US Environmental Protection Agency – Region 2
Caribbean Environmental Protection Division
Response and Remediation Branch

Resource Conservation and Recovery Act (RCRA)
Compliance Evaluation Inspection

Facility Name: Sartorius Stedim Filters Inc.

Note, the inspection included a site visit to Demaco Terminal Operations, Corp.

Facility Address: Sartorius Stedim Filters Inc., Rd 128 Int 368, Yauco, PR 00698
Demaco Terminal Operations Corp., RD 127, KM 13.5, Guaynailla, PR 00656

Latitude & Longitude: 18.034397, -66.860736 (Sartorius Stedim Filters Inc.)
18.002702, -66.756997 (Demaco Terminal Operations Corp.)

Basis for Inspection: Core Program

Potential EJ Concerns: Yes. (See Appendix C)

Potential Flood-Prone Area: Yes. (See Appendix D)

Federal Facility: No

ICIS & other Program ID Codes:

FRS Sartorius Stedim Filters Inc.: 110000307855
Demaco Terminal Operations Corp: 110071453491

RCRA ECO Site: PRR000024596
Main Building: PRD049532807
Demaco Terminal Operations Corp.: PRR000028654

SIC and NAICS Codes: 3081: Unsupported Plastics Film and Sheet; 326113: Unlaminated Plastics Film and Sheet (Except Packaging) Manufacturing

Date of Inspection: October 9-10, 2024

Personnel participating in the inspection:

Name	Affiliation	Title	Contact Information
Carlos J. Colombani	EPA Region 2 CEPD-RRB	Enforcement Officer	787-977-5862; colombani.carlos@epa.gov
Agustin O'Neill	Sartorius	Manager of EHS	734-757-9191; agustin.oneill@sartorius.com
Jose Arroyo	Sartorius	Director, EHS	jose.arroyo1@sartorius.com
Nestor Morales	Sartorius	EHS Specialist	734-757-9715
Wendy Belmont	Sartorius	EHS Coordinator	734-757-996; wendy.belmont@sartorius.com
Miosotis Gonzalez	Sartorius	EHS Specialist	734-757-9298; miosotis.gonzalez@sartorius.com
Rubin Muniz	Sartorius	EHS Engineer	734-757-9308; rubin.muniz@sartorius.com
Tamara Echevarria	Demaco Corp	EHS Operations Coordinator	787-835-2222; info@demacopr.com
Luigi Dessy	Demaco Corp	Certified Welding Inspector	787-835-2315; info@demacopr.com
Status:	Final		
Record Schedule:	1044(C)		
EPA Inspector Signature/Date	X Digitally signed by CARLOS COLOMBANI DN: c=US, o=U.S. Government, ou=Environmental Protection Agency, cn=CARLOS COLOMBANI, 0.9.2342.19200300.100.1.1=68001003667785 Date: 2024.10.31 10:22:16 -04'00' Adobe Acrobat version: 2024.003.20180 Carlos Josue Colombani Enforcement Officer		
Supervisor Signature/Date	X DAVID CUEVAS-MIRANDA Digitally signed by DAVID CUEVAS-MIRANDA Date: 2024.10.31 10:34:49 -04'00' David N. Cuevas Miranda, Ph.D.		

CONTENTS

1 INTRODUCTION

On October 9-10, 2024, a Resource Conservation and Recovery Act (RCRA) Subtitle C Compliance Evaluation Inspection (CEI) was conducted at Sartorius Stedim Filters Inc. (the Facility), pursuant to Section 3007 of RCRA. As part of the inspection, an opening conference, walkthrough, document review and closing conference were conducted to evaluate the Facility's compliance with the requirements that govern hazardous waste generators, universal waste handlers and used oil generators, as applicable.

The Facility is located at Road 128 Bo Susua, Yauco, Puerto Rico, 00698. See aerial photograph (Figure 1) below for reference.

Figure 1: Overview of Sartorius Stedim Filters Inc. Aerial Photograph

The purpose of this inspection was to evaluate the Facility's compliance with the RCRA requirements for hazardous waste management, and to further understand the Audit Policy disclosure the Facility submitted in May of 2022. Based on EPA's RCRAInfo database, the Facility is listed as a large quantity generator (LQG) of hazardous waste and the last onsite inspection by EPA was conducted on April 24, 2023, as part of the RCRA Air Emissions National Compliance Initiative (NCI). The inspection conducted on October 9-10, 2024, was unannounced.

2 OPENING CONFERENCE

I met with Mr. Agustin O'Neill, Manager of Environmental Health & Safety (EHS), Mr. Nestor Morales, EHS Supervisor, Ms. Wendy Belmont, EHS Coordinator, Ms. Miosotis Gonzalez, EHS Specialist, and Mr. Rubin Muñiz, EHS Engineer for the opening conference. I identified myself as an EPA RCRA enforcement officer, told the Facility representatives the purpose of the inspection, and offered an opportunity to claim confidential business information (CBI).

