

Compliance Evaluation Inspection Report Brooklyn Veterans Affairs Medical Center 800 Poly Place Brooklyn NY 11209 September 13, 2022



Written by:

X

Ronald Lockwood

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Enforcement Officer
ECAD-CAPSB-CAS USEPA R2

Approved by:

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KATHLEEN
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Chief - Compliance Assurance Section
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COMPLIANCE EVALUATION INSPECTION REPORT

U.S. Environmental Protection Agency, Region 2
Enforcement and Compliance Assurance Division
290 Broadway, 21st floor
New York, New York 10007-1866

Locational Information

Facility Name: Brooklyn Veterans Affairs Medical Center
Facility Address: 800 Poly Place, Brooklyn NY 11209
Latitude & Longitude: 40.60773, -74.02136

ICIS & other Program ID Codes as appropriate

FRS: 110017051081
ICIS: 3601302623
RCRA ID: NY4360010249

Sector Information

Federal Facility: Yes
SIC: 8062 (General Medical and Surgical Hospitals)
NAICS: 622110 (General Medical and Surgical Hospitals)

Environmental Sensitivity Information

Potential Flood-Prone Area: Yes (See Appendix B: FEMA Flood Map)
Sole Source Aquifer: Yes (See Appendix C: Sole Source Aquifer Map)
Potential EJ Concerns: Yes (See Appendix D: EJ SCREEN)

Inspection Information

Date of Inspection: September 13, 2022
Inspector(s): Ronald Lockwood, Isabella Citera (Intern)

Facility

Representative(s):

Name	Title	Phone	Email
James McCarthy	Supervisory Environmental Engineer, GEMS Coordinator	(718) 836-6600 ext: 4560	James.McCarthy2@va.gov

Corrections/Updates for EPA Databases: N/A

Table of Contents

1. INTRODUCTION.....	5
2. FACILITY TOUR	5
Satellite Accumulation Areas.....	5
Central Hazardous Waste Storage Areas (CHWSA)	7
3. RECORD REVIEW.....	8
4. CLOSING MEETING.....	8
5. REGULATORY CONCERNS	9
6. ENVIRONMENTAL ASSISTANCE.....	9
APPENDICES:.....	10
A: Photographs.....	10
B: FEMA Flood Map	10
C: Sole Source Aquifer Map	10
D: EJ Screen	10

1. INTRODUCTION

The Region 2 office of the Environmental Protection Agency (EPA) inspected the Brooklyn Veterans Affairs (VA) Medical Center for compliance with the hazardous waste requirements under the Resource Conservation and Recovery Act (RCRA) because EPA databases indicated the facility is an active small quantity generator (SQG) of hazardous wastes. The inspection was unannounced.

The VA New York Harbor Healthcare System provides primary and specialty health care services to veterans living in the five boroughs of New York City. As part of this system, the Brooklyn VA Medical Center is a surgical and psychiatric facility with 153 beds as well as outpatient clinics to treat veterans who do not need to be hospitalized. The Brooklyn Campus also provides radiation oncology for all of the VA New York Harbor Healthcare System.

At 11:30 AM, Ms. Citera and I arrived at the facility, went to the Information Desk in the lobby, and asked to speak to the Green Environmental Management System (GEMS) Coordinator/ Supervisory Environmental Engineer, Mr. James McCarthy. We were instructed to go around the main building to where the facility maintenance department is located. There we met Mr. McCarthy, and I asked if there was a conference room where we could conduct the opening meeting. Mr. McCarthy then escorted Ms. Citera and I to such a conference room. At which point, I presented my EPA credentials to Mr. McCarthy; introduced Ms. Citera, a summer intern who was there to learn about the federal RCRA inspection process; offered in- and out-briefings; and explained that the RCRA hazardous waste inspection would include visiting the central hazardous waste storage areas (CHWSAs), the hazardous waste satellite accumulation areas (SAAs), and the universal waste storage areas (UWSA), as well as a review of the facility's hazardous waste manifests, weekly inspection checklists (if available), and training records. I also offered the opportunity to claim confidential business information, if any. The only request was to not take any photos of any patients or staff. I told Mr. McCarthy that following the inspection, a report will be generated that he will have an opportunity to review and that redactions can be done, if necessary. We then proceeded to conduct the facility walkthrough.

2. FACILITY TOUR

The facility has two CHWSAs (i.e., Research Lab Room 3-219 and Room 3-404), and four SAAs (i.e., In-Patient Pharmacy Room 6-227, Histology Lab Room 3-301, Microbiology Serology Room 3-408, and the Out-Patient Pharmacy Room B-614). The Out-Patient Pharmacy Room B-614 also serves as a UWSA.

Satellite Accumulation Areas

In-Patient Pharmacy Room 6-227

The front door of the In-Patient Pharmacy Room 6-227 is equipped with a both a camera/intercom system and keypad for entry. The In-Patient Pharmacy's SAA is located inside the room in a large closet clearly marked, "Caution: Hazardous Waste Satellite Accumulation Point. Unauthorized Employees Keep Out" (Photo 001). Near the entry door there was a fire

extinguisher and an emergency contact phone. Inside the room there is a sign identifying the room as a “Hazardous Waste Satellite Accumulation Area: Pharmaceutical Waste” with emergency contact information. Inside the storage closet, I saw a listing of pharmaceutical hazardous waste identification contained product names, generic names, EPA waste codes, and the characteristics of each listed waste. There were also the following two storage containers marked as hazardous waste (Photo 002):

- One 11-gallon container labeled hazardous waste insulin and other flammable liquids and toxic (Photo 003); and
- One 8-gallon container labeled For Incineration Only: RCRA hazardous waste, but there was no visible information of its contents on the label. When asked, Mr. McCarthy said the container had hazardous waste inhalers (Photo 004).

Finally, there was one empty 55-gal drum and a container for biological sharps.

