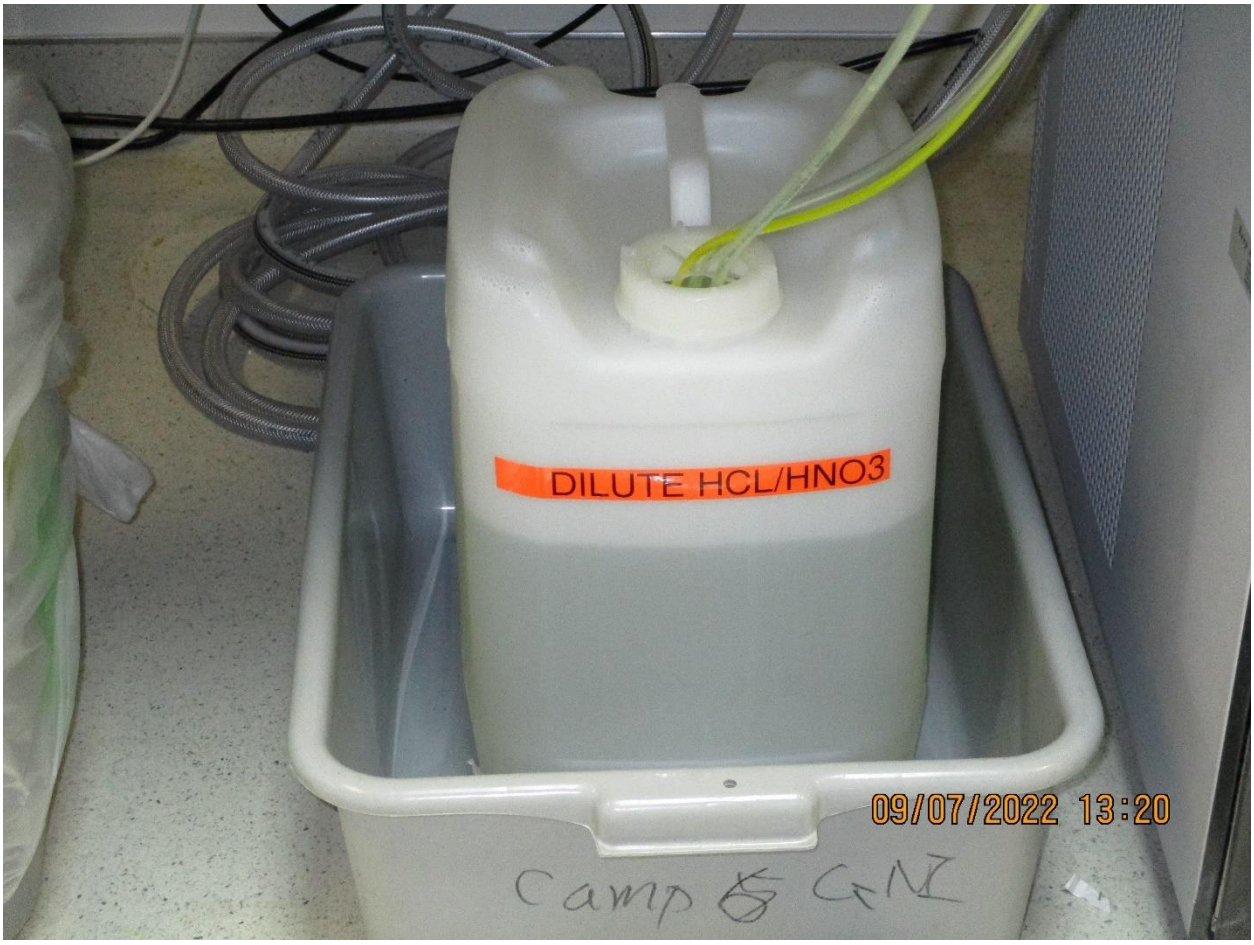


Photo 139

Label on container collecting "DILUTE HCL/HNO3" waste from ICP-OES instrument, located in Room 203, on Floor 2

Photo 140

HW container collecting waste from MP-AES instrument, located in Room 203, on Floor 2

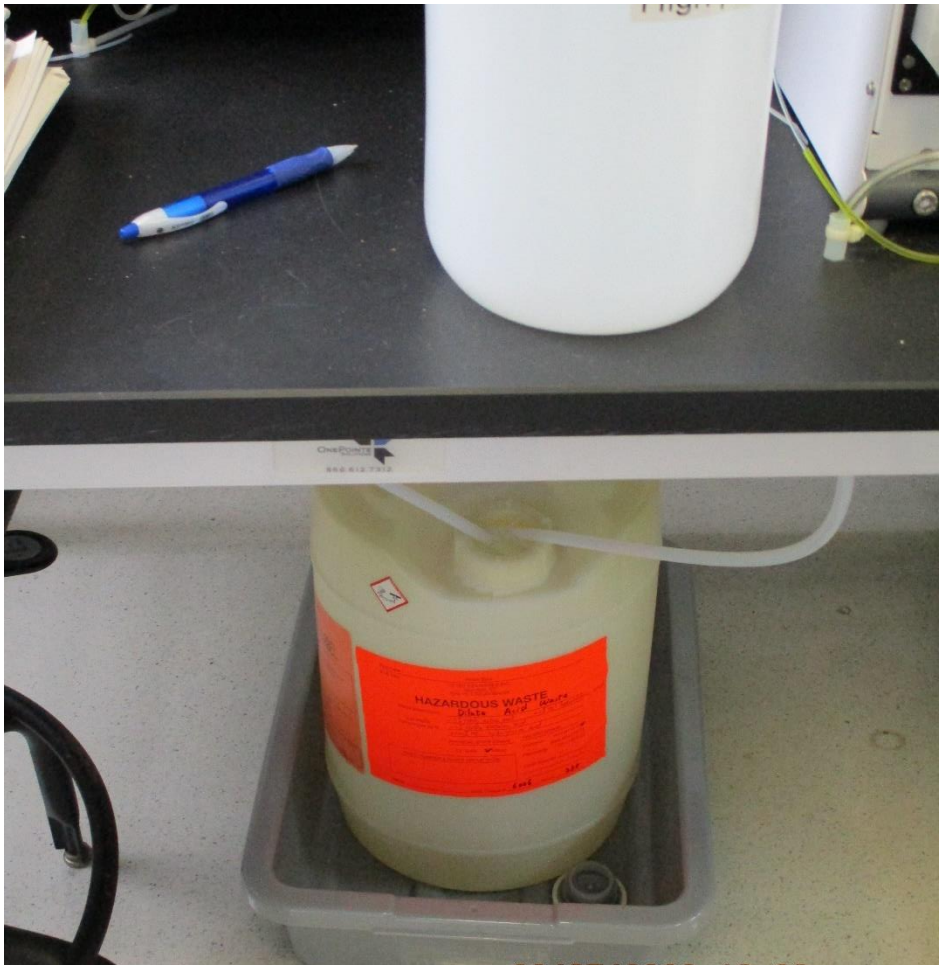


Photo 141

HW container collecting waste from MP-AES instrument, located in Room 203, on Floor 2

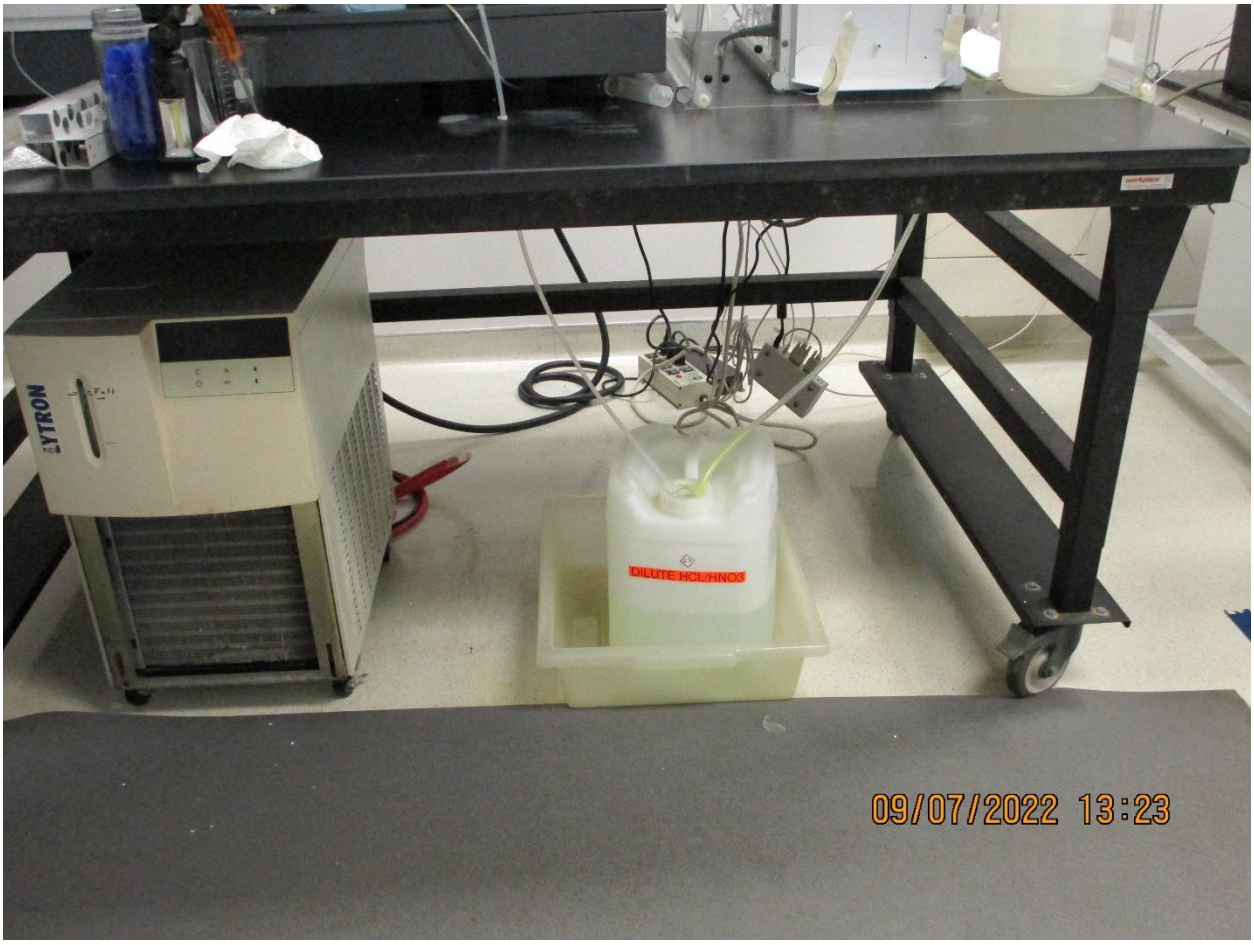


Photo 142

HW container collecting waste from ICP-OES instrument, located in Room 203, on Floor 2

Photo 143

SAA located in Thermal Analysis, Physical Chemistry Lab, on Floor 2

Photo 144

Plastic bottle in hood labelled, "waste solvent Haseltine, 3/14/2014, flamable", located in Scanning Electron Microscope, Room 224, on Floor 2

Photo 145

Plastic bottle in hood labelled, "waste solvent Haseltine, 3/14/2014, flamable", located in Scanning Electron Microscope, Room 224, on Floor 2