I then proceeded to request documents that would be needed to complete the compliance evaluation. These were the following:

- Hazardous waste manifests;
- Land disposal restrictions;
- RCRA personnel training;
- Contingency plan;
- Quick reference guide;
- Biennial report; and
- Central Accumulation Area weekly inspections logs.

I also explained the areas that required a visit to ensure compliance with the regulations. A plan was put in place to ensure these areas were inspected during the walkthrough.

2.1 FACILITY BACKGROUND AND OPERATION

Sartorius is a German global company that provides products and services for biopharmaceutical research and production, as well as laboratory applications. Sartorius Stedim Filters, Inc. has been operating in Yauco, Puerto Rico since 1983, where it initially began manufacturing membrane filters based on polyester in the membrane casting area.

Since 2012, it has also been manufacturing sterile single-use bags. In recent years, the Facility has expanded to meet the growing needs of their customers with the start of powder manufacturing, additional cleanroom space for the production of single-use products, additional space for membrane assembly, cell culture media growth, and purchased new casting machines for membrane production.

The Facility representatives reported that the plant currently employs approximately nine hundred (900) employees between three (3) shifts.

Sartorius's operation has moved completely to their main Yauco Campus, known as the ECO site. The land where the ECO Site operates is owned and operated by Sartorius Stedim Filters, Inc. Initially, the operations were conducted at the Main Building site, but this site is no longer in operation. Plans for proper closure are in process. While Sartorius was the operator at the Main Building, the land was leased from the Puerto Rico Industrial Development Company (PRIDCO).

2.2 SOLID AND HAZARDOUS WASTE GENERATION

Sartorius generates hazardous and nonhazardous wastes in every shift. Typically, the bulk of the hazardous waste is generated at the Separation Technology area, Fluid Management Technology area, Cell Media area, and the Membrane Casting area. The facility's main hazardous waste consists of Oldware (produced during membrane casting) containing isopropyl alcohol (IPA), 2-pyrrolidone, glycerin and water, and spent solvent IPA generated from the cleaning of filter manufacturing equipment.

There are approximately thirty (30) Satellite Accumulation Areas (SAAs) across the areas mentioned above. The Facility accumulates its hazardous and non-hazardous waste in a Central Accumulation Area (CAA). Majority of the hazardous waste generated is shipped under waste codes D001 (ignitable), D002 (corrosive), D003 (reactive), D010 (selenium), and F-listed spent halogenated and non-halogenated solvents. The Facility utilizes Veolia Environmental Services and Safety Kleen (as necessary) as their dedicated haulers.

As part of the Facility's expansion, a distillation unit was built to recover IPA and 2-pyrrolidone under a closed-loop process with the aim of reducing the hazardous waste that was being generated. The distillation unit took longer than it was anticipated to be completed, and as a result, approximately 650,000 gallons of Oldware were sent offsite between April 2021 and March 2022 to a chemical product storage facility. This facility is Demaco Terminal Operations, Corp. located at Road 127, KM 13.5, Guayanilla, Puerto Rico, 00656.

Although historically the Oldware was sent offsite for disposal as hazardous waste (D001, ignitable), the Facility sent it to the terminal as a byproduct (to be reclaimed once the distillation unit became operational). Subsequently, management changes within Sartorius initiated an external audit which determined that the Oldware may potentially be considered spent material and not a byproduct.

On or about May 2, 2022, Sartorius initiated a self-disclosure to address the abovementioned findings. Since Sartorius did not submit a certification of compliance within 60-days (July 1, 2022) of the disclosure, the eDisclosure system issued the Facility an ineligibility letter on or about July 2, 2022.

3 FACILITY WALKTHROUGH

The Facility walkthrough consisted of the ECO Site and the Demaco Terminal Operations, Corp. The Main Building was not visited given it is currently in the process of closing, and there are no longer any operations that generate hazardous waste there. Several Facility representatives accompanied me during the walkthrough (Day 1 and Day 2). These include Mr. Agustin O'Neill, Manager of Environmental Health & Safety (EHS), Mr. Nestor Morales, EHS Specialist, Ms. Wendy Belmont, EHS Coordinator, Ms. Miosotis Gonzalez, EHS Specialist, Mr. Rubin Muñiz, EHS Engineer, and Mr. Jose Arroyo, EHS Director. The following areas were visited:

- Gowning SAA;
- Separation Technology SAAs;
- CAA;

- Universal Waste storage area;
- Used Oil storage area; and
- Demaco Terminals Operations, Corp.

The observations for each area are described below.

3.1 SATELLITE ACCUMULATION AREAS (SAAS)

As mentioned above, the Gowning SAA and the Separation Technology SAAs were visited to evaluate compliance with the RCRA Regulations.

SAAs

At the time of the inspection, the SAAs listed above had the following hazardous waste:

- a 30-gallon drum of used rags at the Gowning SAA; and
- seven (7) 5-gallon buckets of used rags at the Separation Technology SAAs.

