



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

August 4, 2023

Thomas J. Hemenway, GEMS Program Manager

VA Connecticut Healthcare System

950 Campbell Ave

West Haven, CT 06516

Re: U.S. EPA-Region 1 Inspection Report of VA Connecticut Healthcare System Facility, June 8-9, 2023

Dear Mr. Hemenway:

In accordance with current policy, I am providing you with a copy of the final inspection report summarizing observations made during the June 8-9, 2023 inspection of your facility.

This inspection was conducted under the authority of RCRA.

Please contact me at 617-918-1876 or brolin.linda@epa.gov if you have any questions.

Sincerely,

Linda Brolin, Environmental Engineer
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.

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RCRA Compliance Inspection of:

VA Connecticut Healthcare System

950 Campbell Ave

West Haven, CT 06516

June 8-9, 2023
Date of Inspection

Linda Brolin, Environmental Engineer
Waste and Chemical Compliance Section

August 4, 2023
Date Inspection Report Approved

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

August 4, 2023
Date Inspection Report Finalized

August 4, 2023
Date Inspection Report Transmitted to Facility

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RCRA HAZARDOUS WASTE INSPECTION REPORT

I. GENERAL INFORMATION

- a. **Facility Name:** VA Connecticut Healthcare System
- b. **Inspection Date:** June 8-9, 2023
- c. **Inspection Type:** RCRA Compliance Evaluation Inspection (CEI)
- d. **EPA Inspectors:** Linda Brolin, Environmental Engineer
Cheryl Wilkinson, Life Scientist
Ryan Maisano, Physical Scientist
- e. **EPA ID Number:** CT5000001545
- f. **NAICS:** 62211- General Medical and Surgical Hospitals
- g. **Street Address:** 950 Campbell Ave, West Haven, CT 06516
- h. **Mailing Address:** 950 Campbell Ave, West Haven, CT 06516
- i. **Facility Contacts:** Thomas J. Hemenway
GEMS Program Manager
Email: thomas.hemenway@va.gov
Phone:203-932-5711 ext.2767
- j. **Generator Status (per RCRAInfo):** Large Quantity Generator
- k. **Date first notified as a generator (per RCRAInfo):** 2/22/1995 as a Small Quantity Generator on 2/26/2004 changed status to Large Quantity Generator
- l. **Date of most recent notification in RCRAInfo:** 2/16/2022
- m. **Current Property Owner:** US Federal Government -VA Connecticut Healthcare System
- n. **Current Operator:** US Federal Government-VA Connecticut Healthcare System
- o. **Wastes generated (per most recent RCRAInfo notification):** D001, D002, D004, D005, D006, D007, D009, D010, D011, D013, D018, D022, D024, D035,

F001, F002, F003, F005, P001, P012, P042, P075, P081, P188, U010, U035, U044, U058, U059, U089, U121, U122, U129, U150, U182, U187, U188, U200, U201, U205, U206, U237, LABP

Report Attachments:

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

II. FACILITY DESCRIPTION

VA Connecticut Healthcare System (“VA” or “Facility”) is a large quantity generator that provides various healthcare services to Veterans in the United States. They notified initially as a small quantity generator on 2/22/1995 and then a large quantity generator on 2/26/2004. The waste codes generated, per the most recent biennial report, are D001, D002, D004, D005, D006, D007, D009, D010, D011, D013, D018, D022, D024, D035, F001, F002, F003, F005, P001, P012, P042, P075, P081, P188, U010, U035, U044, U058, U059, U089, U121, U122, U129, U150, U182, U187, U188, U200, U201, U205, U206, U237, and LABP. The VA is the largest integrated healthcare system in the United States according to their website. The VA system includes 1,298 facilities, including 171 VA Medical Centers, and 1,113 outpatient sites. The VA provides care to over 9 million Veterans. The property the VA Connecticut Healthcare System is on is owned and operated by the United States Government. The medical campus is around 1.2 million square feet. The West Haven, CT location of the VA Medical Center provides primary care and specialty health services. These services include mental health, cancer treatment, palliative and hospice care, physical therapy, and rehabilitation. The Facility also does medical research on-site. The facility operates 24 hours a day/7 day a week. Most personnel work 8:00 am - 4:30 pm. The VA employs around 3,500 people on the West Haven Campus. There are no hazardous waste tanks on site, and they do not treat hazardous waste.