Photo 146

SAA located in Room 222, on Floor 2

Photo 147

HW Label on blue container in SAA, located in Room 222, on Floor 2

Photo 148

HW Label on red container in SAA, located in Room 222, on Floor 2

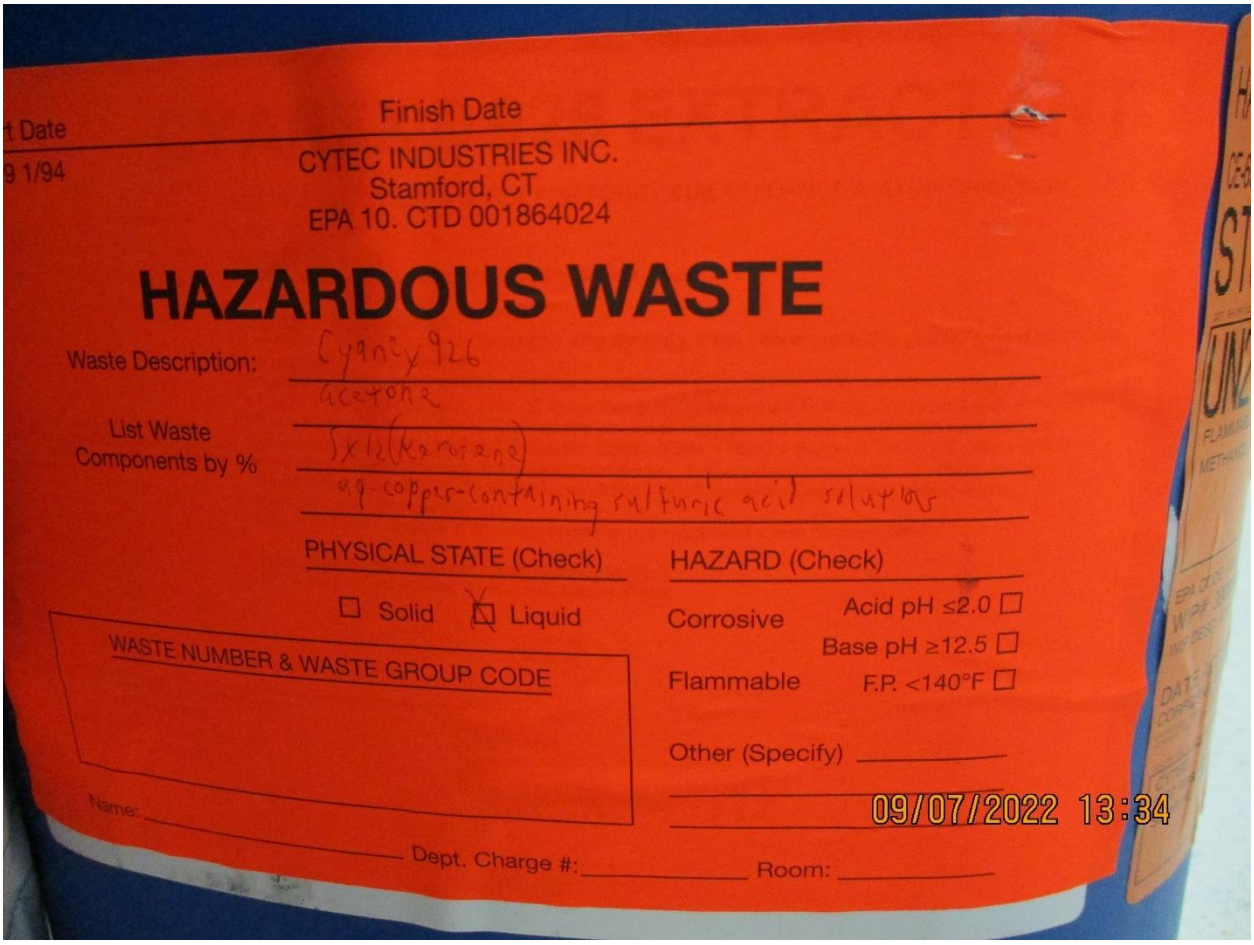


Photo 149

HW Label on blue container in SAA, located in Room 222, on Floor 2

Photo 150

SAA located in Room 218, on Floor 2

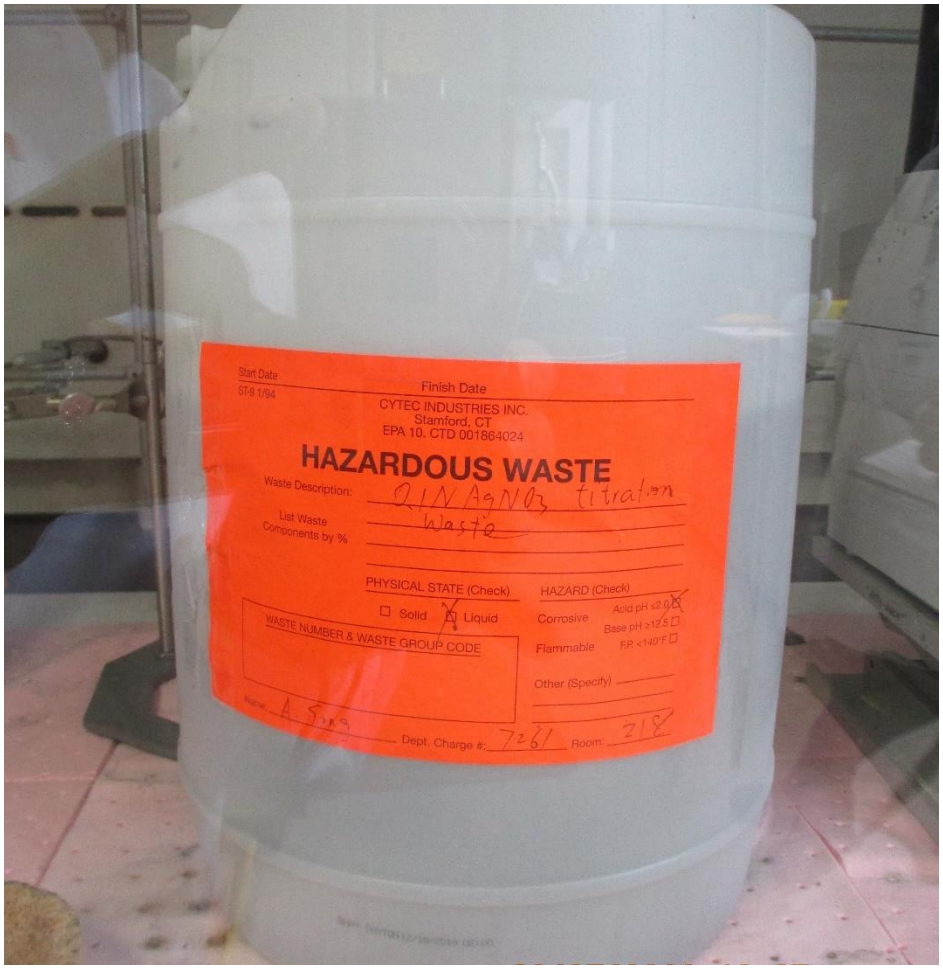


Photo 151

HW container in hood, located in Room 218, on Floor 2

Photo 152

SAA located in Room 218, on Floor 2

Photo 153

SAA located in Room 218, on Floor 2

Photo 154

SAA located in hood in Room 216, on Floor 2

Photo 155

HW container with inventory log, located in hood in Room 216, on Floor 2