The hazardous waste drum and buckets at the SAAs that I visited were closed, properly labeled with the words “hazardous waste”, with an indication of the nature of the hazard, and at or near the point of generation. Also, throughout the SAAs, spill kits were readily available.

3.2 CENTRAL ACCUMULATION AREA (CAA)

CAA

At the time of the inspection, the CAA was accumulating the following hazardous waste:

Hazardous Waste	Accumulation Start Date
• 4 55-gallon drums of oldware (IPA and 2-pyrrolidone)	• August 19, 2024; • September 24, 2024; • October 9, 2024; and • October 10, 2024
• a 55-gallon drum of IPA 99% used	• September 30, 2024
• a 55-gallon drum of solid membrane with IPA	• September 25, 2024
• a 55-gallon drum of cartridges with IPA	• September 30, 2024
• a 55-gallon drum of pads with IPA	• October 4, 2024
• a 30-gallon drum of solid membrane with IPA	• September 25, 2024
• 3 30-gallon drums of pads with IPA	• September 20, 2024; • September 20, 2024; and • October 1, 2024
• a 30-gallon drum of empty aerosol cans	• September 20, 2024
• a 30-gallon drum of pads with cyclohexane	• August 20, 2024

At the time of the inspection, the CAA had an inventory log to track the accumulation start dates. In addition, the hazardous waste drums were closed, properly labeled with the words “hazardous waste”, accumulation start dates, with an indication of the nature of the hazard, and were in good condition. There was adequate aisle space that allowed for a thorough inspection (See Appendix A, Photograph 1).

Spill kits and an eye washing station were available (See Appendix A, Photograph 2). Also, there were fire extinguishers throughout the Facility, an alarm system in place, fire suppression, telephone and radio at reach, and the emergency contact information was posted outside (See Appendix A, Photograph 3).

3.3 UNIVERSAL WASTE

Sartorius accumulates universal waste at the CAA. Typically, the universal waste generated by the Facility are used lamps and batteries. At the time of the inspection, the following universal waste was being accumulated:

Universal Waste	Accumulation Start Date
• 3 cardboard boxes of used lamps	• March 18, 2024; • July 18, 2024; and • October 4, 2024

The cardboard boxes were closed, properly labeled with the words “universal waste lamps” and accumulation start dates (See Appendix A, Photograph 4).

3.4 USED OIL

Sartorius accumulates its used oil for recyling at the CAA. At the time of the inspection, a 55-gallon drum of used oil properly labeled with the words “used oil” (See Appendix A, Photograph 5).

3.5 DEMACO TERMINAL OPERATIONS, CORP.

Figure 2: Overview of Demaco Terminal Operations Corp. Aerial Photograph

Demaco Terminal Operations, Corp. is a "terminal for hire", meaning it receives, stores and dispatches chemical products for major petrochemical, pharmaceutical, and manufacturing companies, and it does not own the products being stored.

Ms. Tamara Echevarria, EHS Operations Coordinator and Mr. Luigi Dessy, Certified Welding Inspector both from Demaco Terminal Operations, Corp, and Mr. O'Neill, Mr. Arroyo, Mr. Morales, and Ms. Gonzalez from Sartorius Stedim Filters, Inc. were all present for the visual walkthrough.

On October 10, 2024, the Demaco Terminal Operations, Corp. facility with the following RCRA programmatic ID PRR000028654 was visited. The RCRA ID was requested by Sartorius on or about June of 2023, and it lists them as the owner and operator, with a generator category of a very small quantity generator. Based on RCRAInfo, there have been no hazardous waste shipments with their RCRA ID.

Ms. Echevarria and Mr. Dessy escorted us through the secured gates until we reached the tank farm area where the Oldware is being stored. The Oldware is currently stored in two aboveground storage tanks (ASTs). Tank # 603 has a rating capacity of 500,000 gallons, and Tank # 605 has a rating capacity of 520,000 gallons (See Appendix A, Photograph 6). Mr. Dessy stated that both ASTs were inspected and repaired prior to accepting the Oldware from Sartorius. The final reports pertaining the inspection and repair summary were provided for both ASTs.

As mentioned in Section 2.2, between April 2021 and March 2022, the terminal received approximately 650,000 gallons of Oldware for storage from Sartorius' Yauco facility. Mr. Dessy stated that the tanks are regularly inspected by conducting visual walkthroughs (daily and weekly), and a thorough inspection programmed monthly.

Tank #603 is considered full, while Tank # 605 is partially full. Sartorius representatives stated that currently, the distillation unit at their Facility has the capacity to recycle the Oldware being stored at the terminal and that the process for the ~650,000 gallons could take around six to nine months to complete.

4 DOCUMENT REVIEW

During the inspection, I requested the documents listed under Section 2 of this report. Below are the observations noted after the document review was completed.

Weekly Inspections

Central Accumulation Area

The review was completed only for the ECO Site since the Main Building is not operating. The CAA is inspected on a weekly basis. This is completed by the Environmental Specialist at shift. The facility looks for leaking and deterioration of containers caused by corrosion or other factors, and that the drums are properly labeled.