III. INSPECTION IN-BRIEF

EPA inspectors arrived at the Facility at 950 Campbell Ave, West Haven, CT 06516 at approximately 8:30 am on June 8, 2023. The EPA inspection team (“inspection team”) consisted of Linda Brolin, Cheryl Wilkinson, and Ryan Maisano. The inspection team entered the facility at the main entrance and requested to see the environmental health and safety person at the information desk. Thomas Hemenway from the VA responded to the information desk’s call and led the inspection team to a conference room in the hospital where the senior leadership offices were located. The inspection team presented their EPA credentials to Thomas Hemenway, John Callahan, and Deeksha Ahuja, and gave out business cards at this time. The following personnel were present at the in-brief:

EPA:	Linda Brolin, Environmental Engineer Cheryl Wilkinson, Life Scientist Ryan Maisano, Physical Scientist
Facility:	Thomas Hemenway, GEMS Program Manager John Callahan, Deputy Medical Center Director

Deeksha Ahuja, Assistant Medical Center Director

EPA inspectors started the briefing by providing an overview of the inspection. The inspection team discussed the records that would be requested, areas of interest, photos, and Confidential Business Informations (CBI). The inspection team requested a list of the satellite accumulation areas (“SAA”) due to the large number of them located at the facility. John Callahan explained that there are two main buildings and at least 16 other buildings. Building 1 and 2 are the main building. Mr. Callahan went on to explain the building numbers go from 1-50. Some of the numbers have no buildings associated with them. Building number 50 is the only 90-day hazardous waste accumulation area (HWAA). There are several satellite accumulation areas (“SAA”) located on-site. Triumvirate Environmental is the contractor that handles and transports hazardous waste from the facility. Mr. Hemenway oversees the contract and contractor. Brian Owens is the Emergency Manager for the facility. Mr. Hemenway is the Emergency Coordinator.

The buildings at the facility include:

- Building 1-Wastes are generated in the following areas:
 - Clinical Lab
 - Pharmacy
 - Pathology Lab
 - Medical Rooms
 - Radiology
 - Nutrition/Food
- Building 2 - Wastes are generated in the following areas:
 - 5th Floor Oncology
 - Pharmacy 2nd Floor
 - Dental
 - Medication Rooms
 - TB Lab
 - Research Labs
 - Eye Clinic
- Building 3
 - Research Labs
- Building 4
 - Research
- Building 5
 - Research
 - Virology Lab
- Building 6 - Offices
- Building 7- Not in use
- Building 8 Offices
- Building 9 Offices
- Building 10
 - Car Garage
- Building 11

- Contracting Administration
 - Mental Health Patient Treatment
- Building 12
 - Administrative
- Building 14
 - Fisher House/Ronald McDonald House
- Building 14A
 - Domicile
- Building 15
 - Administrative
- Building 15A
 - Administrative
- Building 15A
 - Chiller Plant
- Building 16
 - Boiler Plant
- Building 19
 - Natural Gas Compressor-Power Plant
- Building 21-Maintenance Shops
 - Plumbing
 - HVAC
 - Electric
- Building 22
 - Grounds Shops
- Building 24
 - Laundry
- Building 27
 - Research
- Building 34
 - Research
- Building 35
 - Office Research
- Building 35a
 - Office Research
- Building 36
 - Office Research
- Building 36a
 - Office Research
- Building 38
 - Generator 2
- Building 39
 - Generator 3
- Building 50
 - Hazardous waste accumulation area

Buildings 1 and 2 are the main buildings and most of the waste is generated there. In the research buildings, there are small amounts of hazardous waste generated. Most of the research is on the micro-scale. Methanol, toluene, and sulfuric and nitric acids are common wastes in the research areas. The dental area, located in Building 2, mainly has medical waste containing metals. According to Mr. Hemenway, the metals are collected and transported off site for recovery. There is a nationwide VA program that collects precious metal waste and sends it to a site in Illinois. In the med rooms (Building 1), the waste generated is mainly medications, such as coumadin and warfarin. The tank farm on site stores product, not waste.

The in-brief discussion ended around 9:30 am on June 8, 2023, following which the inspection team conducted the walk-through portion of the inspection.

IV. FACILITY TOUR

This section consists of observations by EPA Inspectors during the physical tour of the Facility. Please see Attachment 2 for a digital photo log of photos taken throughout the inspection.