Photo 156

Signage at SAA located in hood in Room 216, on Floor 2

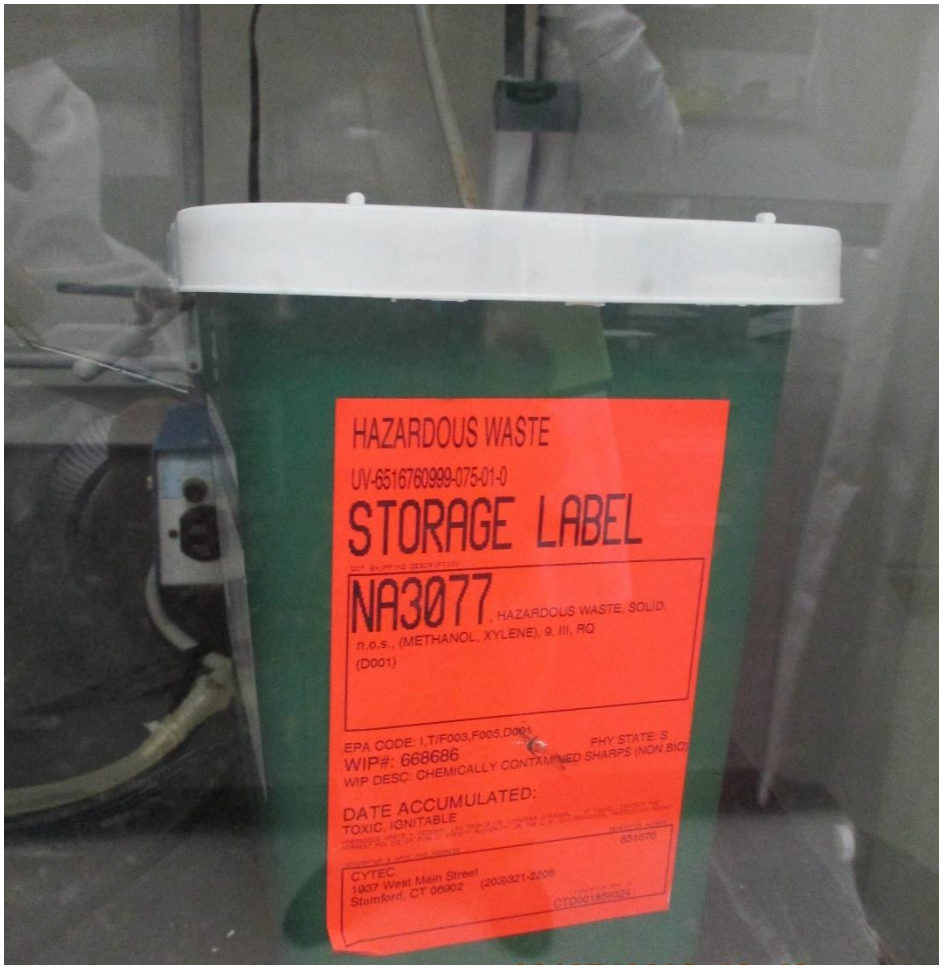


Photo 157

HW container in hood, located in Room 216, on Floor 2

Photo 158

SAA located in Room 216, on Floor 2

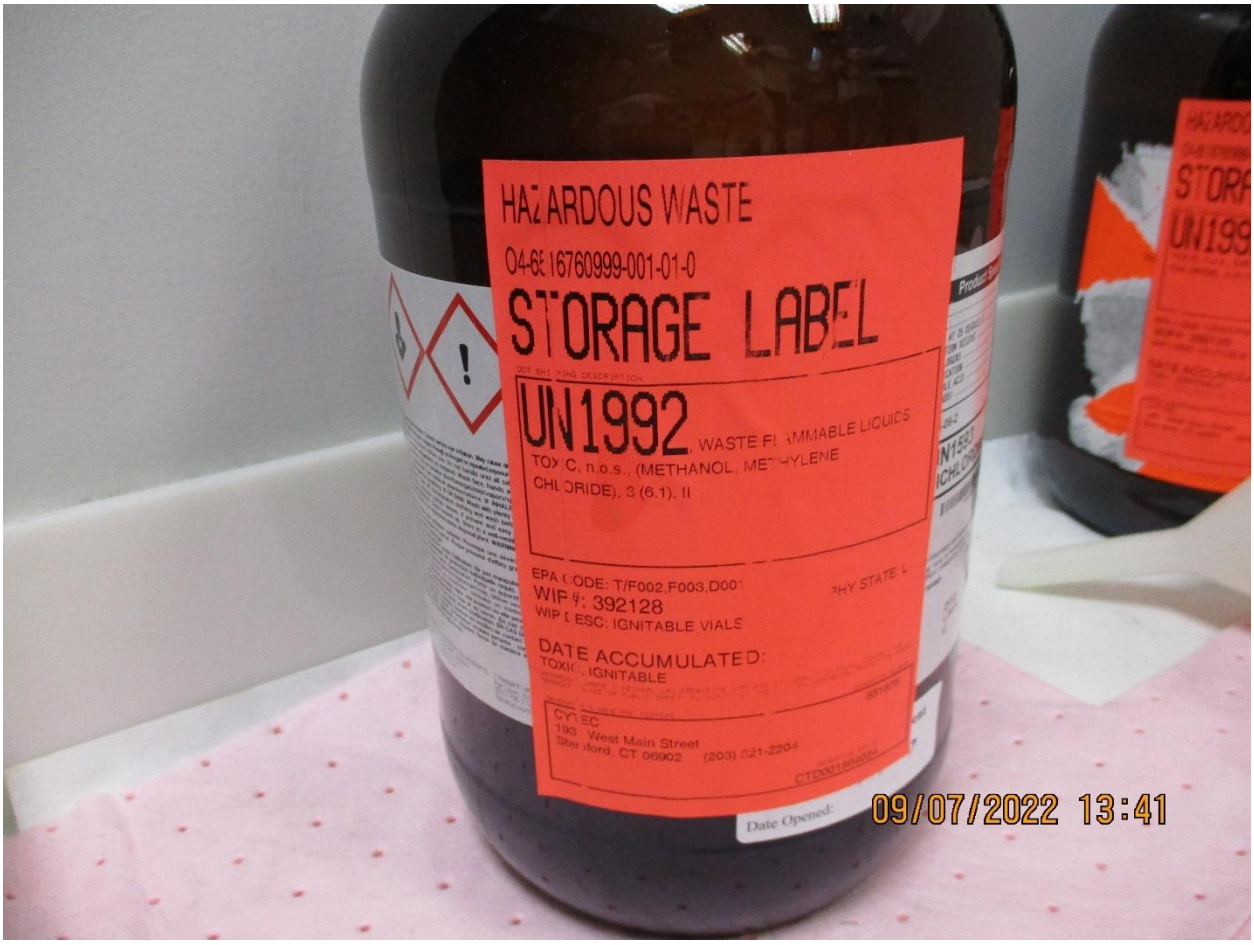


Photo 159

Label on one of two containers in SAA, located in Room 216, on Floor 2

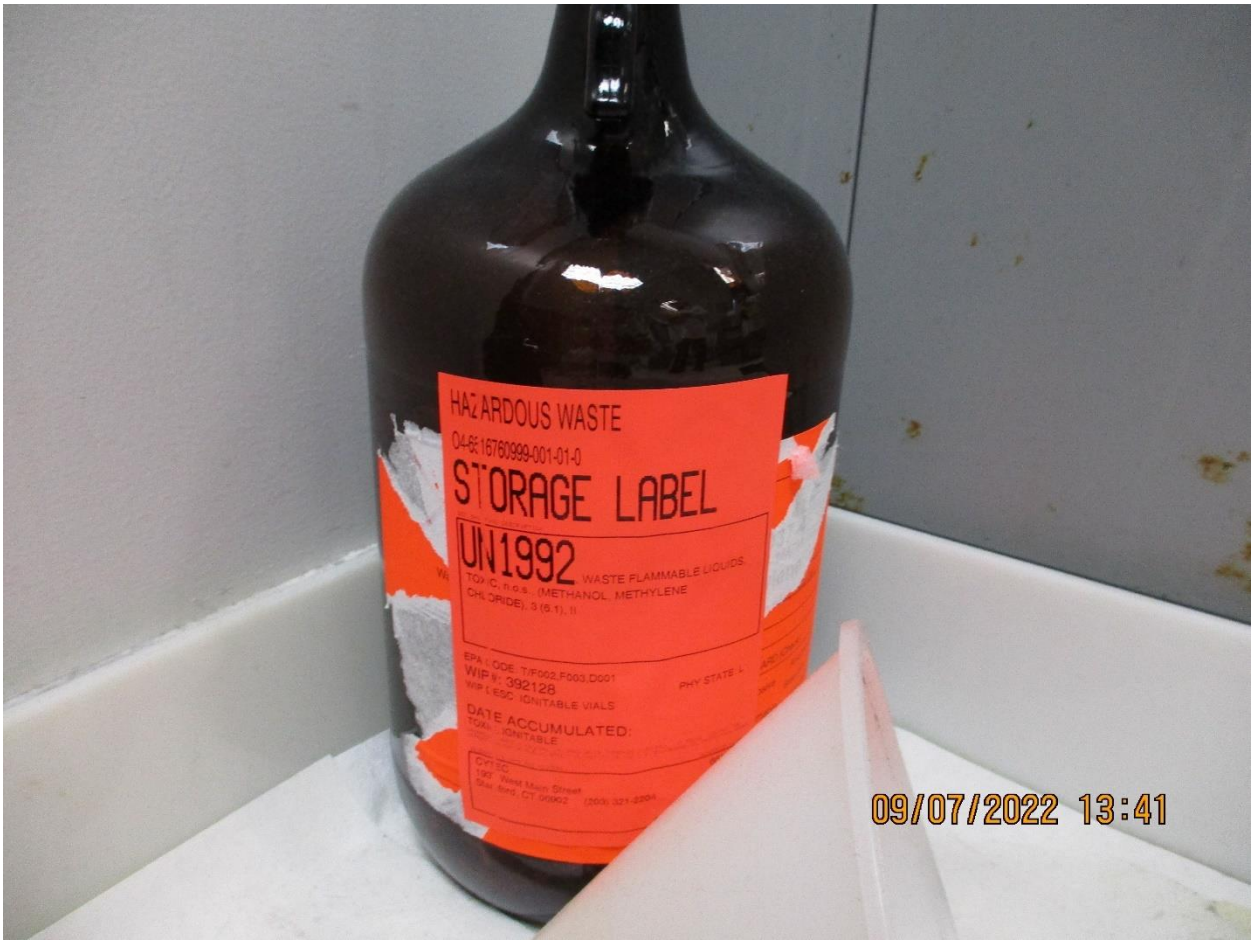


Photo 160

Label on two of two containers in SAA, located in Room 216, on Floor 2

Photo 161

SAA under bench, located in Room 215, on Floor 2

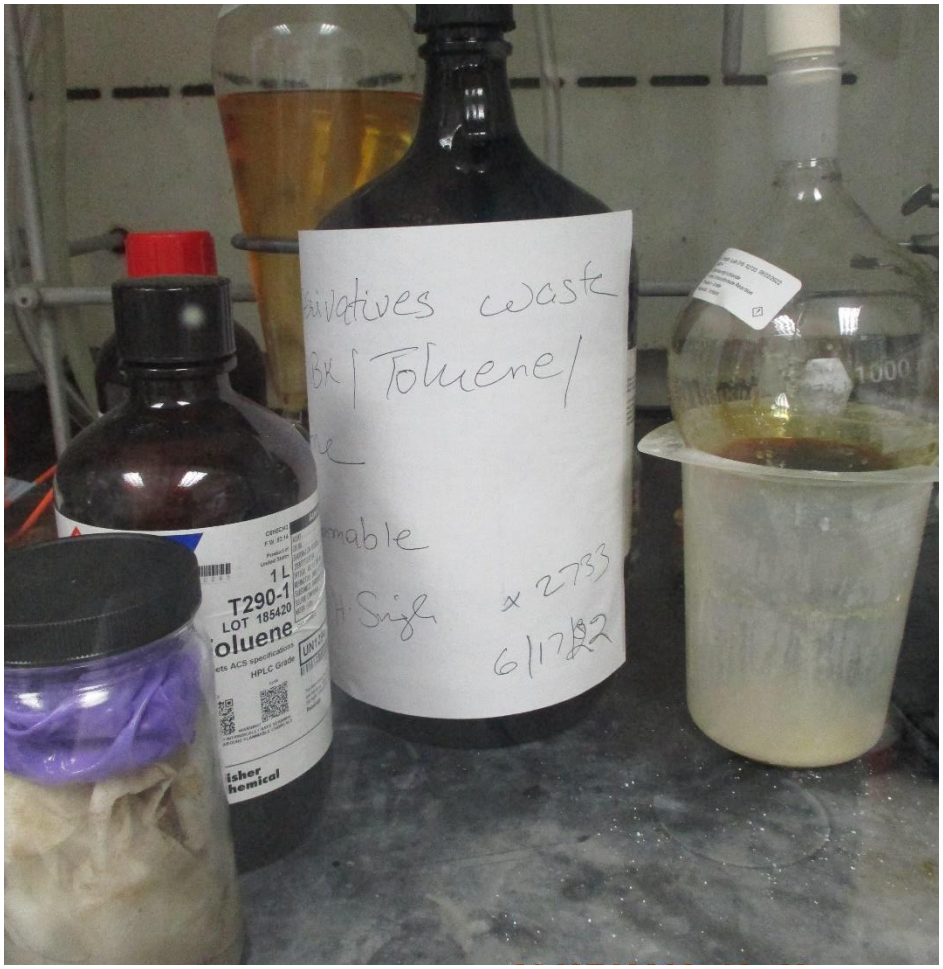


Photo 162

Glass container labelled, Derivatives waste, flammable, toluene, located in Room 215, on Floor 2