Contingency Plan

The Contingency Plan revised in 2023 was provided onsite. The plan was submitted to local emergency response agencies. I verified that the plan describes the actions needed to respond to explosions, fires and/or releases of hazardous waste, that it identifies an emergency coordinator alongside a 24/7 emergency telephone number, that it lists emergency equipment with its location and capabilities, and that it includes an evacuation plan. The plan covers both the ECO Site and Main Building.

Quick Reference Guide

The Facility has a quick reference guide covering both the ECO Site and Main Building that includes a list, location and description of the hazardous waste generated at the site, the estimated maximum amount of each generated waste, access routes and locations, a facility map layout, location and capabilities of the emergency equipment, and the emergency coordinator contact information. The quick reference guide was not submitted to local response agencies. On October 22, 2024, Mr. O'Neill provided evidence (vie email) that the quick reference guide was submitted to the appropriate local agencies.

Personnel Training

Annual personnel training was provided for staff associated with the hazardous waste management and operations of the Facility (for ECO Site and Main Building). The roster included the trainees name alongside their respective job title and department, and the completion training date. These records were provided for 2021, 2022, and 2023 as requested.

Manifests

The hazardous waste manifests had proper land disposal restriction notification forms based on the shipped waste codes, were dated, and signed by the designated facility, and were processed into EPA's Hazardous Waste Electronic Manifest System (e-Manifest). For a list of hazardous waste shipped during calendar years 2021 through 2024, for the ECO Site and the Main Building, see Appendix B.

The following table summarizes the amount of non-acute and acute hazardous waste ECO Site and the Main Building have shipped by calendar year from 2021 through 2024.

Manifest Year	Acute?	Amount of Waste (kg)
2021	Non-Acute	942,345
2022	Non-Acute	838,074
2023	Acute	0.5
2023	Non-Acute	35,650
2024	Acute	0.5
2024	Non-Acute	12,490

ECO Site

Manifest Year	Acute?	Amount of Waste (kg)
2021	Non-Acute	553
2022	Non-Acute	558
2023	Non-Acute	19,3065
2024	Non-Acute	18,538

Main Building

Thus, based on the manifests reviewed for the past three years, and conversations with the Facility representatives, it appears that both ECO Site and the Main Building routinely generated more than 1,000 kilograms of non-acute hazardous waste. Consequently, they are correctly classified as an LQG.

The Facility ships its hazardous waste normally every three (3) weeks given the amount that is being generated.

Biennial Report

The Facility provided proof of the Biennial Report submissions. This was verified in RCRAInfo for the reporting cycle of calendar year 2023 (for the ECO Site and Main Building).

5 CLOSING CONFERENCE

On October 10, 2024, after completion of the walkthrough and onsite document review, I met with facility representatives Ms. O'Neill, Mr. Morales, Mr. Arroyo, and Ms. Gonzalez to conduct a closing conference. I indicated that the purpose of the closing conference was to inform the Facility about the CEI observations and the opportunity to clarify any questions or doubts the representatives might have pertaining the RCRA inspection. I also communicated that a CEI report would be emailed once finalized.

6 POTENTIAL AREAS OF CONCERN

Based on observations made during the walkthrough of the Facility and/or a review of records provided to EPA by the Facility on-site and/or afterwards, the following potential areas of concern were identified:

REGULATORY, STATUTORY OR PERMIT REFERENCE	FIELD OBSERVATION
RCRA Subtitle C – Hazardous Waste **(ECO Site)**	
40 CFR § Part 262.262(b): Prepares a quick reference guide and submits it to emergency response agencies.	At the time of the inspection, the quick reference guide of the contingency plan was not submitted to local response agencies. *Corrective action: The Facility provided documentation that the quick reference guide was submitted to the appropriate response agencies.*
40 CFR § Part 262.11(b): The hazardous waste determination for each solid waste must be made at the point of waste generation, before any dilution, mixing, or other alteration of the waste occurs, and at any time in the course of its management that it has, or may have, changed its properties as a result of exposure to the environment or other factors that may change the properties of the waste such that the RCRA classification of the waste may change.	Between April 2021 and March 2022, approximately 600,000 gallons of Oldware were sent offsite to Demaco Terminal Operations, Corp in Guayanilla, Puerto Rico. Although historically the Oldware was sent offsite for disposal as a characteristic waste (D001, ignitable), the Facility sent it to the terminal as a byproduct to be reclaimed once their distillation unit became operational.
Demaco Terminal Operations, Corp.	
40 CFR § Part 270.1(c): RCRA requires a permit for the "treatment," "storage," and "disposal" of any "hazardous waste" as identified or listed in 40 CFR part 261.	Since April 2021, Demaco Terminal Operations, Corp. has been storing approximately 600,000 gallons of Sartorius' Oldware in two aboveground storage tanks. Prior to April 2021, Sartorius was disposing of it as hazardous waste.
Subpart J: Tank Systems: The requirements of this subpart apply to owners and operators of facilities that use tank systems for storing or treating hazardous waste.	The two aboveground storage tanks storing Oldware at Demaco Terminal Operations, Corp would be subject to the regulations under Subpart J.