The tour of the Facility started on June 8th, 2023, at approximately 9:50 am. The following personnel were present for all or part of the tour:

EPA:	Linda Brolin, Environmental Engineer Cheryl Wilkinson, Life Scientist Ryan Maisano, Physical Scientist
Facility:	Thomas Hemenway, GEMS Program Manager

Building 2-5th Floor-Room 5-202-Oncology Pharmacy

Upon exiting the conference room, the inspection team and Mr. Hemenway made their way to the 5th floor in Building 2. Once on the 5th floor, the team started with room 5-202 which is an oncology pharmacy. This pharmacy mixes compounds and infusion compounds for cancer treatments. There is a hazardous waste satellite accumulation area sign (HW SAA sign) posted in the area that lists the storage and labeling requirements and the phone numbers to call for help and to schedule a waste pick up. The following containers were located in this SAA: one closed 18-gallon black bin, labeled as hazardous waste, D and U listed waste, bulk chemo; one closed 5-gallon black container labeled non-hazardous waste, non-regulated pharmaceuticals. There was also one empty 2-gallon black container, labeled as Hazardous waste, arsenic, epinephrine, warfarin, and nitroglycerine, according to Mr. Hemenway.

Building 2-5th Floor-Room 5-226-Cardiology Research Lab

The next room in Building 2 the inspection team visited was the Cardiology Research Lab. The SAA is located in a cabinet with a HW SAA sign on the door. In this SAA, there is one 5-gallon container labeled "Non-Hazardous Waste-Aminopropionitrile. There were 5 other small empty

containers for waste. Finally, there is one vial that is labeled as ketamine/xylazine. All of these containers located in the SAA were closed. This vial is an expired controlled drug that is not labeled as waste. (*See photo #6*) The weekly inspection sheet located at this SAA was missing inspections for the following dates: 4/7, 4/14, 4/21, 4/28, 5/5, 5/12, 5/19, 5/24, and 6/2/2023.

Building 2-2nd Floor-Room 2-215-TB Lab

The next area the inspection team observed was the TB lab. In this lab, the SAA only had a one-1-gallon closed container labeled as used batteries.

Building 2-2nd Floor-Room 2-218-TB Lab

In this TB Lab stains are used according to Mr. Hemenway. Methylene Blue and stains containing 3% acid are being used in the lab. LPH is used for disinfecting the lab. The inspection team did not enter the TB testing lab for safety reasons. An SAA was located in that area.

Building 2-2nd Floor-Room 2-145-Medication Room in Pharmacy B

In the waste area of the medication room, there were two containers. One container is a 2-gallon container labeled as hazardous waste-D&U coded pharmaceutical waste. The other container is a 1-quart labeled as hazardous waste-P coded pharmaceutical waste. Both containers were closed.

Building 2-2nd Floor-Room 2-104 Outpatient Pharmacy

The SAA area of the outpatient pharmacy contains six containers. There is also a collection tube for alkaline batteries. The signage for the area was located above the SAA. The inspection team met Safiye Nuhic, Outpatient Pharmacy Supervisor, who explained that weekly inspections are done by the supervisors and Triumvirate comes weekly to pick up waste. Inspections are documented on a weekly inspection log located in the area. All containers were closed at the time of the inspection. The waste stored in the area at the time of the inspection included the following:

Top shelf of the SAA

Two 1-gallon containers one was labeled as hazardous waste and the other was non-hazardous waste. The non-hazardous containers were labeled as inhalers. The hazardous container was labeled as P-Listed pharmaceutical waste-Arsenic Trioxide, Nitroglycerine, Epinephrine, Physostigmine, Nicotine, Warfarin

Second shelf

Two 18-gallon containers both labeled as hazardous waste. The first container was labeled as D and U listed pharmaceuticals. The other container was labeled as P-listed pharmaceuticals.

Bottom shelf

Two 18-gallon containers. One was labeled as hazardous waste D and U listed pharmaceutical waste and the other is labeled as non-hazardous waste-non-regulated pharmaceuticals.

Building 2-2nd Floor-Room 2-117A Dental Clinic

The dental clinic SAA is located in a closet. In the closet, the SAA was on a shelf and the containers were located in a bin. There were five containers located in the SAA bin. The SAA bin was labeled as a “Satellite-Hazardous Waste Accumulation Area.” Mr. Hemenway’s contact extension was labeled on the shelf near the bin. The one hazardous waste container that was located in this SAA was labeled as Hazardous Waste, D and U listed pharmaceutical waste: Paraldehyde, Phenacetin, Phenol, Reserpine, Resorcinol, Selenium Sulfide, Streptozotocin, Trichlorofluoromethane, Uracil Mustard. The other two containers located in the SAA were both 1-quart containers, one was labeled amalgam teeth and the other was labeled traps.