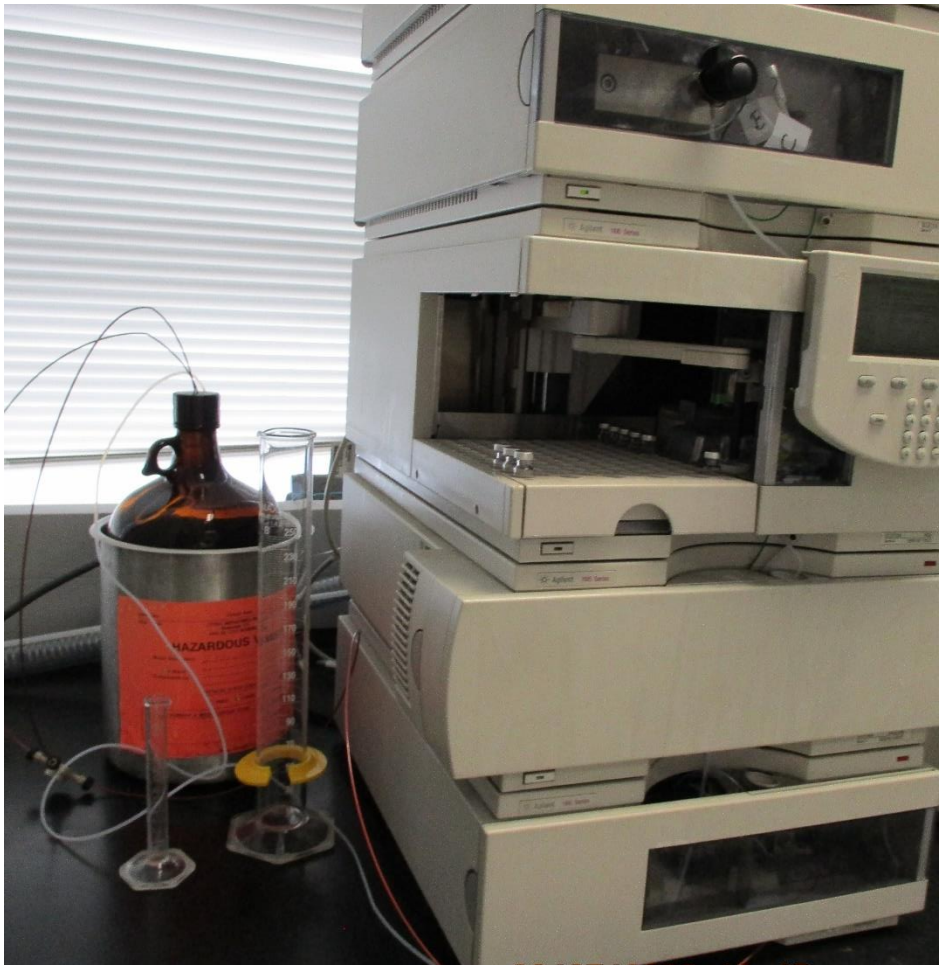


Photo 163

HW container collecting waste from instrument, located in Room 215, on Floor 2

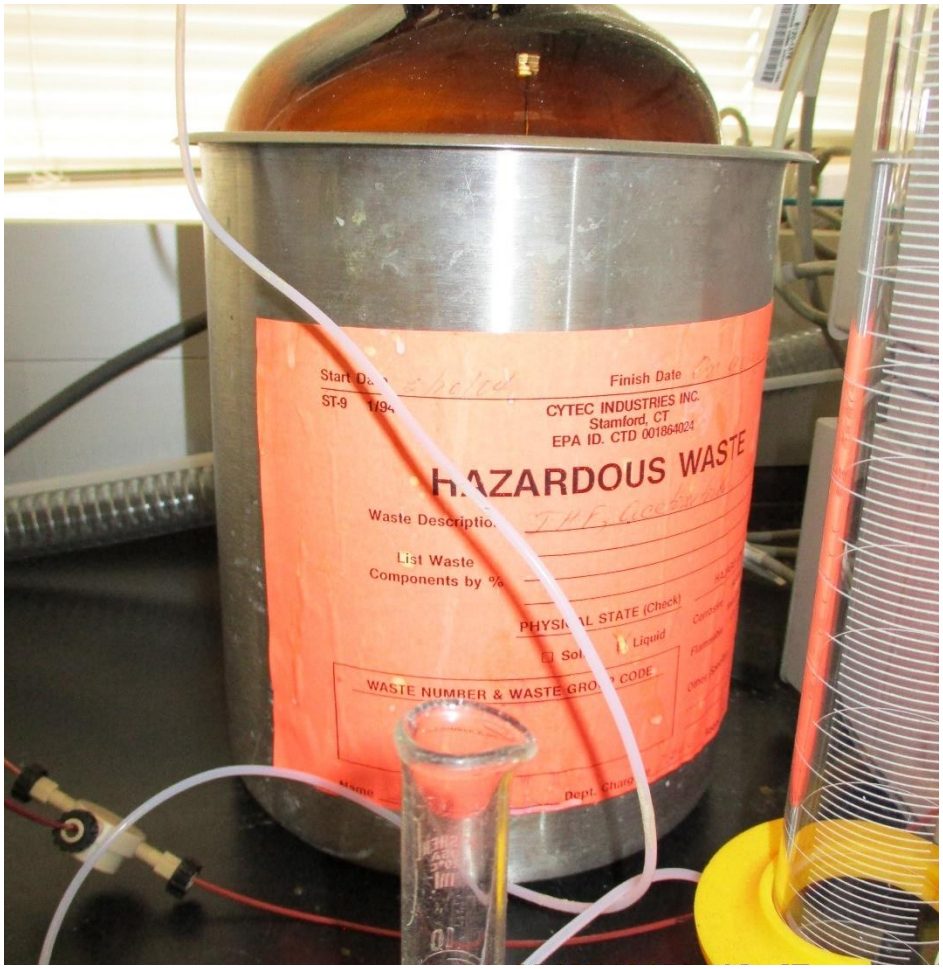


Photo 164

Label on HW container collecting waste from instrument, located in Room 215, on Floor 2

Photo 165

SAA located under bench in Room 217, on Floor 2

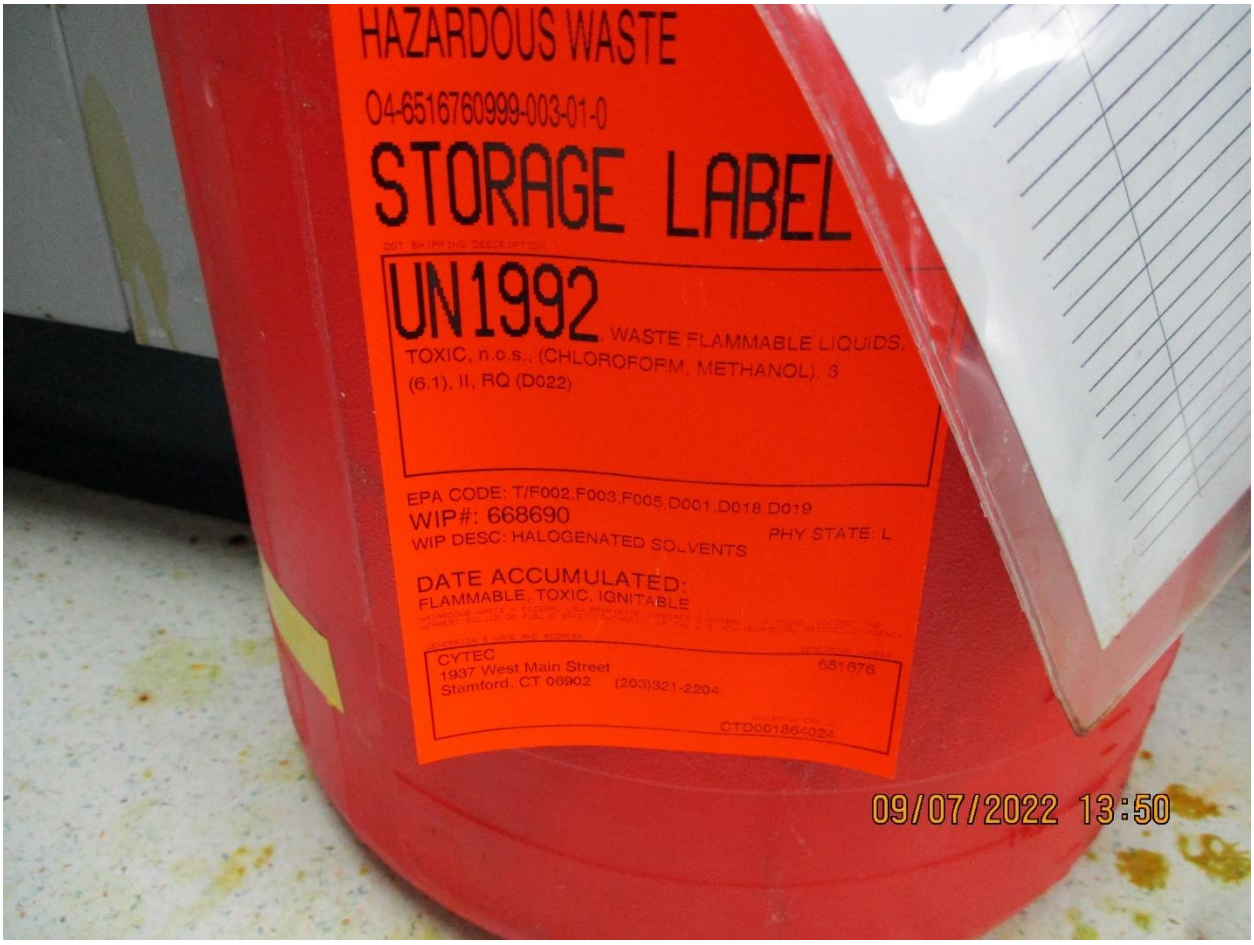


Photo 166

HW label on container in SAA located under bench in Room 217, on Floor 2

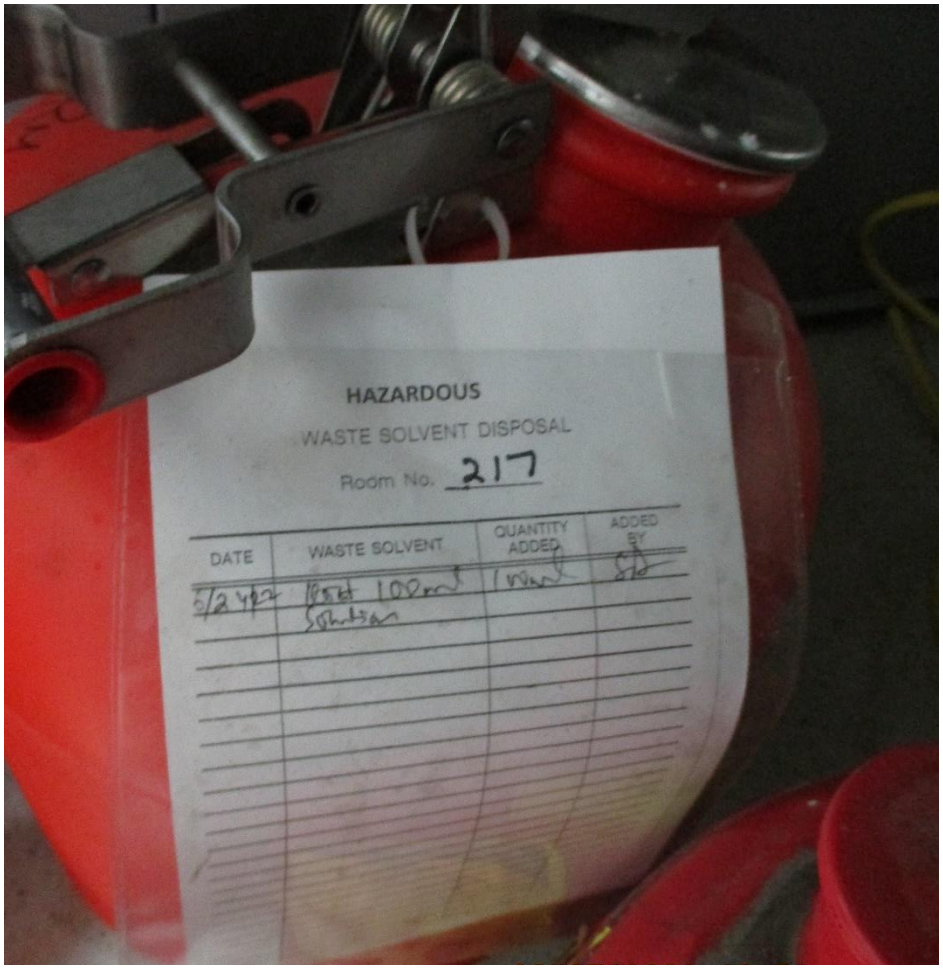


Photo 167

Inventory sheet on HW container in SAA located under bench in Room 217, on Floor 2