7 ENVIRONMENTAL ASSISTANCE

The Facility can consider the following resources to increase their understanding and compliance with applicable environmental requirements and/or go 'beyond compliance' to reduce its overall environmental footprint:

- Final Rule: Hazardous Waste Generator Improvements (2017), https://www.epa.gov/hwgenerators/final-rule-hazardous-waste-generator-improvements

- Compliance Assistance Centers, https://www.complianceassistance.net/

- Regulatory Exclusions and Alternative Standards for the Recycling of Materials, Solid Wastes and Hazardous Wastes, https://www.epa.gov/hw/regulatory-exclusions-and-alternative-standards-recycling-materials-solid-wastes-and-hazardous

- Hazardous Waste Portal, and https://www.hazwasteportal.org/

- Fact Sheet on Requirements for Large Quantity Generators of Hazardous Waste, https://www.epa.gov/sites/default/files/2020-07/documents/10635_lqg-factsheet_508.pdf

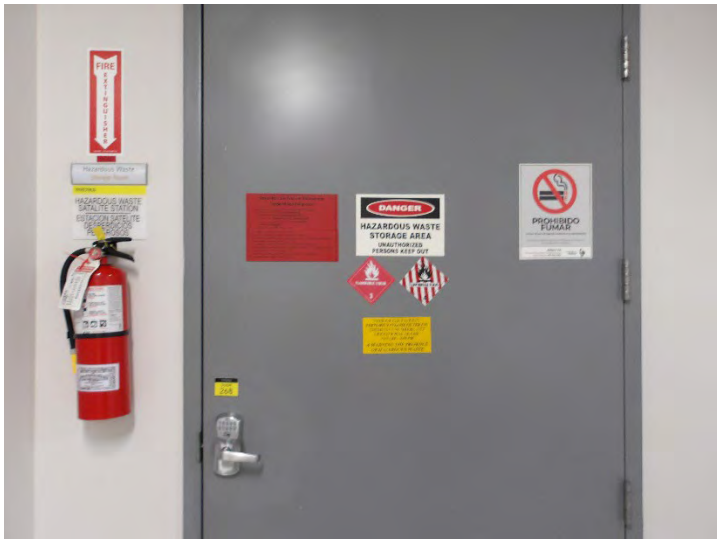
8 APPENDICES

A. Inspection Photographs
B. Hazardous Waste Manifests
C. EJScreen Report
D. Flood Zone Map

Appendix A: Inspection Photos

Photograph One (1): CAA

Photograph Two (2): Eye washing station and spill kit



Photograph Three (3): Outside view of the CAA

Photograph Four (4): Universal Waste; CAA

Photograph Five (5): Used Oil; CAA

Photograph Five (6): Tanks 603 and 605 storing Sartorius' Oldware at Demaco Terminal Operations, Corp.

Appendix B: Hazardous Waste Manifests

ECO Site PRR000024596

Manifest Date	Waste (kg)	Manifest Tracking Number
9/17/2024	1,433	002237093VES
9/17/2024	2	002237092VES
9/17/2024	399	002383424VES
9/17/2024	18	002237093VES
8/13/2024	64	002382513VES
8/13/2024	349	002382512VES
8/13/2024	4	002382514VES
8/13/2024	32	002382512VES
8/13/2024	2	002382512VES
7/16/2024	948	002383500VES
7/16/2024	871	002383499VES
7/16/2024	18	002383500VES
7/16/2024	0	002383499VES
6/11/2024	907	002065835VES
6/11/2024	279	002065834VES
6/11/2024	18	002065835VES
6/11/2024	23	002065834VES
6/11/2024	18	002065835VES
5/14/2024	1,175	002065825VES
5/14/2024	454	002065826VES
5/14/2024	5	002065827VES
5/14/2024	1	002065827VES
4/16/2024	1,560	002066598VES
4/16/2024	5	002066597VES
4/16/2024	95	002066599VES
4/16/2024	7	002066598VES
4/16/2024	27	002066597VES
4/16/2024	18	002066598VES
3/12/2024	363	002065768VES
3/12/2024	1,107	002065769VES
3/12/2024	68	002065772VES
3/12/2024	200	002065770VES
3/12/2024	163	002065771VES
3/12/2024	18	002065769VES
3/12/2024	18	002065772VES