Building 2-7th Floor-Room 7-117 Genetic Research Lab

In the Genetic Research Lab, there was one SAA located in a cabinet under one of the sinks in the lab. In that SAA, there were six small containers located in a bin as secondary containment. Those containers all had product labels on them. There was another SAA in a flammable cabinet with a hazardous waste sign on the door. Inside the flammable cabinet, there was a 5-gallon container labeled hazardous waste-Isopropanol and Ethanol. All the containers were closed.

Building 2-7th Floor-Room 7-192B Cancer/Kidney Disease Research Lab

The SAA in this lab was located in a cabinet under a fume hood. There were two empty containers located in a bin. There was a SAA sign located on the wall along with an inspection log. The inspection log was the missing weeks of 4/2/2023 and 5/26/2023..

After finishing up in room 7-192B the inspection team was led by Mr. Hemenway to Building 15A the safety office where his office was located. The team was led to a conference room in that trailer and then broke for lunch. After lunch, the team did some of the records review. To finish the first day of the inspection, the inspection team visited the main accumulation area. This allowed for more time for Mr. Hemenway to pull more records that inspection team requested.

Building 50-Hazardous Waste Accumulation Area

The 90-day hazardous waste accumulation is located outside. The building contained four different storage sections, all with secondary containment. The signage on the building includes two no smoking signs, three hazardous waste signs/main accumulation area/emergency information, and three dangerous signs. The hazardous waste signs have out-of-date contact information according to Mr. Hemenway. (*See photo #31.*) Mr. Hemenway explained that the list needs to be updated as a few of the people on it are retired and his name is not on it. There is a fire extinguisher located at the front of the building. The storage building is grounded at the rear of the building. There is an eye wash station.

The first and second storage units were used as hazardous waste storage, the third storage unit was used as packing supplies, and the fourth storage was for unit empty containers and non-regulated waste.

Storage Unit One

Left Side

One 55-gallon container, hazardous waste, flammable, corrosive lab waste, 4/24/2023.
One 55-gallon cardboard container, non-hazardous waste, carbon filters, 5/1/2023.
One 5-gallon container, hazardous waste, gasoline, 5/8/2023.

Right Side

One 5-gallon container, hazardous waste, ethanol, acetone, crystal violet No Date-Empty.
One 5-gallon container hazardous waste, flammable, corrosive, stain waste No Date-Empty.
One 5-gallon container white hazardous, flammable, corrosive lab waste, ethanol, acetic acid - Empty. The label on this container is stained and faded and hard to read.
One 5-gallon container, hazardous waste, aerosols, 5/8/2023.
Two 450-ml containers, hazardous waste, Neulumex, 6/5/2023.
One 5-gallon container, hazardous waste, phenol, ethanol, /27/2023.
One container, non-hazardous waste, nonflammable, aerosols, 6/5/2023.
One container blue, hazardous waste, oxidizing liquid, corrosive, basic, cartridges, 5/1/2023.
One 5-gallon black container, hazardous waste, hydrogen peroxide, acetic acid, peroxyacetic acid, wipes, 5/8/2023.
One 5-gallon black container, hazardous waste, methanol thin prep vials, 4/24/2023.
Four 55-gallon containers, hazardous waste, flammable lab waste, 5/1/2023, 6/5/2023, 4/24/2023, 5/22/2023.

Storage Unit Two

Right Side

One 55-gallon black regulated loose pack, 5/30/2023, closed.
One 55-gallon black container, non-hazardous, non-regulated pharmaceuticals, 6/5/2023 closed.
One 55-gallon container non-hazardous, soda lime, 5/31/2023 closed.
One 55-gallon blue container UN3291, regulated medical waste, BioFire cartridges, acetaminophen, there was no date, closed.
One 55-gallon container non-hazardous waste, specimen in formalin, 5/11/2023 closed.
One 55-gallon cardboard container, hazardous waste, corrosive liquids, acidic, inorganic, 5/1/2023, closed.
One 5-gallon white container of barium sulfate. There was no date on the label. (*See photo #47*)
One 55-gallon black container empty.
One 50-gallon blue container empty.