Histology Lab Room 3-301

The SAA is located inside the Histology Lab. The entry door to the Histology Lab is clearly marked Biohazard: Authorized Personnel Only and a keypad code needed for entry. Inside the room there was one 10-gallon pail of xylene labeled “hazardous waste” (Photo 005), and one 5-gallon pail of non-hazardous waste. Near the entry door, there was a fire extinguisher and an emergency contact phone with the GEMS coordinator’s contact information.

Microbiology Serology Room 3-408

Inside of the Microbiology Serology Room is a small yellow locker marked “Flammable Hazardous Wastes” (Photo 006), which did not contain any hazardous waste at the time of the inspection. The room had numerous fire extinguishers and staff phones that could be used in case of emergency.

Out-Patient Pharmacy Room B-614

This SAA/UWSA is in the basement in an enclosed locked, gated area. There is a “Hazardous Waste Satellite Accumulation Area: Mixed Aerosols – Flammable D001” sign on the gate, which also contains emergency contact information. There is also signage instructing staff to keep the gate closed at all times. Signage inside the gated area states that universal waste (e.g., used batteries and electronics) is also stored here.

There was a visible spill in front of one of the waste storage shelves. When asked, Mr McCarthy contacted the pharmacy staff who maintains the room and it turned out that the spill was of Applicare Providore Iodine Solution, which is an antiseptic containing approximately 10% iodine. The staffer proceeded to clean up the spill, which had dried on the tile flooring (Photo 007).

Inside the SAA/UWSA there were the following items:

- One 8-gallon container with a hazardous waste label marked as ‘Waste Warfarin (Acutely Toxic)’ with an EPA waste number of P001 (Photo 008), inside of which was a plastic bag with unused warfarin pills (Photo 009).
- One 5-gallon pail with a hazardous waste label marked as ‘Waste Inhalers (flammable gas)’ with an EPA waste number of D001 (Photo 010), which contained 6 spent inhalers

- and a small box labeled “Placebo Respimat – Inhaler and Cartridge” (Photo 011).
- One 8-gallon container with a hazardous waste label marked as ‘Waste Insulin’ (Photo 012) that contained sealed plastic bags of insulin bottles (Photo 013).
- One 8-gallon container with a hazardous waste label marked as aerosols with an EPA waste number of D001 (Photo 014); and
- One large storage container marked Universal Wastes, which contained various batteries (e.g., pc batteries, alkaline AAA, and AA batteries). All universal waste batteries were labeled Universal Waste with accumulation start dates ranging from 7/11/22 to 7/26/22 (Photos 015-022).

Central Hazardous Waste Storage Areas (CHWSA)

Research Lab/Compressor Room 3-219A

This CHWSA is one of the two main storage areas in the facility. The front door had a sign reading “Chemical Storage Area: Caution Flammable Materials”. As with the SAAs above, there were fire extinguishers located near the entry door and a phone with emergency contact information. Inside the room there were the following items:

- One 8-gallon container holding two 12-oz bottles of Barium Sulphate labeled as Hazardous Waste and dated 8/25/22 (Photos 023 and 024 – only one bottle in photo);
- One 8-gallon container with a hazardous waste label marked as ‘Silver Nitrate (D011-Silver, D003 - Reactive)’ and dated 8/22/22 (Photo 025), which contained one small box (containing 100 applications) of Arzol Silver Nitrate and three loose tubes of Arzol (Photo 026).
- One 8-gallon container with a hazardous waste label marked as sulfuric acid and dated 8/8/22 (Photo 027), which contained two partially filled glass bottles of sulfuric acid (Photo 028).
- One 8-gallon container of cesium hydroxide and sodium hydroxide (D002) labeled Hazardous Waste and dated 8/22/22 containing one 500-gram plastic bottle of sodium hydroxide and two 50-gram glass bottles of cesium hydroxide (Insert 0121 as 029, Photo 029).
- One 8-gallon container of calcium granules (D003) labeled hazardous waste and dated 8/12/22 containing two metal cans of calcium granules (Photos 030 and 031); and
- One small plastic tray (as secondary containment) with a hazardous waste label, on which sat a 25-gram glass bottle of ammonium persulfate, a 500-gram glass bottle of guanidine thiocyanate and a 1-gram metal bottle of phenylmethylsulfonyl fluoride (Photos 032, 033, and 034).

The room also had spill prevention and spill treatment materials for acids (Photo 035).

Room 3-404

The room is clearly marked as a “Hazardous Material Storage Area” but at the time of the inspection, there were no hazardous wastes being stored. All containers - one red container marked with the biohazard symbol and two blue plastic containers - were empty (Photos 036, and 037).

3. RECORD REVIEW

Manifests

A review of three years of manifests confirms the facility is an active small quantity generator (SQG) of hazardous wastes, manifesting such wastes 5-6 times a year with amounts ranging from 255 to 1315 pounds per shipment. All p-wastes manifested never exceed 2 pounds per shipment and are shipped no more than twice per calendar year. The last time two shipments of p-wastes were manifested in a calendar year was in 2019.

There were three manifests from June 2022 that were not entered into the New York State Department of Environmental Conservation (NYSDEC) eManifest database. The following are the findings:

- 022280972 JJK (6/29/22) – has designated facility signature, not in eManifest
- 020104537 JJK (2/5/22)– has designated facility signature, not in eManifest
- 022280960 JJK (6/16/22)– did not have the designated facility signature, not in eManifest

Noted concerns include the three manifests not represented in the NYSDEC eManifest system and the one manifest with no designated facility signature.

Weekly Inspection Records

Three years of inspection records were provided for the two CHWSAs (Room 3-219 and 3-404). No concerns were noted.

Training Records

No training records were provided for review.