3/12/2024	2	002065771VES
2/13/2024	386	002066782VES
2/13/2024	295	002066779VES
2/13/2024	170	002066781VES
2/13/2024	7	002066781VES
2/13/2024	3	002066783VES
1/24/2024	544	002068394VES
1/24/2024	136	002068395VES
1/24/2024	238	002066659VES
1/24/2024	16	002068396VES
1/24/2024	7	002068397VES
1/24/2024	18	002068395VES
12/21/2023	962	002066897VES
12/21/2023	45	002066896VES
12/21/2023	140	002066898VES
12/21/2023	1	002066898VES
12/21/2023	0	002066898VES
12/21/2023	0	002066898VES
11/27/2023	562	002066819VES
11/27/2023	240	002066817VES
11/27/2023	181	002066818VES
11/27/2023	3	002066820VES
11/27/2023	1	002066820VES
11/27/2023	4	002066820VES
11/27/2023	1	002066820VES
11/2/2023	363	002065746VES
11/2/2023	68	002066887VES
11/2/2023	68	002066887VES
11/2/2023	18	002066887VES
10/12/2023	136	002066886VES
10/12/2023	363	002066910VES
10/12/2023	79	002066909VES
10/12/2023	11	002066886VES
10/12/2023	15	002066909VES
10/12/2023	2	002066909VES
9/22/2023	249	002068189VES
9/22/2023	1,633	002068191VES
9/22/2023	408	002068192VES
9/22/2023	18	002068191VES

9/22/2023	18	002068190VES
8/31/2023	181	002066920VES
8/31/2023	181	002066922VES
8/31/2023	318	002066921VES
8/31/2023	170	002066923VES
8/31/2023	34	002066923VES
8/31/2023	5	002066924VES
8/31/2023	18	002066922VES
8/10/2023	181	002066985VES
8/10/2023	612	002066986VES
8/10/2023	32	002066983VES
8/10/2023	18	002066985VES
7/20/2023	472	002066991VES
7/20/2023	980	002066994VES
7/20/2023	204	002066993VES
6/29/2023	454	002068358VES
6/29/2023	454	002068360VES
6/29/2023	5	002068357VES
6/29/2023	79	002068359VES
6/29/2023	23	002068357VES
6/9/2023	544	002068225VES
6/9/2023	363	002068227VES
6/9/2023	476	002068226VES
6/9/2023	102	002068228VES
6/9/2023	18	002068225VES
6/9/2023	18	002068227VES
5/18/2023	286	002068070VES
5/18/2023	1,145	002068156VES
5/18/2023	318	002068064VES
5/18/2023	36	002068070VES
4/27/2023	1,077	002068073VES
4/27/2023	181	002068072VES
4/27/2023	113	002068076VES
4/27/2023	23	002068076VES
4/4/2023	907	002066277VES
4/4/2023	408	002066278VES
4/4/2023	238	002066279VES
4/4/2023	18	002066277VES
3/29/2023	10,342	024431125JJK

3/16/2023	272	002064036VES
3/16/2023	1,712	002064042VES
3/16/2023	218	002064038VES
3/16/2023	15	002064039VES
3/16/2023	941	002064041VES
3/16/2023	5	002064037VES
3/16/2023	14	002064040VES
3/16/2023	20	002064040VES
3/16/2023	3	002064040VES
3/16/2023	1	002064040VES
3/16/2023	26	002064039VES
3/16/2023	5	002064040VES
2/16/2023	345	002066336VES
2/16/2023	1,814	002066337VES
2/16/2023	1,225	002066338VES
1/24/2023	1,633	002066298VES
1/24/2023	2	002066294VES
1/24/2023	238	002066295VES
1/24/2023	5	002066296VES
1/24/2023	476	002066297VES
1/24/2023	18	002066298VES
1/24/2023	34	002066295VES
12/27/2022	2,585	002066207VES
12/27/2022	1,111	002066208VES
12/27/2022	136	002066209VES
12/27/2022	18	002066207VES
12/21/2022	17,775	024431292JJK
12/16/2022	17,864	024431291JJK
12/14/2022	17,119	024654218JJK
12/13/2022	17,864	024431290JJK
12/9/2022	17,144	024431289JJK
12/5/2022	17,775	024431288JJK
11/29/2022	91	000951390VES
11/29/2022	1,508	002067078VES
11/29/2022	567	002067079VES
11/29/2022	43	002067080VES
11/29/2022	17,119	024654219JJK
11/29/2022	14	002067080VES
11/28/2022	17,861	023897400JJK

11/18/2022	17,775	023897402JJK
11/17/2022	17,775	023897399JJK
11/16/2022	17,775	023897401JJK
11/15/2022	17,789	015391802FLE
11/10/2022	17,772	023897398JJK
11/9/2022	1,633	002067074VES
11/9/2022	181	002067077VES
11/9/2022	1,032	002067075VES
11/9/2022	204	002067076VES
11/9/2022	17,119	024654220JJK
11/9/2022	17,119	024654221JJK
11/8/2022	17,119	024654222JJK
11/7/2022	17,119	024654223JJK
10/25/2022	17,119	024618092JJK
10/21/2022	17,929	017378925FLE
10/21/2022	17,119	024618090JJK
10/21/2022	17,119	024618091JJK
10/19/2022	17,119	024618093JJK
10/19/2022	17,119	024618094JJK
10/18/2022	1,270	002064286VES
10/18/2022	147	002064289VES
10/18/2022	794	002064287VES
10/18/2022	68	002064288VES
10/18/2022	18	002064286VES
10/18/2022	11	002064290VES
10/14/2022	17,680	017378923FLE
10/6/2022	2,631	002066047VES
10/6/2022	91	002066049VES
10/6/2022	1,225	002066046VES
10/6/2022	152	002066048VES
10/6/2022	18	002066047VES
10/5/2022	17,772	017378922FLE
9/15/2022	17,929	017378924FLE
9/14/2022	181	002064277VES
9/14/2022	2,903	002067054VES
9/14/2022	1,372	002067055VES
9/14/2022	136	002067058VES
9/14/2022	18	002067054VES
9/14/2022	7	002067058VES