Photo 168

SAA located in room 318, on Floor 3

Photo 169

Label on one container in SAA, located in room 318, on Floor 3

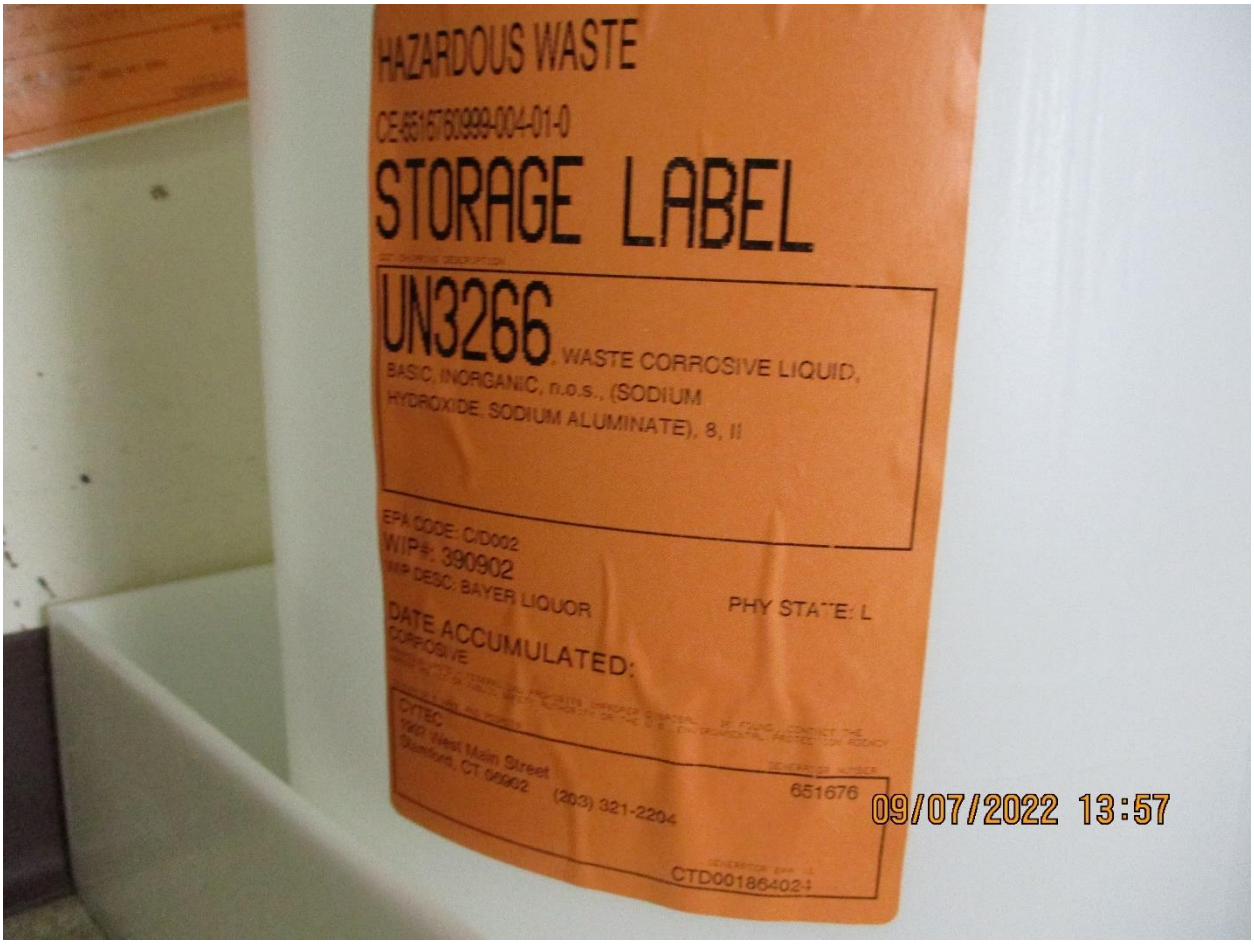


Photo 170

Label on one container in SAA, located in room 318, on Floor 3

Photo 171

SAA under table, located in Room 317, on Floor 3

Photo 172

Labels on HW containers in SAA under table, located in Room 317, on Floor 3

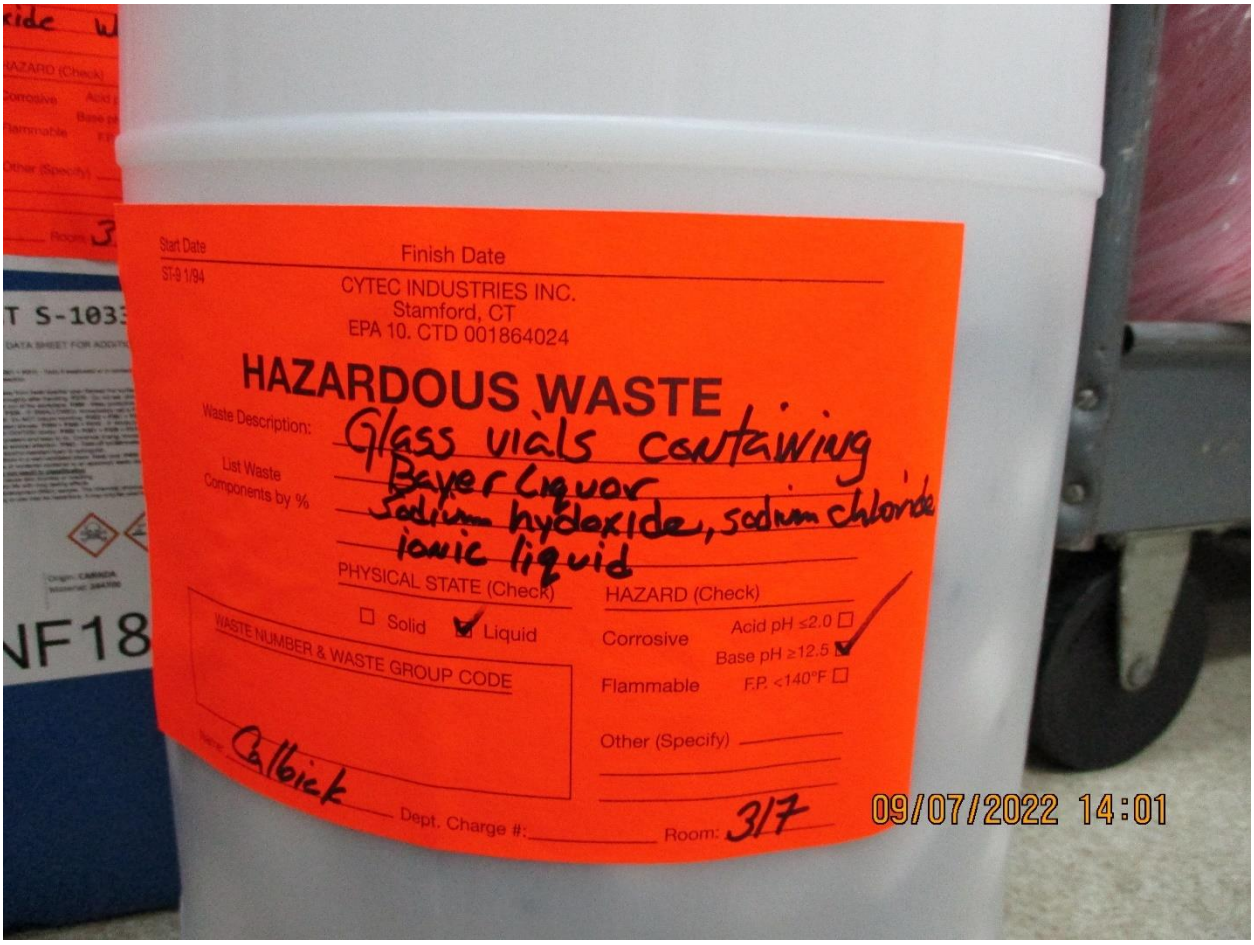


Photo 173

HW label on one container in SAA under table, located in Room 317, on Floor 3

Photo 174

HW label on one container in SAA under table, located in Room 317, on Floor 3

Photo 175

SAA in hood, located in Room 330.2, on Floor 3

Photo 176

SAA in hood, located in Room 330.2, on Floor 3

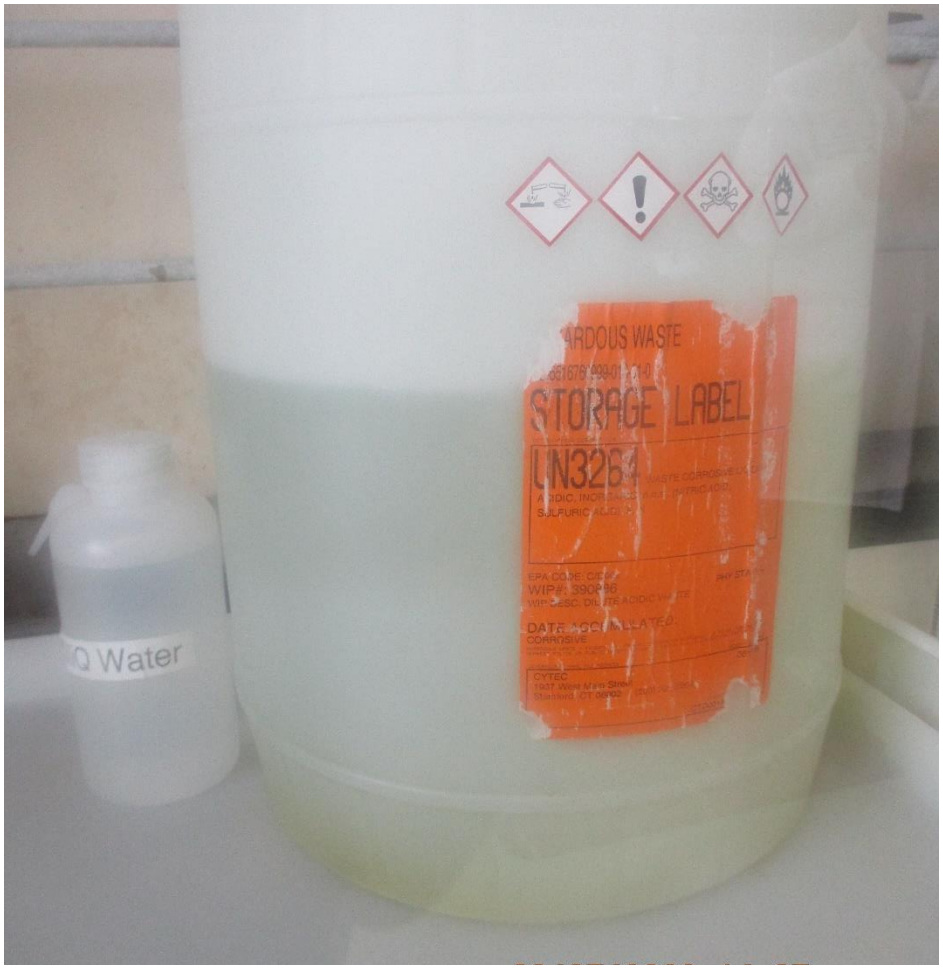


Photo 177

Label on SAA HW container on right side of hood, located in Room 330.2, on Floor 3