4. CLOSING MEETING

With the walkthrough and record review complete, Mr. McCarthy, Ms. Citera, and I returned to the conference room we were at in the morning to begin the closing meeting. I pointed out the 8-gallon container with no visible information on the label in the In-Patient Pharmacy SAA in Room 6-227. I also asked about the general housekeeping procedures in the Out-Patient Pharmacy Room B-614 where the iodine spill was seen. Mr. McCarthy stated he would check to make sure future spills are cleaned up immediately. Finally, I asked about the manifests missing from the NYSDEC eManifest system and the manifest with the missing designated signature. Mr. McCarthy said he was pretty sure the signed manifests were in the files, and he would send me a copy once located. He would also check on why the manifests are not in the NYSDEC eManifest system. I informed Mr. McCarthy I would be writing a report and sending him a copy for his response. I asked Mr. McCarthy if he had any questions, which he did not, and I concluded the on-site inspection.

5. REGULATORY CONCERNS

Based on observations made during the inspection and/or a review of records related to the RCRA hazardous waste inspection, the following regulatory concerns were identified:

REGULATORY, STATUTORY OR PERMIT REFERENCE	FIELD OBSERVATION
Pursuant to 6 NYCRR Parts 372.2(a)8(i)(‘a’)(‘2’), an SGQ must mark the containers in an SAA with the words "Hazardous Waste" and with other words that identify the contents of the containers.	The SAA in the In-Patient Pharmacy Room 6-227 had an 8-gallon container labeled ‘For Incineration Only: RCRA hazardous waste’, but there was no visible information of its contents on the label. When asked, Mr. McCarthy said the container had hazardous waste inhalers (Photo 004).
Pursuant to 6 NYCRR Parts 372.2(c)(3), a generator who does not receive a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 35 days of the date of shipment must immediately contact the transporter and/or disposal facility to determine the status of the shipment. If within 45 days of the date of shipment the generator has not received a signed copy of the manifest, an exception report must be submitted to the NYSDEC and, in the case of interstate shipments, submitted to the state in which the shipment was to be received, and any states in which the shipment may have been delivered. In the case of states which do not have EPA approved hazardous waste programs, notification must be sent to EPA.	Manifest number 022280960 JJK did not have the designated facility signature.

6. ENVIRONMENTAL ASSISTANCE

To increase the Federal community’s understanding and compliance with applicable environmental requirements, EPA, along with other Federal agencies, sponsor Fed Center, the Federal government's home for comprehensive environmental stewardship and compliance assistance information for Federal facility managers and their agencies. Fed Center can be accessed via the worldwide web at <https://www.fedcenter.gov/>

Also, EPA is pleased to announce the publication of the 2022 edition of “A 10-Step Blueprint for Managing Pharmaceutical Waste in U.S. Healthcare Facilities.” This practical guide helps healthcare facilities, including hospitals, surgery centers, and urgent care facilities, understand the applicable regulations so they can develop compliant, holistic, and cost-effective pharmaceutical waste management programs. The primary focus is to help healthcare facilities

understand EPA's hazardous waste regulations under RCRA as they apply to hazardous waste pharmaceuticals, but other regulations are also discussed. EPA last updated the document in 2008. Since then, the 2019 Hazardous Waste Pharmaceuticals Rule (https://www.epa.gov/hwgenerators/final-rule-management-standards-hazardous-waste-pharmaceuticals-and-amendment-p075?utm_medium=email&utm_source=govdelivery), as well as several other applicable policy and regulatory changes have gone into effect, rendering much of the 2008 version out of date.

In addition, the NYSDEC is seeking comments on potential revisions to the New York State hazardous waste management regulations to adopt some of the major regulatory changes published by EPA since 2012, including EPA's Hazardous Waste Generator Improvements Rule that, among other things, includes procedures for episodic generation events to allow hazardous waste generators to avoid increased burden of a higher generator status when generating episodic waste provided the episodic waste is properly managed. For more information on this pending change, go to: <https://www.dec.ny.gov/regulations/117189.html>

APPENDICES:

A: Photographs

B: FEMA Flood Map

C: Sole Source Aquifer Map

D: EJ Screen

Appendix A: Photographs

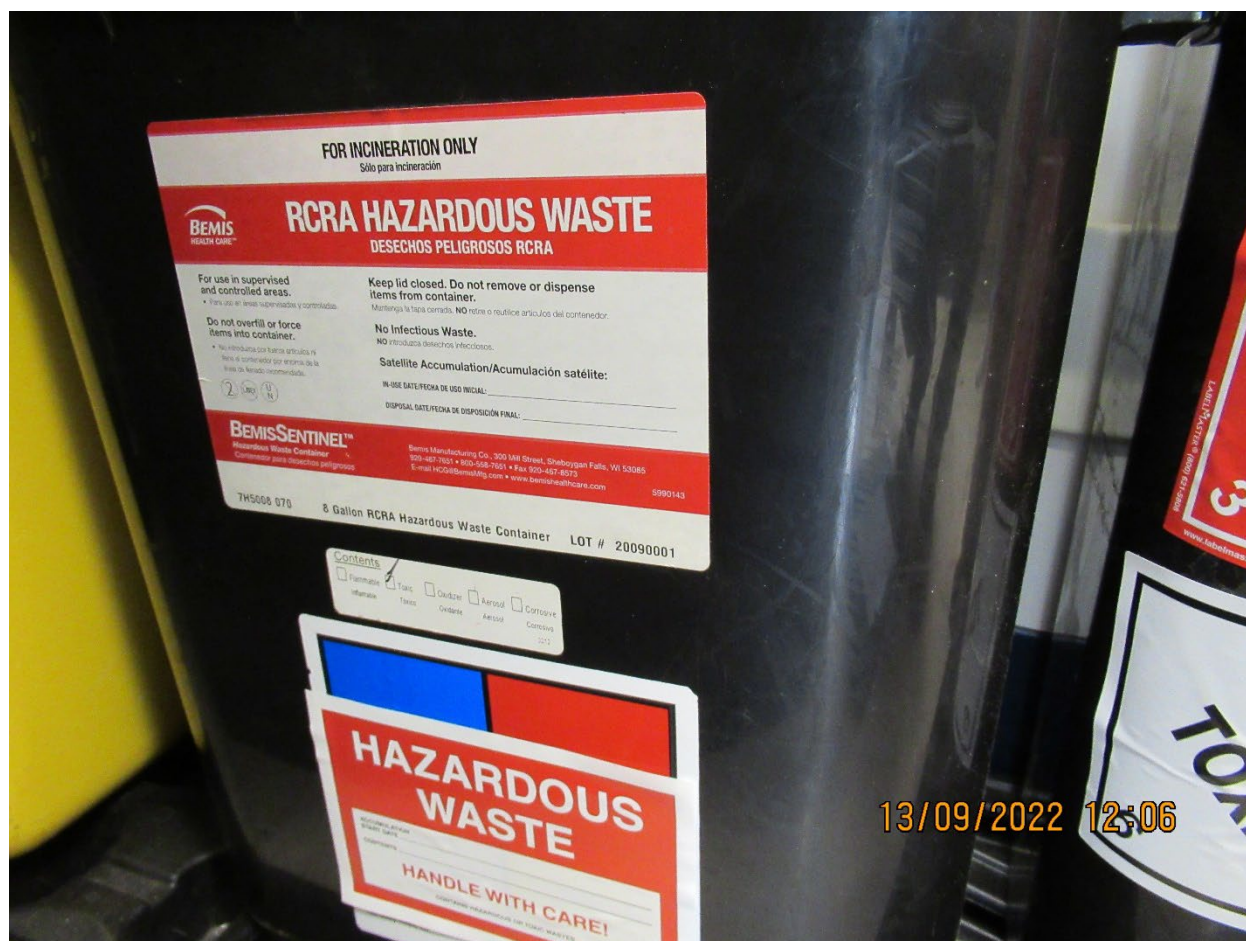
001



002







005



006



007



HAZARDOUS WASTE

FEDERAL LAWS PROHIBIT IMPROPER DISPOSAL
IF FOUND, CONTACT THE NEAREST POLICE OR
PUBLIC SAFETY AUTHORITY OR THE
U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERATOR INFORMATION:

NAME Brooklyn VA Medical Center
ADDRESS 800 Poly Place
CITY Brooklyn STATE NY ZIP 11209
EPA ID NO. _____ EPA WASTE NO. P-001
ACCUMULATION START DATE _____ MANIFEST DOCUMENT NO. _____

[Waste Warfarin
(Acutely Toxic)]

D.O.T. PROPER SHIPPING NAME AND UN OR NA NO. WITH PREFIX

HANDLE WITH CARE!

BRADY SIGNMARK® DIV.