9/8/2022	17,769	017378921FLE
8/29/2022	16,615	015391807FLE
8/26/2022	54	002069812VES
8/26/2022	136	002069813VES
8/26/2022	2,903	002069815VES
8/26/2022	136	002069814VES
8/26/2022	939	002069818VES
8/26/2022	18	002069805VES
8/26/2022	4	002069811VES
8/15/2022	17,759	015391801FLE
8/12/2022	18,100	015391800FLE
8/11/2022	18,134	015391799FLE
8/8/2022	16,591	015391798FLE
8/2/2022	17,808	015391797FLE
7/29/2022	218	002064356VES
7/29/2022	1,814	002069846VES
7/29/2022	476	002064353VES
7/29/2022	7	002064354VES
7/29/2022	82	002064355VES
7/29/2022	8	002064354VES
7/29/2022	18	002069846VES
7/29/2022	51	002064354VES
7/29/2022	608	002069845VES
7/22/2022	19,471	015391796FLE
7/18/2022	17,325	015391794FLE
7/7/2022	907	002064460VES
7/7/2022	181	002064462VES
7/7/2022	2	002064461VES
7/7/2022	463	002064463VES
6/20/2022	18,260	015391795FLE
6/17/2022	19,136	015391793FLE
6/15/2022	2,540	002064434VES
6/15/2022	91	002064432VES
6/15/2022	1,107	002064435VES
6/15/2022	18	002064434VES
6/15/2022	7	002064433VES
6/15/2022	11	002064433VES
6/15/2022	18	002064433VES
6/10/2022	18,133	015391791FLE

6/10/2022	18,133	015391792FLE
6/4/2022	18,045	015391790FLE
6/2/2022	13,197	015391789FLE
6/1/2022	14,364	015391788FLE
5/31/2022	17,716	015391787FLE
5/30/2022	18,045	015391786FLE
5/28/2022	18,045	015391785FLE
5/26/2022	181	002069542VES
5/26/2022	218	002064311VES
5/26/2022	23	002064311VES
5/3/2022	2,540	001510558VES
5/3/2022	263	002069733VES
5/3/2022	3,239	002069712VES
5/3/2022	162	002069734VES
5/3/2022	18	001510558VES
5/3/2022	18	002069733VES
4/12/2022	4,899	002069716VES
4/12/2022	114	002064068VES
4/12/2022	1,432	002069715VES
4/12/2022	5	002064068VES
3/25/2022	159	001849717VES
3/25/2022	363	001849716VES
3/25/2022	45	001849716VES
2/18/2022	1,996	002069611VES
2/18/2022	181	002069613VES
2/18/2022	1,304	002069610VES
2/18/2022	476	002069612VES
2/18/2022	20	002069614VES
12/20/2021	2,540	001849455VES
12/20/2021	272	001849456VES
12/20/2021	1,996	001849457VES
12/20/2021	397	001849458VES
12/20/2021	54	001849458VES
11/11/2021	907	002065154VES
11/11/2021	159	002065152VES
11/11/2021	522	002065155VES
11/11/2021	18	002065154VES
11/11/2021	23	002065152VES
10/15/2021	102	002065176VES

10/15/2021	159	002065177VES
10/15/2021	52	002065177VES
10/4/2021	1,451	002065020VES
10/4/2021	1,508	002065021VES
9/17/2021	245	002065204VES
9/17/2021	5	002065205VES
9/17/2021	18	002065204VES
8/26/2021	1,089	002065034VES
8/26/2021	170	002065033VES
8/26/2021	23	002065031VES
8/26/2021	18	002065033VES
7/29/2021	1,451	002065063VES
7/29/2021	109	002065064VES
7/29/2021	1,361	002065062VES
7/29/2021	122	002065065VES
7/29/2021	68	002065063VES
6/28/2021	181	001656965VES
6/28/2021	154	001656963VES
6/28/2021	7	001656963VES
6/28/2021	0	001656964VES
6/8/2021	1,451	001849482VES
6/8/2021	2,771	001849481VES
6/8/2021	63	001849483VES
6/8/2021	32	001849483VES
5/28/2021	91	001656959VES
5/28/2021	238	001656960VES
5/28/2021	5	001656961VES
5/28/2021	7	001656962VES
4/28/2021	17,196	015391808FLE
4/26/2021	136	001656880VES
4/26/2021	4	001656879VES
4/26/2021	191	001656881VES
4/26/2021	17,196	015391784FLE
4/26/2021	18	001656881VES
4/24/2021	17,196	015391783FLE
4/22/2021	17,232	015391782FLE
4/21/2021	17,196	015391781FLE
4/19/2021	17,196	015391780FLE
4/16/2021	17,051	015391779FLE