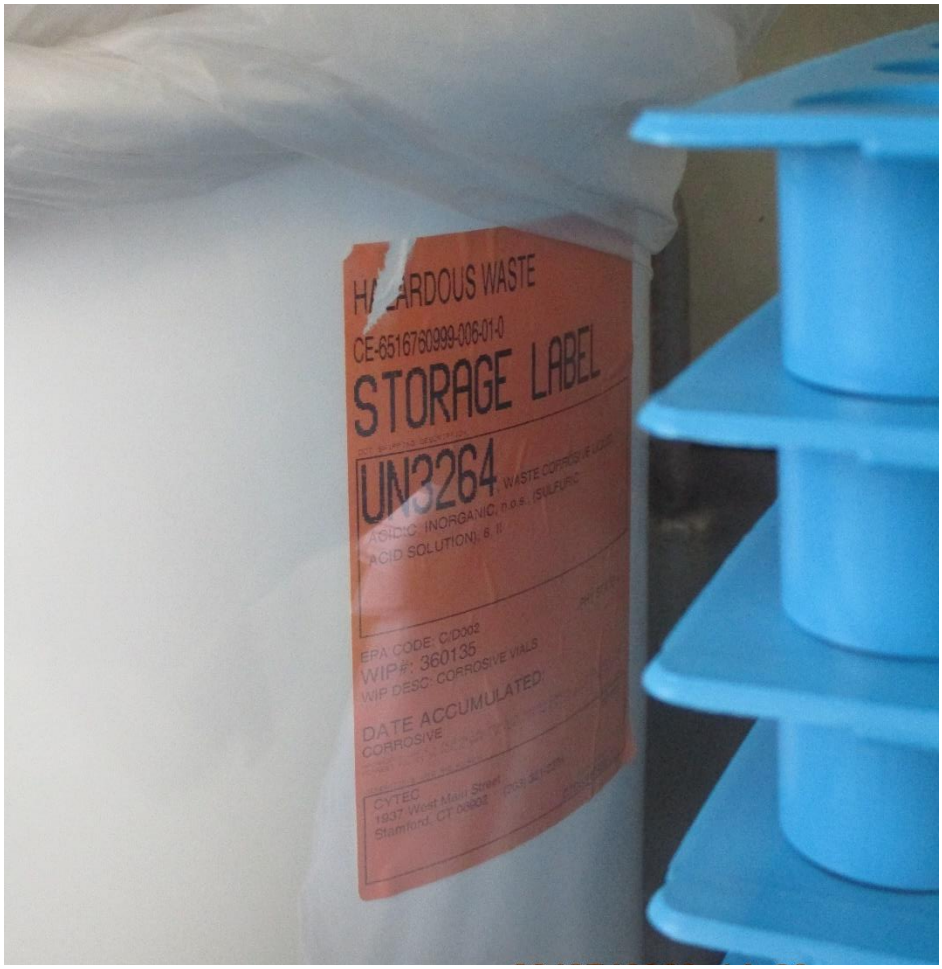


Photo 178

Label on SAA HW container on left side of hood, located in Room 330.2, on Floor 3

Photo 179

SAA on bench, located in Room 330.2, on Floor 3

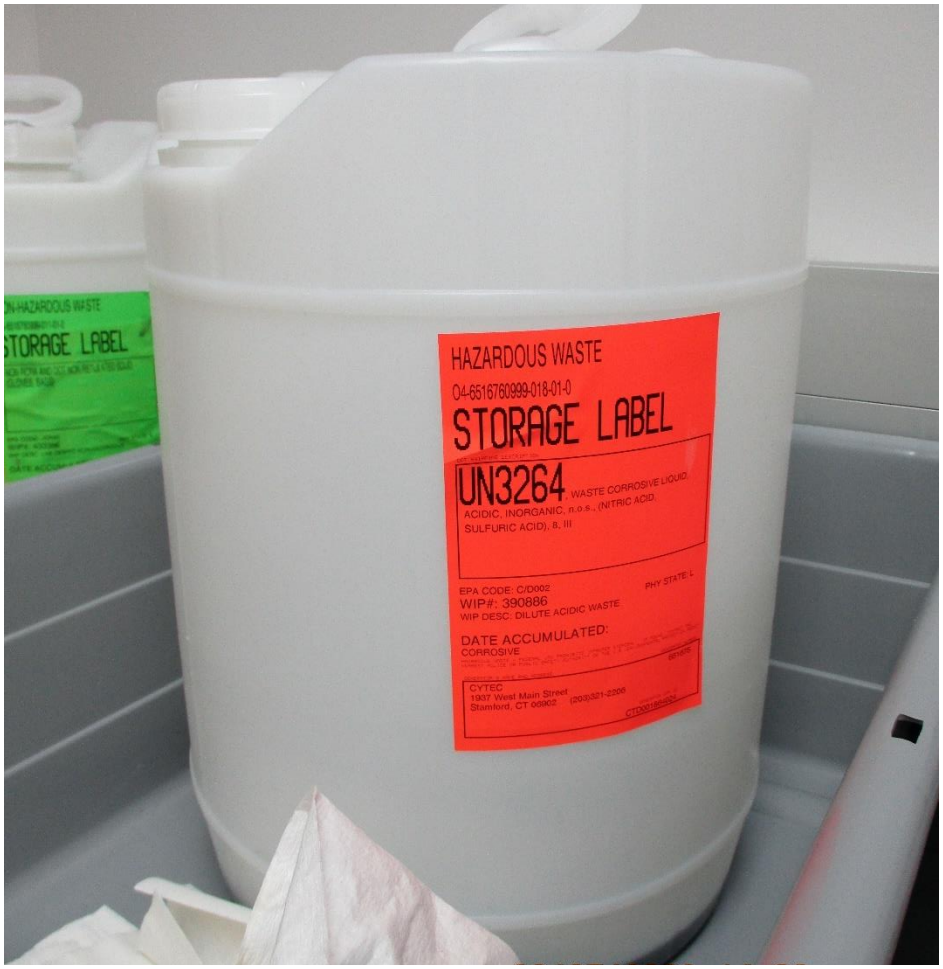


Photo 180

Label on HW container in SAA on bench, located in Room 330.2, on Floor 3

Photo 181

SAA in hood, located in Room 332, on Floor 3

Photo 182

SAA on floor, located in Room 332, on Floor 3

Photo 183

HW containers and signage in SAA on floor, located in Room 332, on Floor 3

Photo 184

HW containers and signage in SAA on floor, located in Room 332, on Floor 3

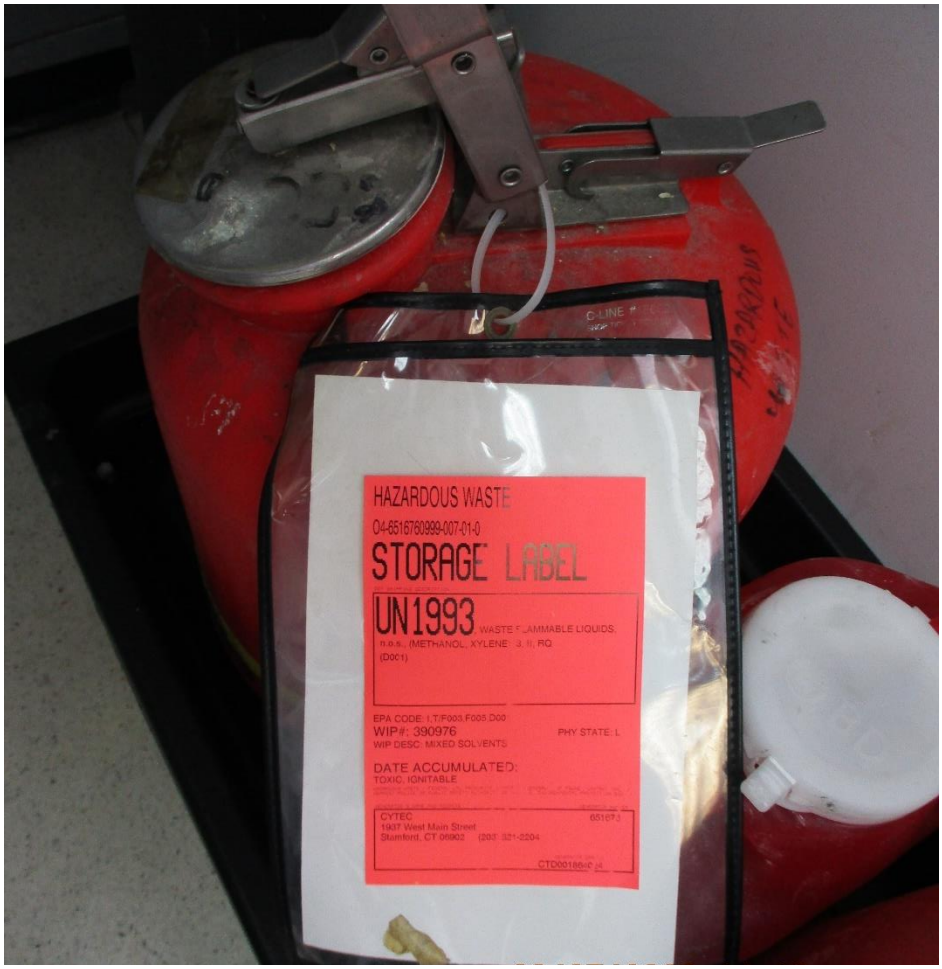


Photo 185

HW label on HW container in SAA on floor, located in Room 332, on Floor 3

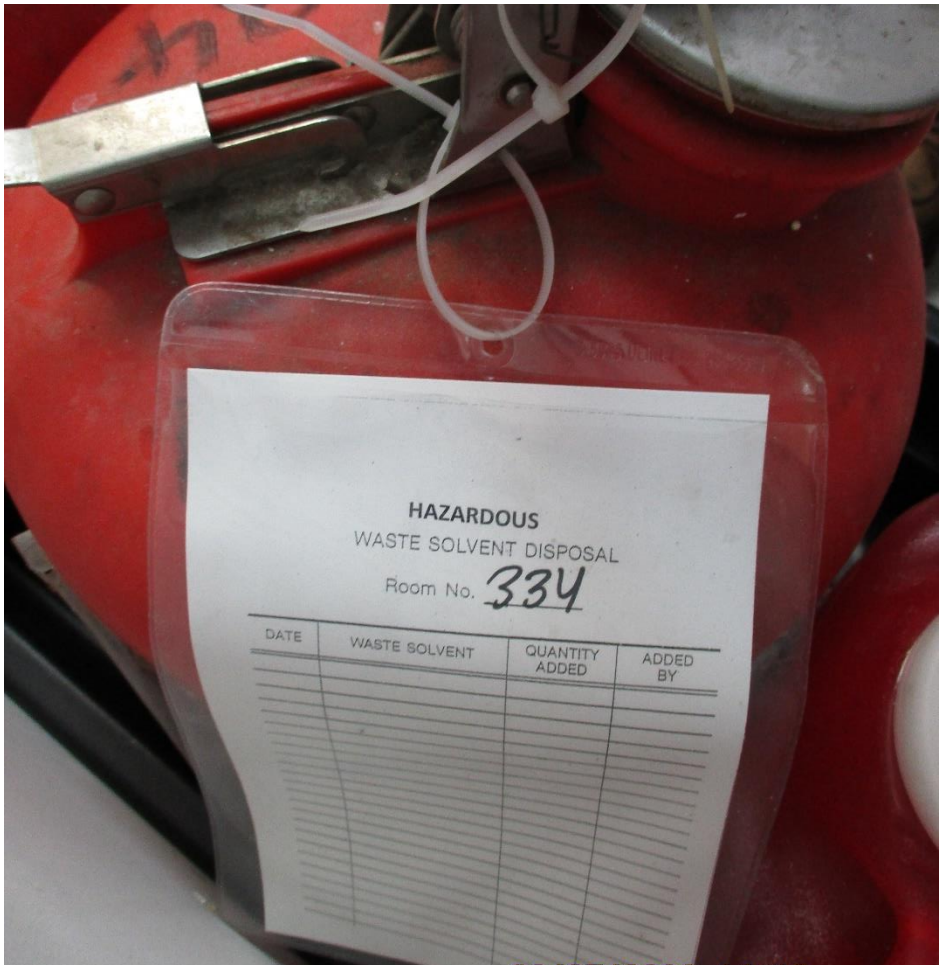


Photo 186

HW inventory label on HW container in SAA on floor, located in Room 332, on Floor 3