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009





011





013



Photo 014



015





017



018



019





021



022





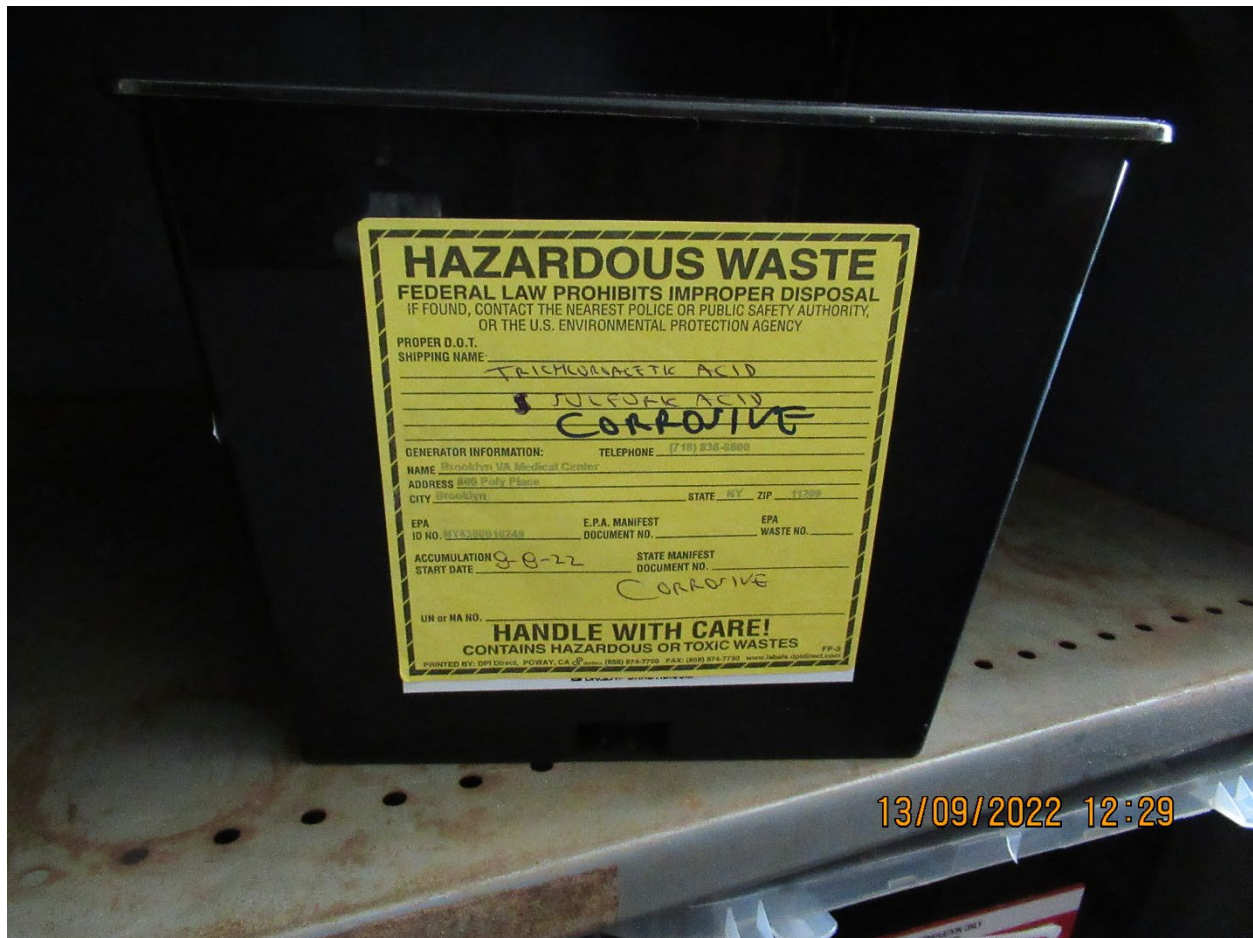
024



025







028





030



031

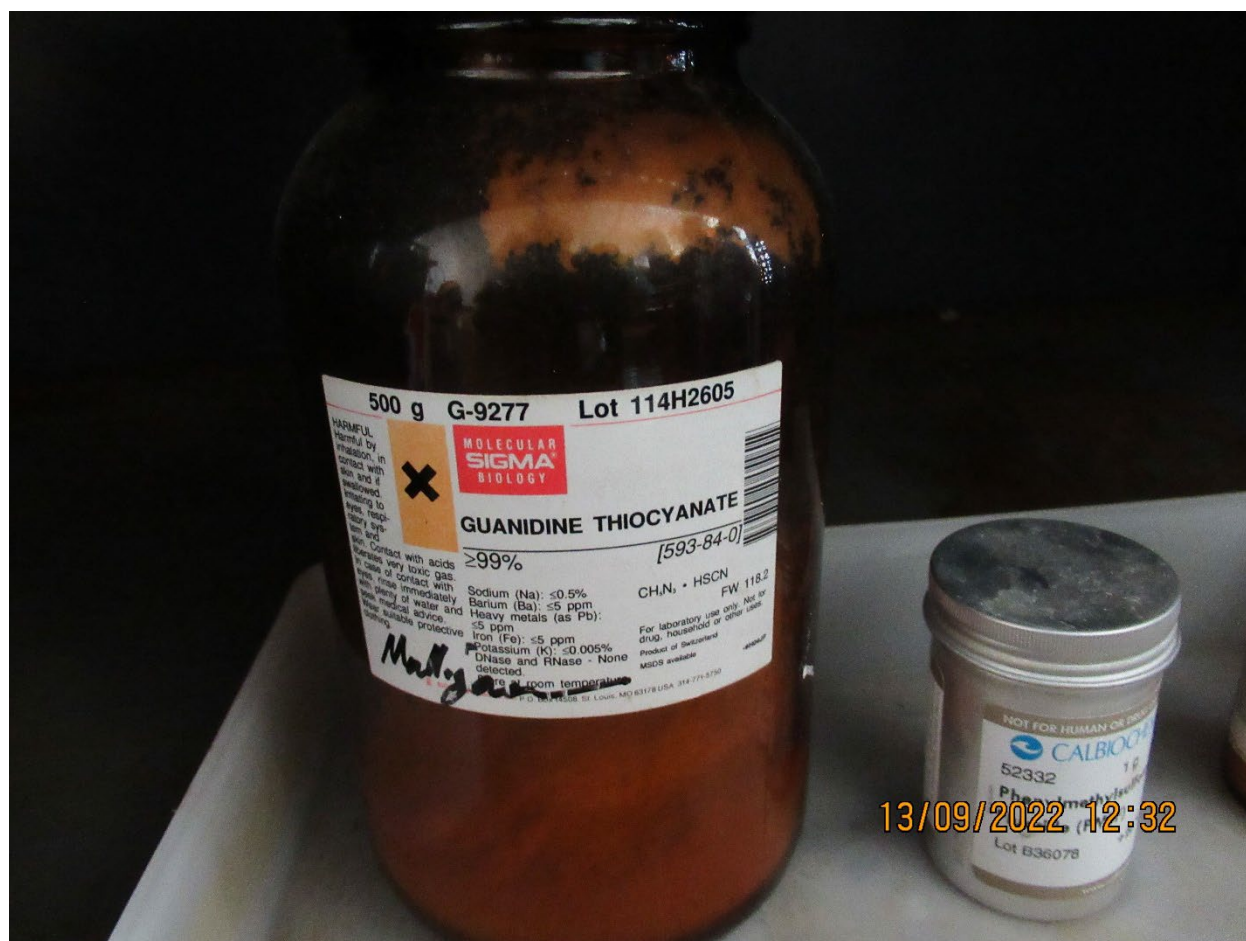




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034



035



036



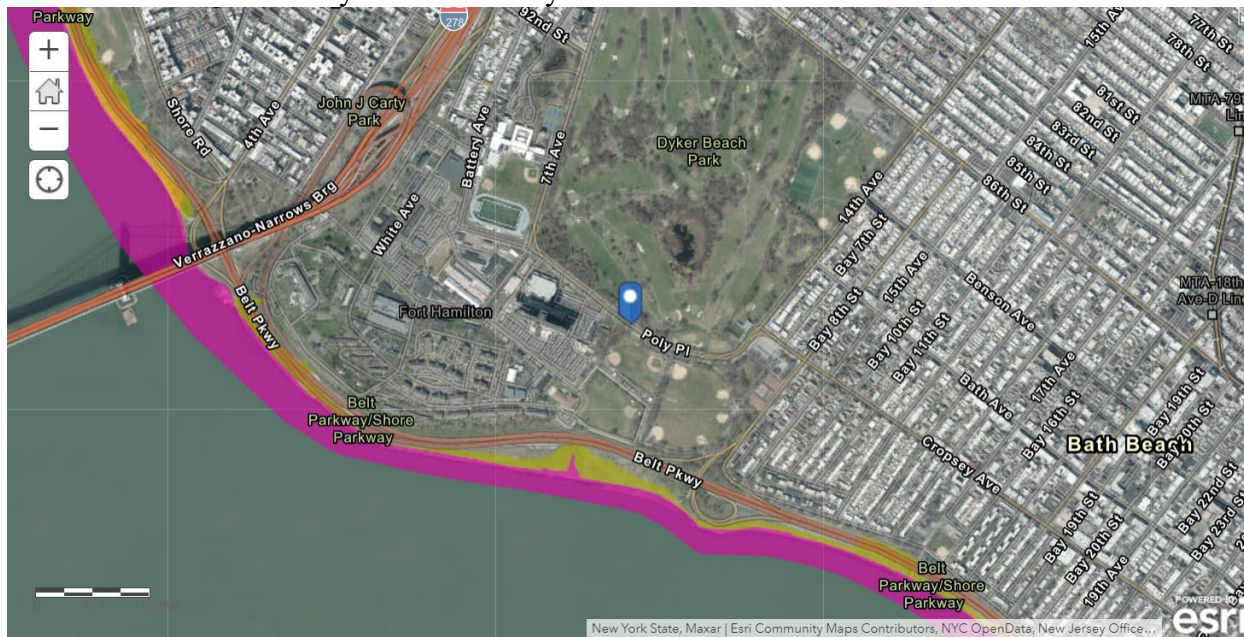