Left Side

There was one 1-gallon white container, labeled “dental amalgam for recycling, contaminated teeth”, start date 1/23/2019. According to Mr. Hemenway, this is the mercury and silver that is sent to a central location in Illinois by the VA. Triumvirate used to pick up this amalgam but

stopped because of the VA recycling program. Mr. Hemenway is not sure how long the container has been there, (*See photo #40-41*).

There were seven-various sizes-black containers, labeled, hazardous waste, P-Listed pharmaceutical waste, with the following dates- 5/11/2023, Two-4/14/2023, 4/23/2023, Two-5/22/2023, and 5/30/2023.

Two-black containers, hazardous waste D and U coded pharmaceutical waste, dated 4/17/2023 and 5/15/2023.

One 30-gallon cardboard container, Hazardous waste, xylene in wax, dated 5/1/2023.

One 30-gallon cardboard container, Non-hazardous, hydraulic door closures.

One 5-gallon black container, Non-hazardous, waste asbestos.

Storage Unit Three

Packing storage.

Storage Unit Four

Containers of hand sanitizer waste cartridges-not expired; facility changed dispenser units.

One blue 55-gallon container labeled as non-hazardous-antifreeze.

One black 55-gallon container labeled as non-hazardous-non-regulated pharmaceuticals.

Containers of X-Ray tubes labeled as non-hazardous.

Non-flammable gas cylinders

Containers of non-hazardous inhalers.

All containers were closed at the time of the inspection. The inspection team discussed with Mr. Hemenway the lack of aisle space in storage unit four. Some of the containers could not be inspected and were inaccessible due to how the unit was packed. Mr. Hemenway explained that the containers have been there since the end of April or May, (*See photos #32-36*). Under the floor grating in the storage unit one, the secondary containment area, the inspection team observed Vermiculite, an absorbant material that had staining and discoloration on it, showing evidence of spills, (*See photo #70-73*). Mr. Hemenway explained that the 55-gallon containers in the storage unit one was lab waste brought to the HWAA and is consolidated there. He explained that during the consolidation, is how the staining and discoloration occurred. Mr. Hemenway was not sure when the secondary containment was last cleaned.

Weekly inspection logs were reviewed by the inspection team while at Building 50. The logs were located in storage unit one. The inspections are done by Triumvirate. The years 2020-2023 were reviewed by the inspection team. The inspection team observed the weekly inspection logs had a question regarding aisle space, and if the secondary containment area was clear, and there was an area on the logs for observations and corrective actions. There were no corrective actions noted since the weekly inspection done on December 5, 2022.

The inspection team then ended the walkthrough for day one. No out-brief was conducted.

Day 2, June 9, 2023

The inspection team arrived at the Facility at approximately 08:30 am on June 9, 2023. The inspection team met Mr. Hemenway at Building 15A the safety office and they were led to the same conference room in the trailer as the day before. Mr. Hemenway has an appointment that morning, so the inspection team met Leonard Zwack, an Industrial Hygienist at the VA. Mr. Zwack has been with the VA for almost one year. Mr. Zwack led the team around the facility.

Building 1-Ground Floor In-Patient Pharmacy

At the in-patient pharmacy, the inspection team met Greg Rdzak. Mr. Rdzak is a pharmacist in the inpatient pharmacy. He led the team to the SAA area in the drug handling area. In that area, there were four containers located on a cart. All containers were closed. Mr. Rdzak explained to the inspection team that the VA has a color-coded system for hazardous drug handling. This is done so nurses and staff can easily identify each hazard. The waste stored in the area at the time of the inspection included the following:

One 18-gallon black container, labeled Hazardous waste, P-L listed pharmaceutical waste, NA 3082.

One yellow biohazard container.

One 1-gallon white container, labeled non-hazardous waste, inhalers.

One 20-gallon black container, labeled Hazardous waste, arsenic, epinephrine, nicotine, nitroglycerine, physostigmine, and warfarin.

Building 1-Research Pharmacy

Mr. Rdzak led the inspection team to the Research Pharmacy which included one SAA. All of the containers were closed. The waste stored in the area at the time of the inspection included the following:

One 18-gallon yellow container, labeled as biohazard, Sharps collector.

One 5-gallon black container, labeled, Hazardous waste, Flammable liquids, alcohol.