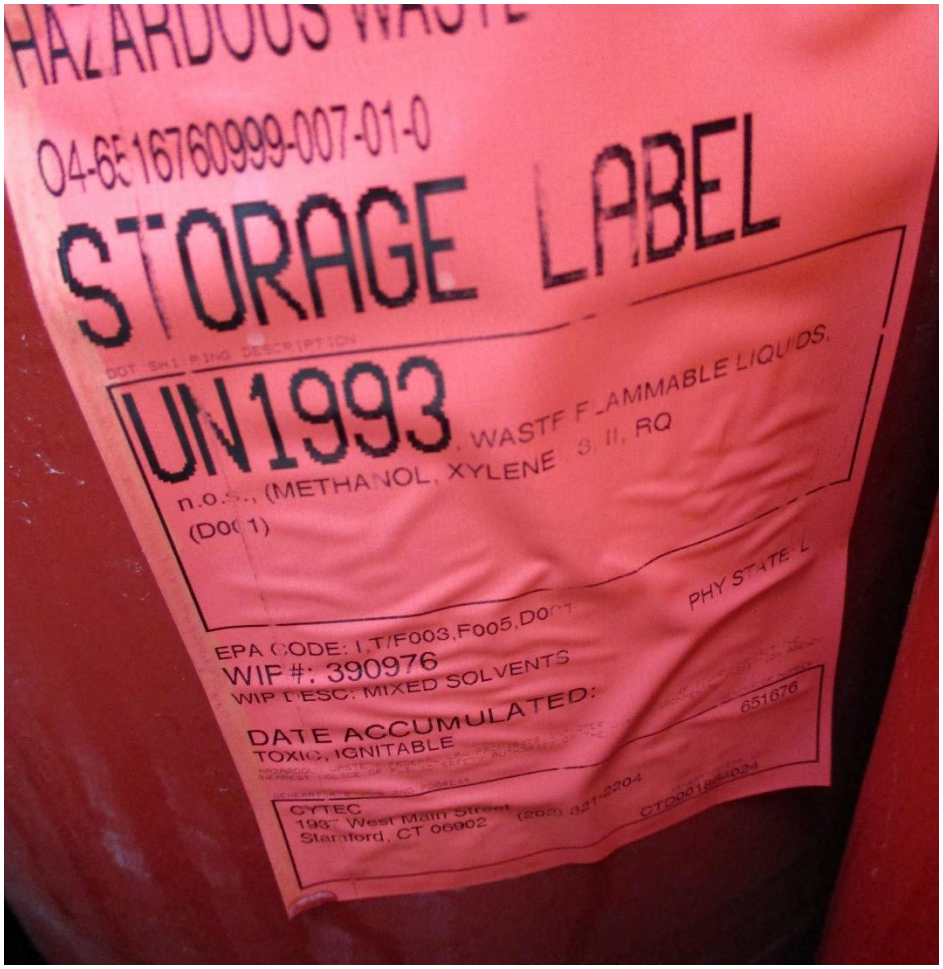


Photo 187

HW label on HW container in SAA on floor, located in Room 332, on Floor 3

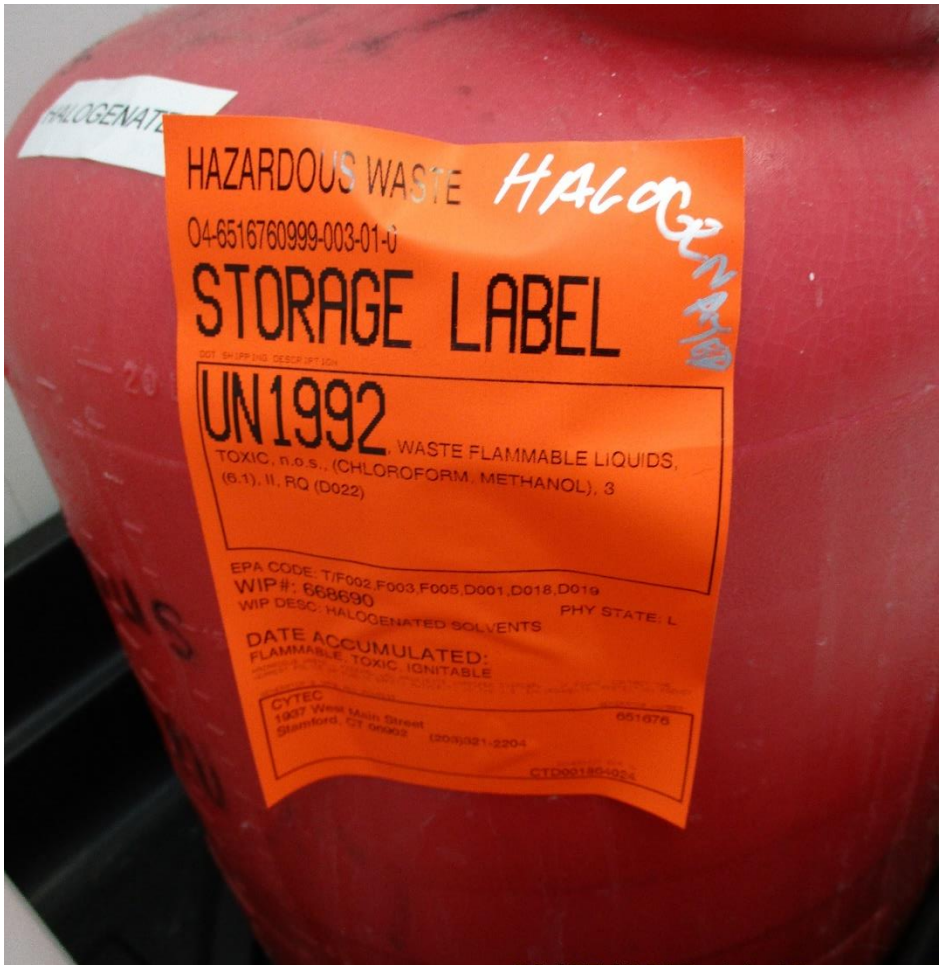


Photo 188

HW label on HW container in SAA on floor, located in Room 332, on Floor 3

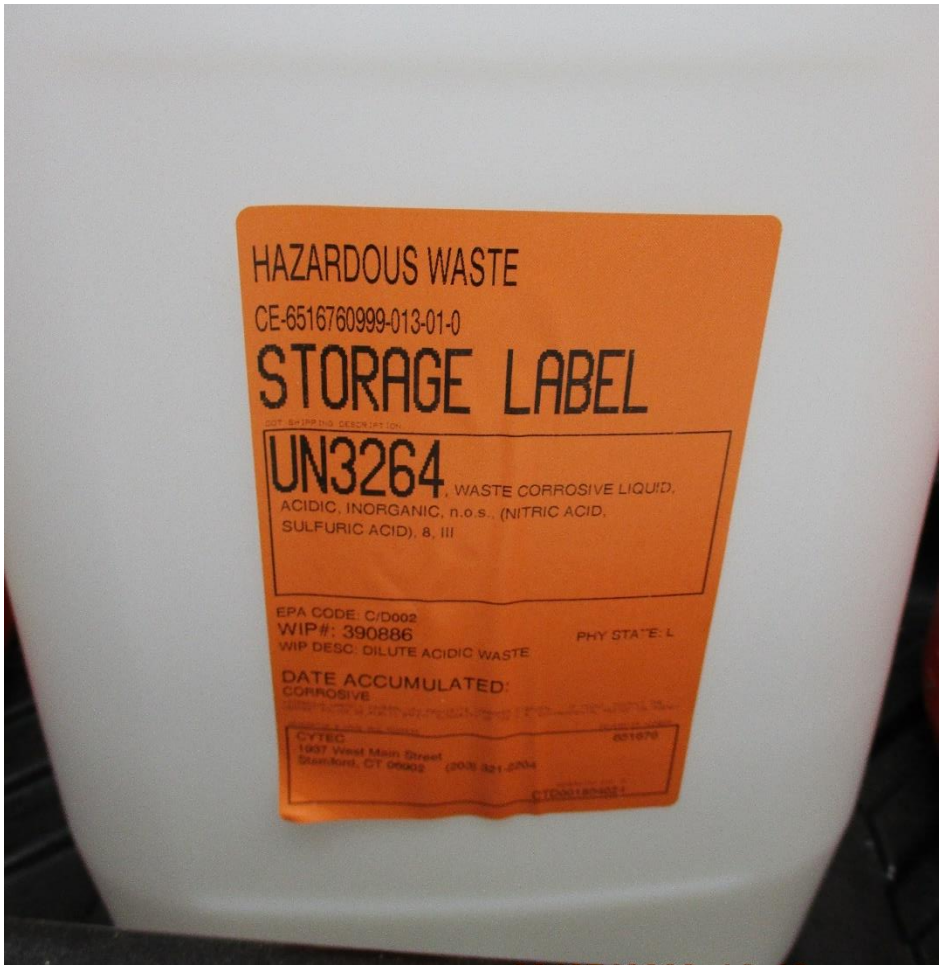


Photo 189

HW label on HW container in SAA on floor, located in Room 332, on Floor 3

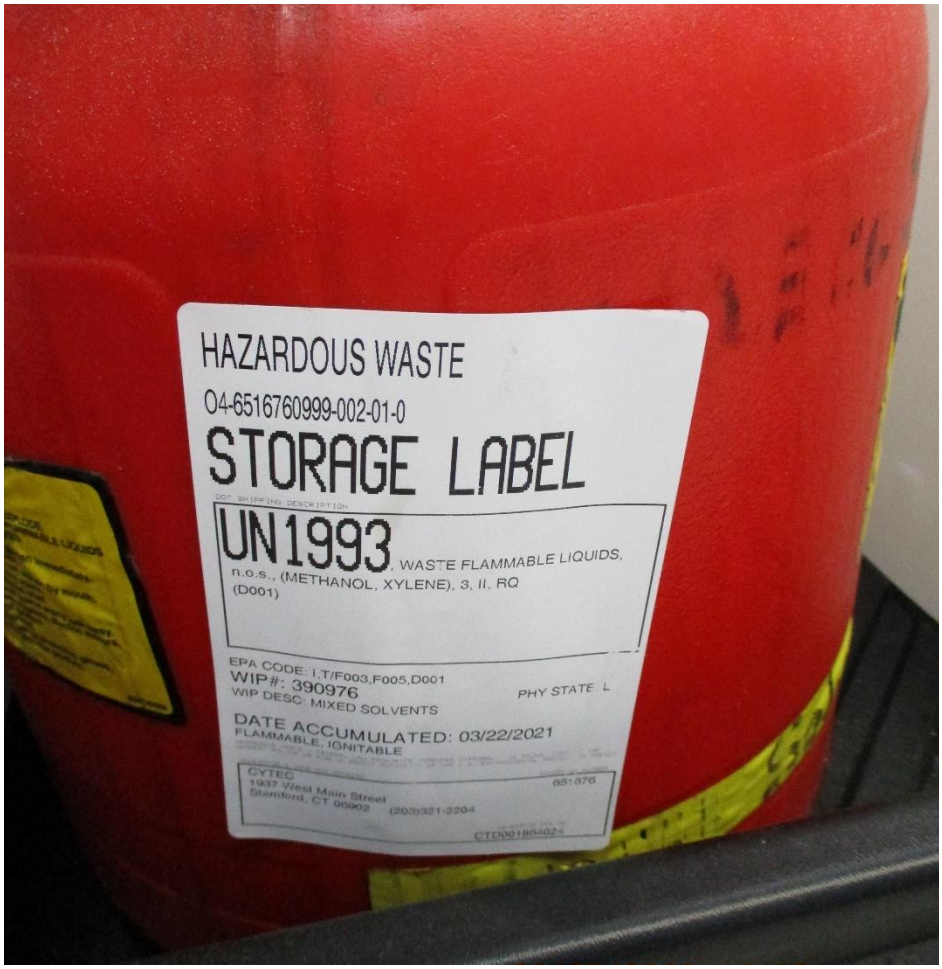


Photo 190

HW label on HW container in SAA on floor, located in Room 332, on Floor 3

Photo 191

SAA in hood, located in Room 333, Robotics and Automation Lab on Floor 3

Photo 192

Containers in SAA in hood, located in Room 333, Robotics and Automation Lab on Floor 3