037



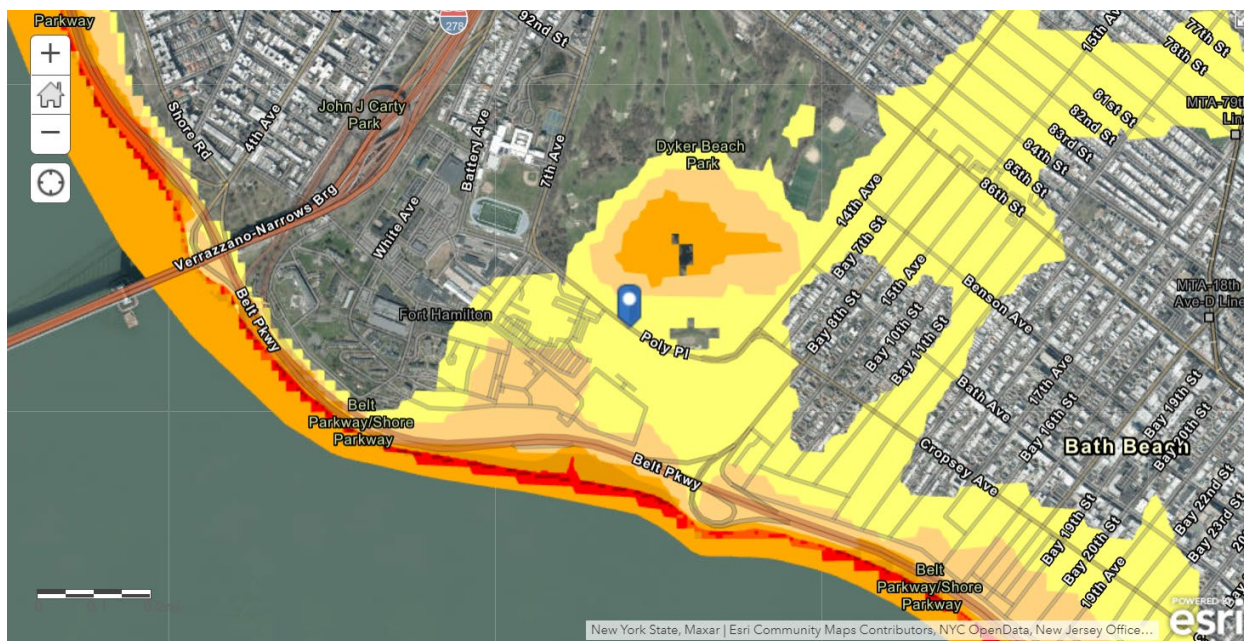
038



**Appendix B: Federal Emergency Management Agency (FEMA) 100 Year Flood Zone and
EPA's Region 2 Composite Flood Risk Layer**
Facility Name: Brooklyn Veterans Affairs Medical Center



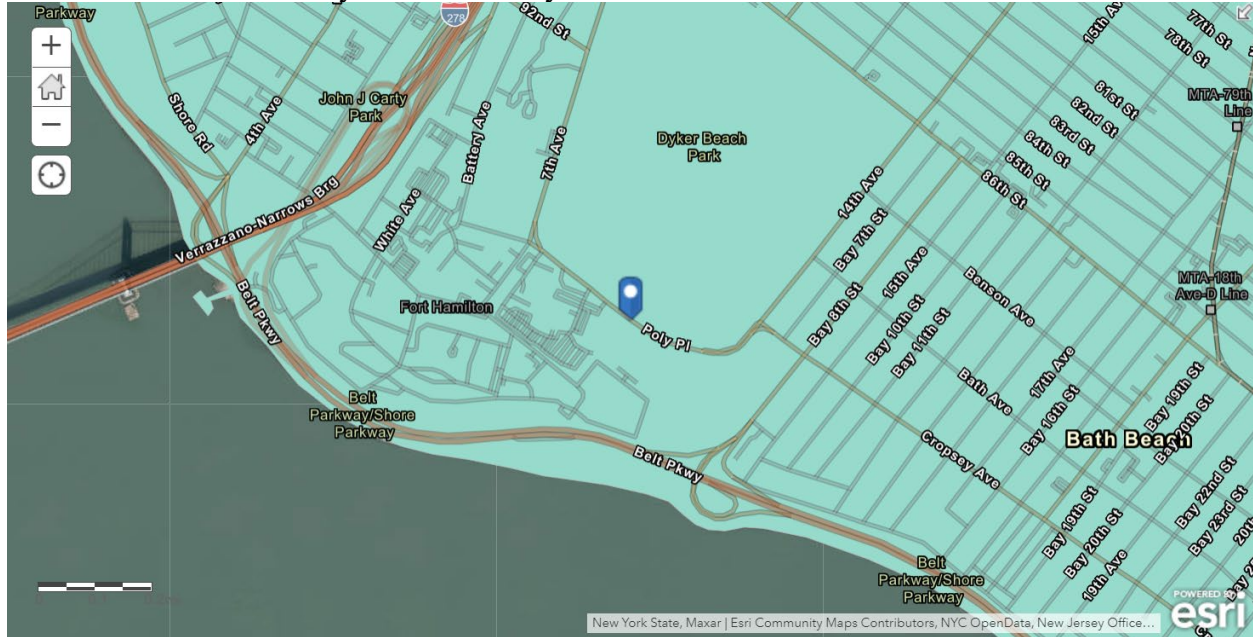
The facility is not located within a FEMA 100-year flood zone area.