Germ-Free IV Trailer

The inspection team then followed Mr. Rdzak outside to the germ-free trailer where specialty oncology IVs were compounded. The trailer was under cover. There were positive pressure rooms on the right side of the trailer and negative pressure rooms on the left side. On the left side of the trailer, there is an SAA. All containers were closed in the SAA. Mr. Rdzak mentioned that this waste is picked up every 4 months or so. The inspection did not take a photo of this SAA because it was located in a clean room. The waste stored in the area at the time of the inspection included the following:

One 18-gallon black container labeled, Hazardous waste, Flammable liquids, alcohol.

Building 2-4th Floor-Room 4-169 Eye Clinic

The SAA located in the eye clinic was in a soiled utility room under the sink. This SAA had two shelves with a biohazard container located on the counter above. All of the containers were closed. The waste stored in the area at the time of the inspection included the following:

Top shelf:

One 18-gallon black container, labeled Hazardous waste, D and U listed waste.

Two 1-gallon clear container, labeled Hazardous waste, hydrogen peroxide.

Bottom shelf:

One 1-quart black container labeled, Hazardous waste, profile 16010 UN NA3082

One 1-gallon clear container labeled, Non-hazardous pharmacy waste.

One 1-gallon clear container labeled, Hazardous waste, isopropanol.

Building 1 Clinical Labs

After Building 2 was completed, the inspection team was led by Mr. Hemenway to Building 1, Clinical Labs. In the clinical labs, there are three SAAs. The first SAA is in a cabinet and bin under a lab counter near a sink. This SAA was labeled on the outside of the cabinet. All containers were closed. The waste stored in the area at the time of the inspection included the following:

One 1-gallon clear container, labeled Hazardous waste, polyvinyl alcohol.

One 1-gallon clear container, labeled Hazardous waste, expired reagents (methanol, DMSO, PBS).

One 1-gallon clear container, labeled Non-hazardous waste, Formalin.

one 5-gallon clear container, labeled Hazardous waste, ethanol, acetone, crystal violet, gram stain, Flammable.

The second SAA is located on the lab bench next to a sink. The SAA is labeled on the bin where the containers were located. The containers in this SAA were all closed. The waste stored in the area at the time of the inspection included the following:

One 5-gallon clear container, labeled Hazardous waste, ethanol, acetone, crystal violet, gram stain, Flammable.

There are various stains stored in the same bin. All of them are labeled for use in the lab.

The third SAA was located in the back of the room. This SAA was one 55-gallon blue container that was labeled Hazardous waste, deactivated MRSA cartridges (sodium hydroxide). The container was not closed at the time of the inspection, (*See photos #99 and 101*) The inspection team interviewed Wilson Vientos who is the Lab Supervisor. The team discussed the open container of hazardous waste and the regulations that applied. Mr. Vientos closed the container while the inspection team was present.

Building 1 Room 1-229 Chemistry Hematology Lab

In the Chemistry Hematology Lab, the inspection team interviewed Bismark Adu, Technical

Specialist about the waste in that area. The SAAs in this area include waste from a Sysmex Instrument that is used to analyze blood samples. The instrument uses ethanol to clean slides and automatically collects in a 5-gallon white container. The container was labeled as Hazardous waste-ethanol, stain. Other containers that were associated with the Sysmex were not waste and contained products. The product was deionized water and stains. The inspection team viewed the waste for the Abbott Arch. The lab had two Abbott Arches. These instruments perform metabolic and blood chemistry analysis. According to Desirei Hernandez, a Medical Laboratory Scientist. The Arch instruments were both draining to a pipe located in the lab which drained to the sanitary. Mr. Hemenway explained to the inspection team that the VA does have a water discharge permit. The instrument took reagents that included an acid wash and ICT reference solutions. The container of the acid wash did not note the type of acid. The ICT reference solution contained sodium, potassium, and chloride.

Building 1 Room 1-175 Histology Lab

The SAA in this lab was located in the hoods, closet, and on the floor in secondary containment bins. The hoods that included the SAAs were one and three. The inspection team interviewed Scott Dunn, who is responsible for safety and hazardous waste in this lab. There were two containers of product located in hood three with the waste and they included ammonia hydroxide and acid alcohol. Both of those products were used in the staining process in the lab. The waste stored in SAA three at the time of the inspection was one 5-gallon clear container labeled as hazardous waste, acid waste, corrosive. The waste stored in Hood #1 at the time of the inspection included the following:

One 5-gallon black container labeled, Hazardous waste, methanol, human serum. This container was empty at the time of the inspection.