Photo 193

Container in SAA in hood, located in Room 333, on Floor 3

Photo 194

SAA on floor, located in Room 333, Robotics and Automation Lab, on Floor 3

Photo 195

HW label on SAA container on floor, 333, Robotics and Automation Lab, on Floor 3

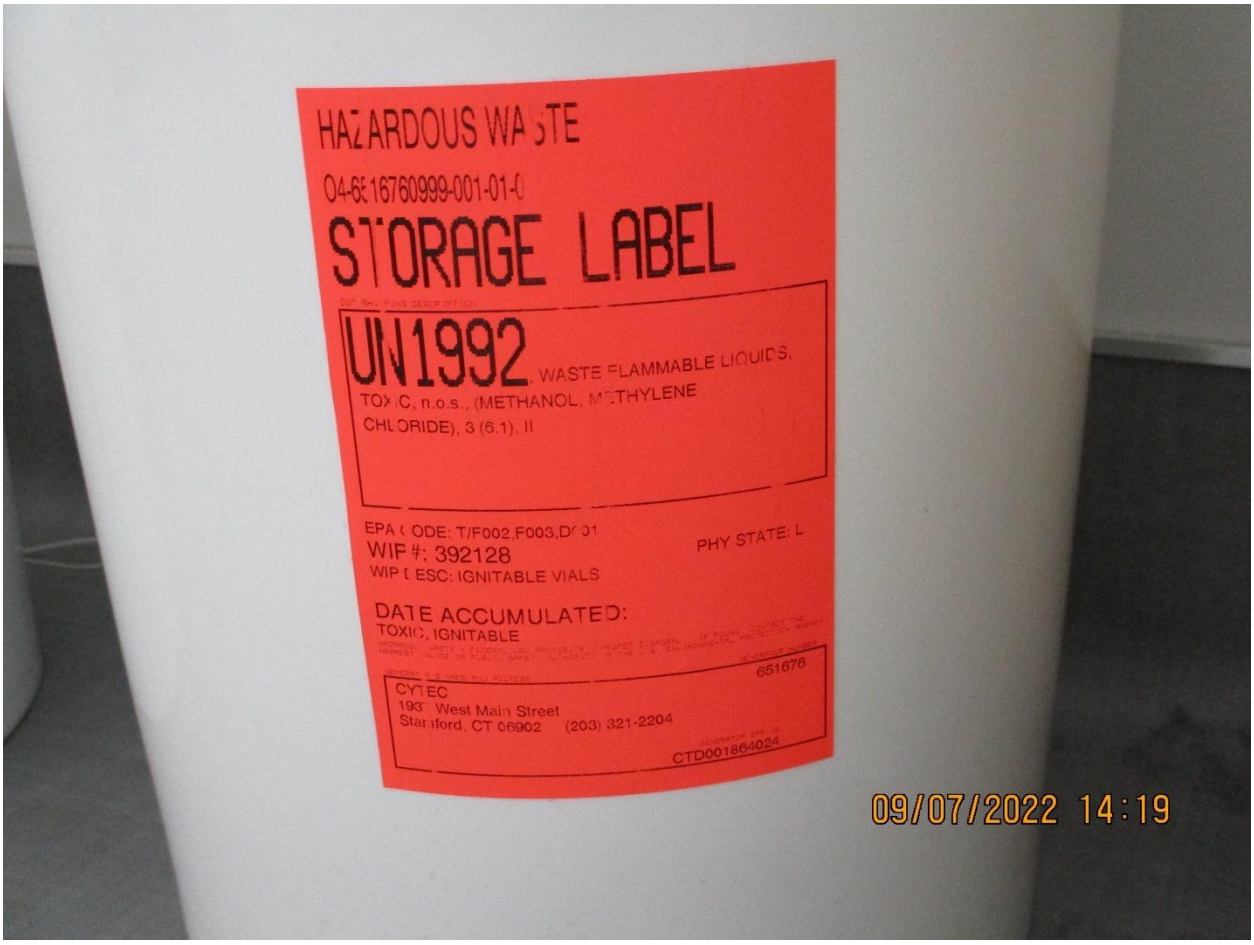


Photo 196

HW label on SAA container on floor, 333, Robotics and Automation Lab, on Floor 3

Photo 197

HW container in hood, located in Room 333, Robotics and Automation Lab, on Floor 3

Photo 198

HW container in hood, located in Room 333, Robotics and Automation Lab, on Floor 3

Photo 199

SAA on floor, located in Room 335, HEL Lab, on Floor 3

Photo 200

Red lab pack container in hood, located in Room 335, HEL Lab, on Floor 3

Photo 201

Waste batteries container in hood, located in Room 335, HEL Lab, on Floor 3

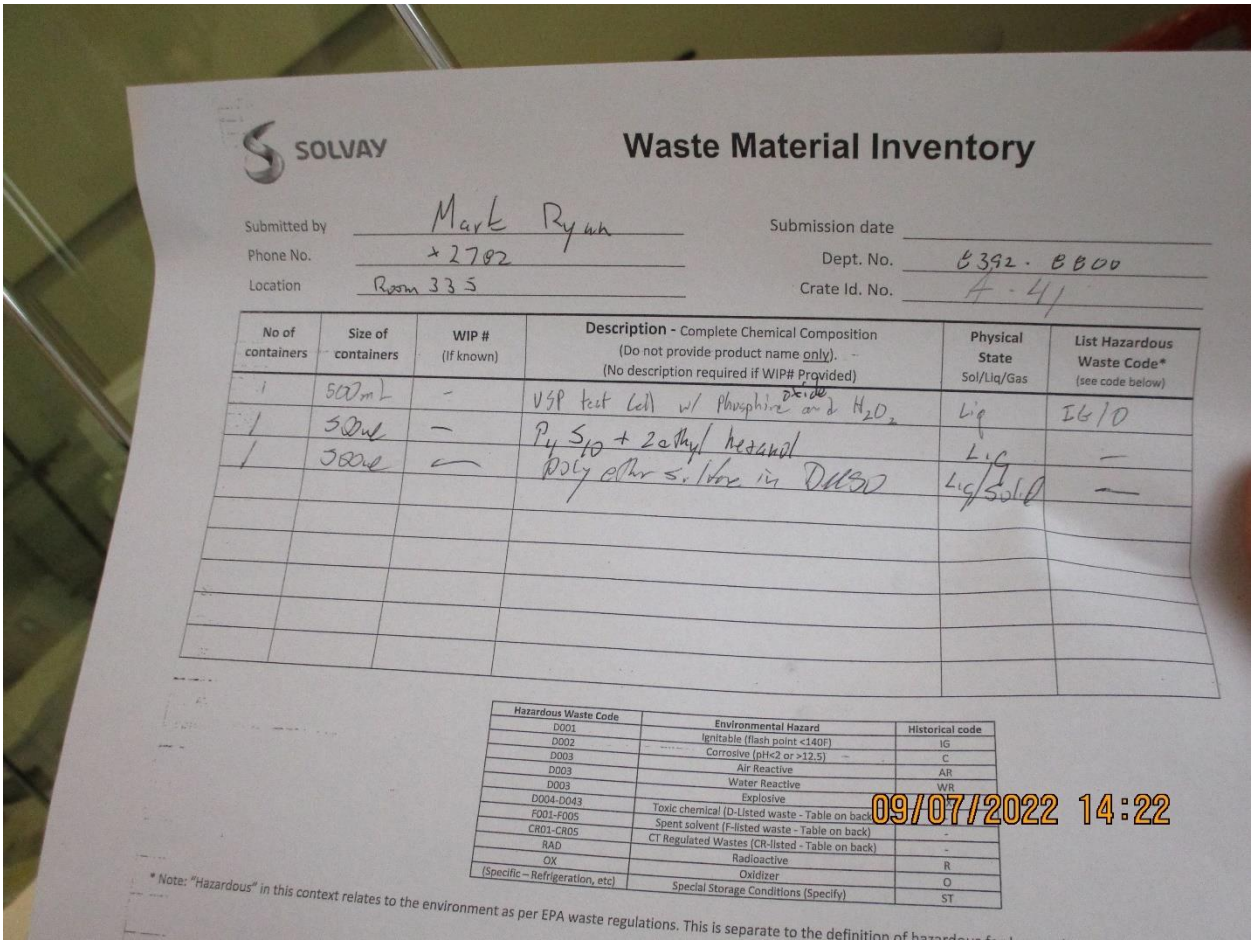


Photo 202

Inventory sheet for red lab pack container in hood, located in Room 335, HEL Lab, on Floor 3

Photo 203

SAA on floor, located in Room 440, Alumina Separation Lab, on Floor 4

Photo 204

Container and signage at SAA on floor, located in Room 440, Alumina Separation Lab, on Floor 4

Photo 205

Container and signage at SAA on floor, located in Room 440, Alumina Separation Lab, on Floor 4

Photo 206

HW container on floor, at SAA located in Room 440, Alumina Separation

Photo 207

Label on SAA container at SAA on floor, located in Room 440, Alumina Separation Lab, on Floor 4

Photo 208

Label on SAA container at SAA on floor, located in Room 440, Alumina Separation Lab, on Floor 4

Photo 209

Label on HW container on floor, at SAA located in Room 440, Alumina Separation

Photo 210

Two containers, one storing odorous aqueous waste and one storing odorous organic waste in hood, located in Room 430, Minerals Metallurgy Lab, on Floor 4

Photo 211

Two containers, one storing odorous aqueous waste and one storing odorous organic waste in hood, located in Room 430, Minerals Metallurgy Lab, on Floor 4

Photo 212

Yellow container holding small containers, some waste cyanide in hood, located in Room 430, Minerals Metallurgy Lab, on Floor 4

Photo 213

Yellow container holding small containers, some waste cyanide in hood, located in Room 430, Minerals Metallurgy Lab, on Floor 4

Photo 214

Some containers inside yellow container holding small containers, some waste cyanide in hood, located in Room 430, Minerals Metallurgy Lab, on Floor 4

Photo 215

Some containers inside yellow container holding small containers, some waste cyanide in hood, located in Room 430, Minerals Metallurgy Lab, on Floor 4

Photo 216

White container holding containers, one waste hydrogen peroxide in hood, located in Room 430, Minerals Metallurgy Lab, on Floor 4