The facility is located within a composite potential risk area based on the EPA's Region 2 Composite Flood Risk layer.

Appendix C: Sole Source Aquifer Map

Facility Name: Brooklyn Veterans Affairs Medical Center



The facility is located within a Sole Source Aquifer area.

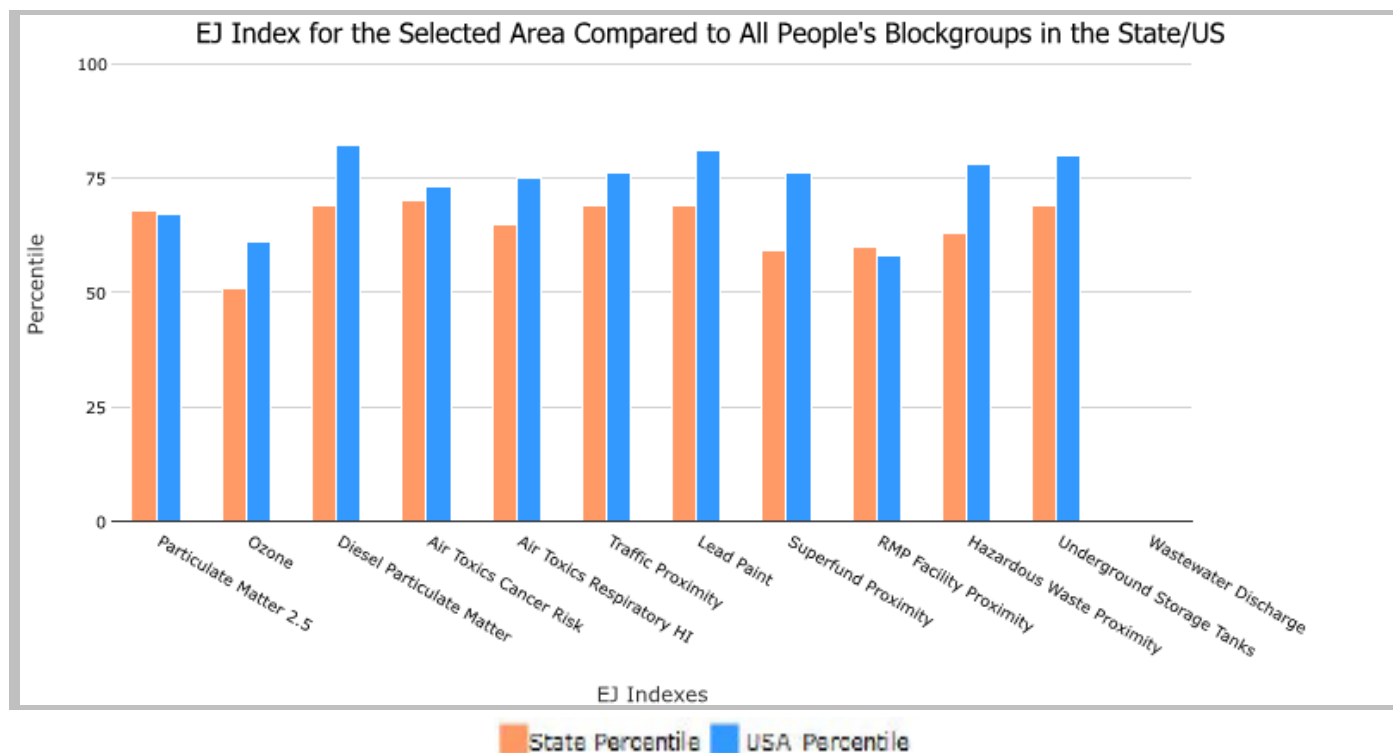
1 mile Ring Centered at 40.607762,-74.021330, NEW YORK, EPA Region 2

Approximate Population: 53,544

Input Area (sq. miles): 3.14

VA Brooklyn (The study area contains 6 blockgroup(s) with zero population.)