One 5-gallon clear container labeled, Hazardous waste, ethanol, xylene stain. This container was empty at the time of the inspection. The label is faded and difficult to read. At the time of the inspection, Mr. Dunn put a new label on this SAA container.

One 5-gallon clear container labeled, Hazardous waste, ethanol, xylene waste.

The two containers on the floor under hood one was empty but labeled as hazardous waste, ethanol, xylene stain. All containers in this lab were closed at the time of the inspection.

Building 1 Room 1-105 Fluoroscopy and Catheterization Lab Soiled Utility Room

The inspection team was then led to the fluoroscopy and catheterization lab. The SAA in this area was located in a soiled utility room. All containers in the SAA in this room were closed at the time of the inspection. The waste stored in the area at the time of the inspection included the following:

One 18-gallon black container, labeled Hazardous waste, P-listed pharmaceutical waste, pharmaceutical waste-arsenic trioxide, nitroglycerine, epinephrine, physostigmine, nicotine, warfarin.

One 5-gallon clear container, labeled Hazardous waste, barium sulfate.

Building 2 Ground Floor G-141 Utility Room

Mr. Hemenway led the team to a utility room in the basement of Building 2 which contained Universal waste storage. The waste stored in the area at the time of the inspection included the following:

One 55-gallon black container, labeled as non-PCB electronic ballasts, closed.

Three 5-ft round containers, labeled as Universal Waste, used lamps, dated 5/4/2023, 5/12/2023, and 5/12/2023.

There was one, open 5 ft round container of used lamps that was open, not labeled or dated, (*See photos #116, 118, and 119*). Mr. Hemenway placed a label on the container, dated it and closed it at the time of the inspection. The date was 5/12/23.

Mr. Hemenway explained that there was a recent change in contractors for universal waste. While the inspection team was in the room, Mr Hemenway labeled and closed this container.

Building 34 Room 105 Neuroscience

The SAA in the neuroscience room at the time of the inspection consists of one 500ml glass container labeled hazardous waste, glutaraldehyde (2%). The SAA was located in the hood in the Neuroscience Room, it was located in secondary containment and was closed. A hazardous waste SAA sign and inspection log is posted on the hood. The last inspection was done on 6/2/2023.

Building 34 Room 107 Molecular Biology Lab

The SAA in the Molecular Biology Lab was located under the hood in the room. There was one 1-gallon container labeled as non-hazardous waste, water, saline, bleach. There was an SAA sign on the counter in front of the SAA.

Building 34 Room 163 Molecular Neuroscience Lab

SAA in the molecular neuroscience lab was located in secondary containment on a lab bench. There was an SAA sign on the front of the secondary containment. In the SAA at the time of the inspection. there were two 1-L clear containers labeled as hazardous waste, ignitable, Gaudnidine thiocyanate, and the other was labeled as hazardous waste, ignitable, guanidine hydrochloride. The SAA containers were closed at the time of the inspection.

Building 4 Psychiatry Research Lab Room D-228

The inspection team was then led to Building 4. In Building 4, the team interviewed Devi Ojha, an Associate Research Scientist with Yale. The SAA in room D-228 was located in a secondary containment bin near the fume hood on the floor. There was one 5-gallon white container labeled, Hazardous waste, 50% ethyl acetate, 20% dichloromethane, 30% H₂O and methanol. The container is closed. Other supplies in the secondary containment bin are product and tools.

Building 4 Psychiatry Research Lab Room D-209 Chemistry Lab

In Room D-209, the SAA is located under the hood. The SAA included two bins and a brown bottle. The waste stored in the area at the time of the inspection included the following:

- One 5-gallon container labeled, Hazardous waste, corrosive, ethyl acetate, acetone, water.
- One 5-gallon container with no label, (*See photo #131*). At the time of the inspection, Mr. Ojha added a HW label, ignitable to this container.
- One 1-gallon container labeled, Hazardous waste, corrosive, lithium salt.
- One container of corrosive sand is labeled but with no description.
- One container labeled, Hazardous waste, hexane, IPA, MTBE and H₂O

Building 4 Hallway

In the hallway outside rooms D-209 and D-208, there was an SAA. There was a flammable cabinet located in the hallway with only product stored in it. The waste stored in the area at the time of the inspection included the following:

One 5-gallon black container labeled, Hazardous waste, silica gel, sodium sulfate, dated 12/20/2021. The label was written as the chemical formulas, instead of words, (*See photo #135*). The inspection team explained the full name should be written out on the label not just the formula.