Selected Variables	State Percentile	USA Percentile
Environmental Justice Indexes		
EJ Index for Particulate Matter 2.5	68	67
EJ Index for Ozone	51	61
EJ Index for Diesel Particulate Matter*	69	82
EJ Index for Air Toxics Cancer Risk*	70	73
EJ Index for Air Toxics Respiratory HI*	65	75
EJ Index for Traffic Proximity	69	76
EJ Index for Lead Paint	69	81
EJ Index for Superfund Proximity	59	76
EJ Index for RMP Facility Proximity	60	58
EJ Index for Hazardous Waste Proximity	63	78
EJ Index for Underground Storage Tanks	69	80
EJ Index for Wastewater Discharge	N/A	N/A



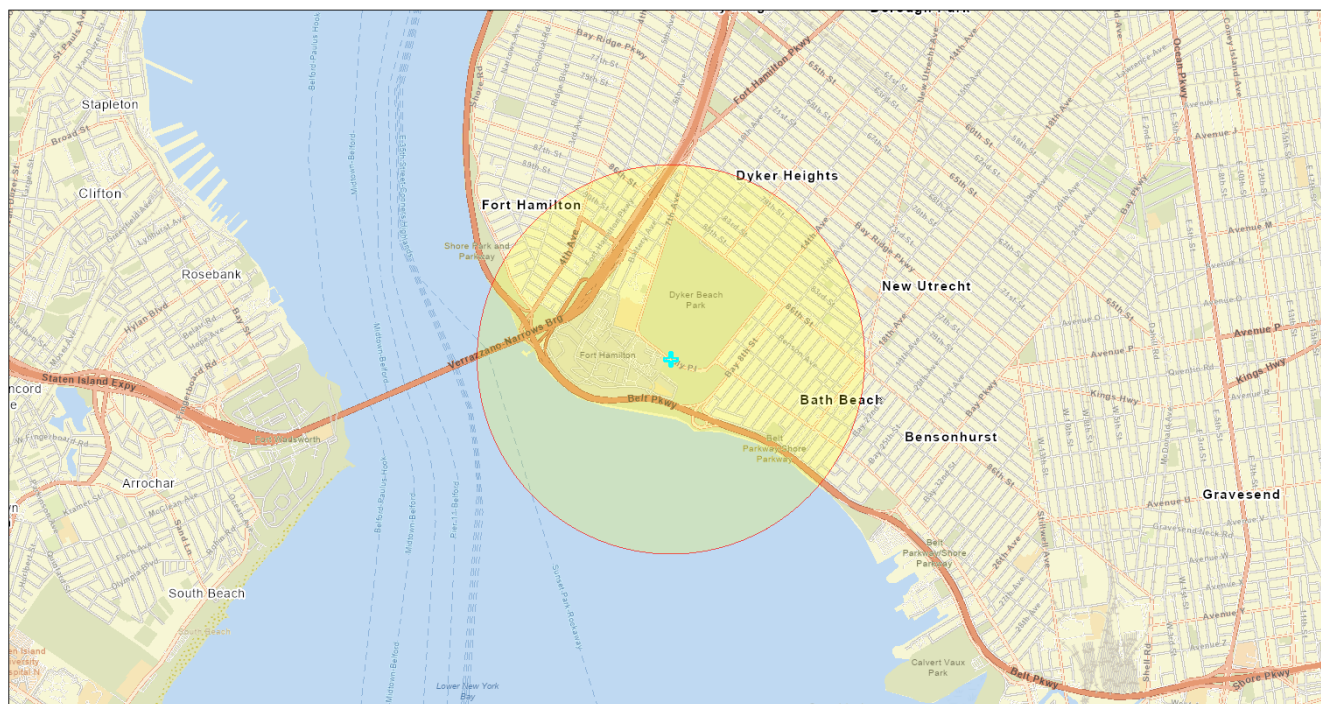
This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

1 mile Ring Centered at 40.607762,-74.021330, NEW YORK, EPA Region 2

Approximate Population: 53,544

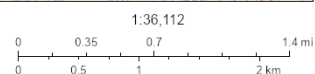
Input Area (sq. miles): 3.14

VA Brooklyn (The study area contains 6 blockgroup(s) with zero population.)



November 2, 2022

VA Brooklyn



NYC OpenData, New Jersey Office of GIS, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc., MET/NASA, USGS, EPA, NPS, US Census Bureau, USDA

Sites reporting to EPA

Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

EJScreen Report (Version 2.1)

1 mile Ring Centered at 40.607762,-74.021330, NEW YORK, EPA Region 2

Approximate Population: 53,544

Input Area (sq. miles): 3.14

VA Brooklyn (The study area contains 6 blockgroup(s) with zero population.)

Selected Variables	Value	State Avg.	%ile in State	USA Avg.	%ile in USA
Pollution and Sources					
Particulate Matter 2.5 ($\mu\text{g}/\text{m}^3$)	8.8	7.86	70	8.67	56
Ozone (ppb)	41.5	41.5	37	42.5	42
Diesel Particulate Matter* ($\mu\text{g}/\text{m}^3$)	1.17	0.637	77	0.294	95-100th
Air Toxics Cancer Risk* (lifetime risk per million)	37	29	90	28	90-95th
Air Toxics Respiratory HI*	0.5	0.39	75	0.36	90-95th
Traffic Proximity (daily traffic count/distance to road)	2400	870	90	760	92
Lead Paint (% Pre-1960 Housing)	0.76	0.54	68	0.27	89
Superfund Proximity (site count/km distance)	0.12	0.24	49	0.13	73
RMP Facility Proximity (facility count/km distance)	0.26	0.52	52	0.77	45
Hazardous Waste Proximity (facility count/km distance)	4.8	6	62	2.2	87
Underground Storage Tanks (count/km ²)	13	7.7	76	3.9	92
Wastewater Discharge (toxicity-weighted concentration/m distance)	N/A	4	N/A	12	N/A
Socioeconomic Indicators					
Demographic Index	38%	35%	60	35%	62
People of Color	50%	45%	63	40%	67
Low Income	26%	29%	53	30%	47
Unemployment Rate	5%	6%	60	5%	61
Limited English Speaking Households	14%	8%	81	5%	89
Less Than High School Education	16%	13%	72	12%	74
Under Age 5	6%	6%	58	6%	56
Over Age 64	18%	17%	60	16%	60

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <https://www.epa.gov/haps/air-toxics-data-update>.

For additional information, see: www.epa.gov/environmentaljustice

EJScreen is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJScreen outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.