One 20-gallon container, labeled, Non-hazardous non-regulated material.

The walk-through portion of the inspection was concluded.

The inspection team went to lunch. After lunch, the inspection team then returned to the conference room on the 5th floor of Building 2 to conduct the closing conference.

V. RECORDS REVIEW

The inspection team reviewed all documents on the first day of the inspection June 8, 2023. This was done in the conference room at Building 15A the Safety Office.

Manifests/LDRs

The inspection team reviewed hazardous waste manifests and land disposal restriction notifications from shipments made by VA Connecticut Healthcare System during 2021 and 2023. Triumvirate Environmental is being used by VA Connecticut Healthcare System for their

hazardous waste transporter. Some of the manifests showed waste being exported to Canada from the site. Mr. Hemenway explained Triumvirate acts as their exporter. The inspection team did not observe the international movement documents.

Inspection Logs

The inspection team reviewed inspection logs for 2020, 2021, 2022, and 2023. The names of the inspectors that signed the inspection sheets were Jonathan Reyes, Mark Shuman, and Anthony Libera from Triumvirate. No observations or corrective actions were noted since 12/5/2022.

Training/Job Descriptions

The inspection team reviewed VA Connecticut Healthcare System's training certificates and training logs. RCRA and DOT Hazardous Materials Regulations training was done by Thomas Hemenway and Xu Ling on 5/12/2022. Xu Ling is the Safety Manager. RCRA refresher was done by Thomas Hemenway on 1/27/2022. The training was given by Mabbett & Associates, Inc.

Contingency Plan

The inspection team reviewed VA Connecticut Healthcare System's contingency plan. The plan was initially created in May 2012 and the last update to the plan was done in January 2022. The plan was prepared by Mabbett & Associates, Inc. The inspection team reviewed the records of the submission of the plan to local authorities and emergency services. This was done by certified letters.

Spills and Clean-ups

The inspection team reviewed the spill log. The inspection team had no comment.

Biennial Report

The inspection team reviewed the biennial report submitted on February 16, 2022.

VI. INSPECTION OUTBRIEF

An out-brief conference was conducted on site, prior to leaving the facility. The following personnel were present for the closing conference:

EPA:	Linda Brolin, Environmental Engineer Cheryl Wilkinson, Life Scientist Ryan Maisano, Physical Scientist
Facility:	Thomas Hemenway, GEMS Program Manager John Callahan, Deputy Medical Center Director

Deeksha Ahuja, Assistant Medical Center Director
Leslie Pierson, Interm Medical Center Direction
Jennifer Bourgue, Executive Assistant to the Associate Director
Amy Charton from the Safety Dept. was on the phone.

EPA Inspectors noted that no violations were determined at this time. EPA then relayed the following areas of concern that arose from observations throughout the inspection.

1. Container Management:

- a. Hazardous Waste Accumulation Area
 - i. Inadequate aisle space in the storage unit 4
 - ii. Emergency contact sign was outdated. Mr. Hemenway mentioned the sign was updated to list the current contacts.
 - iii. The 5-gallon container in storage unit 2 was not dated.
 - iv. Contaminated teeth container was dated 1/23/2019.
 - v. Evidence of spill in storage unit 1
- b. Building 1 Clinical Lab-Open 55-gallon container in SAA
- c. Building 1 Room 1-173 Histology lab container of ethanol and xylene label was illegible. This label was corrected while the inspection team was onsite.
- d. Building 2 Ground Floor
 - i. Universal waste containers of lamps were open.
 - ii. Universal waste containers of lamps were not labeled.
- e. Building 4 Psychiatry Research Lab Room D-209
 - i. One 5-gallon container did not have a label.
 - ii. In the hallway outside D-209, there was a chemical formula used on a label instead of the name.

2. Other areas of concern:

- a. Building 1 Room 1-229 Chemistry Hematology Lab Abbott Arch instrument-no SDS and discharge permit was not reviewed.
- b. Export manifests did not have export numbers.

After discussing the above areas of concern, the inspection team reviewed the broad spectrum of all possible post-inspection follow-ups, including both informal and formal notices.

Following this discussion, the inspection team left the premises, concluding the on-site portion of the inspection.