4/14/2021	17,196	015391476FLE
4/12/2021	17,196	015391477FLE
4/9/2021	15,835	015391478FLE
4/8/2021	907	001849264VES
4/8/2021	1,560	001849263VES
4/8/2021	27	001849265VES
4/7/2021	17,325	015391481FLE
4/1/2021	19,759	015391479FLE
3/30/2021	181	001849333VES
3/30/2021	64	001849341VES
3/30/2021	17,196	015391480FLE
3/30/2021	14	001849333VES
3/30/2021	16	001849341VES
3/29/2021	17,325	015391482FLE
3/26/2021	18,226	015391485FLE
3/24/2021	17,196	015391484FLE
3/22/2021	17,325	015391483FLE
3/20/2021	17,196	015391486FLE
3/18/2021	17,196	015391488FLE
3/16/2021	17,232	015391487FLE
3/15/2021	17,196	015391489FLE
3/13/2021	17,196	015391492FLE
3/12/2021	94	001849332VES
3/12/2021	46	001849332VES
3/11/2021	17,196	015391490FLE
3/9/2021	17,196	015391491FLE
3/8/2021	17,196	015391465FLE
3/5/2021	17,196	015391466FLE
3/3/2021	17,413	015391467FLE
3/1/2021	17,956	015391468FLE
2/27/2021	17,196	015391469FLE
2/25/2021	17,683	015391470FLE
2/23/2021	17,232	015391472FLE
2/22/2021	17,683	015391471FLE
2/15/2021	1,270	001849300VES
2/15/2021	1,463	001849301VES
2/15/2021	17,196	015399413FLE
2/12/2021	17,232	015399414FLE
2/10/2021	17,413	015399412FLE

2/9/2021	61	001849237VES
2/9/2021	138	001849236VES
2/9/2021	7	001849238VES
2/9/2021	31	001849236VES
2/9/2021	20	001849238VES
2/8/2021	15,969	015399415FLE
2/6/2021	16,963	015399416FLE
2/5/2021	17,506	015399411FLE
2/3/2021	17,196	015399417FLE
2/2/2021	17,196	015399418FLE
1/30/2021	17,325	015399410FLE
1/28/2021	17,591	015399409FLE
1/26/2021	17,591	015399408FLE
1/25/2021	17,502	015399407FLE
1/22/2021	17,196	015399405FLE
1/20/2021	17,196	015399406FLE
1/18/2021	17,196	015399404FLE
1/15/2021	17,196	015399403FLE
1/13/2021	17,196	015399402FLE
1/11/2021	17,196	015399401FLE
1/9/2021	17,196	015399400FLE
1/7/2021	17,196	015399419FLE
1/4/2021	17,196	015391275FLE

Main Building PRD049532807

Manifest Date	Waste (kg)	Manifest Tracking Number
7/3/2024	18,348	009197600SKS
4/23/2024	42	018810114FLE
4/23/2024	7	018810114FLE
1/31/2024	64	008905326SKS
1/31/2024	19	008905326SKS
1/31/2024	59	008905326SKS
11/16/2023	19,218	008792959SKS
10/24/2023	16,324	008792872SKS
10/23/2023	217	008792891SKS
10/20/2023	64	008792892SKS
9/22/2023	17,349	008792837SKS
9/14/2023	118	008792821SKS
9/14/2023	36	008792821SKS
8/29/2023	19,006	008792790SKS
8/11/2023	50	008792741SKS
8/11/2023	82	008792737SKS
8/2/2023	19,263	008792727SKS
6/23/2023	18,987	008792641SKS
6/23/2023	159	008792646SKS
6/23/2023	18	008792648SKS
5/30/2023	18,980	008792589SKS
5/25/2023	6,010	002068067VES
5/10/2023	19,271	008792535SKS
5/4/2023	218	008792503SKS
4/17/2023	19,328	008264878SKS
3/7/2023	91	008264798SKS
2/27/2023	17,005	008264764SKS
1/24/2023	1,270	002066293VES
12/6/2022	163	008264990SKS
10/12/2022	54	008275849SKS
8/5/2022	272	008275567SKS
5/31/2022	68	008275687SKS
8/20/2021	122	007887189SKS
8/20/2021	20	016433899FLE
8/20/2021	315	007887189SKS
8/20/2021	26	016433899FLE

8/20/2021	9	016433899FLE
6/15/2021	9	007613222SKS
3/3/2021	52	007506960SKS

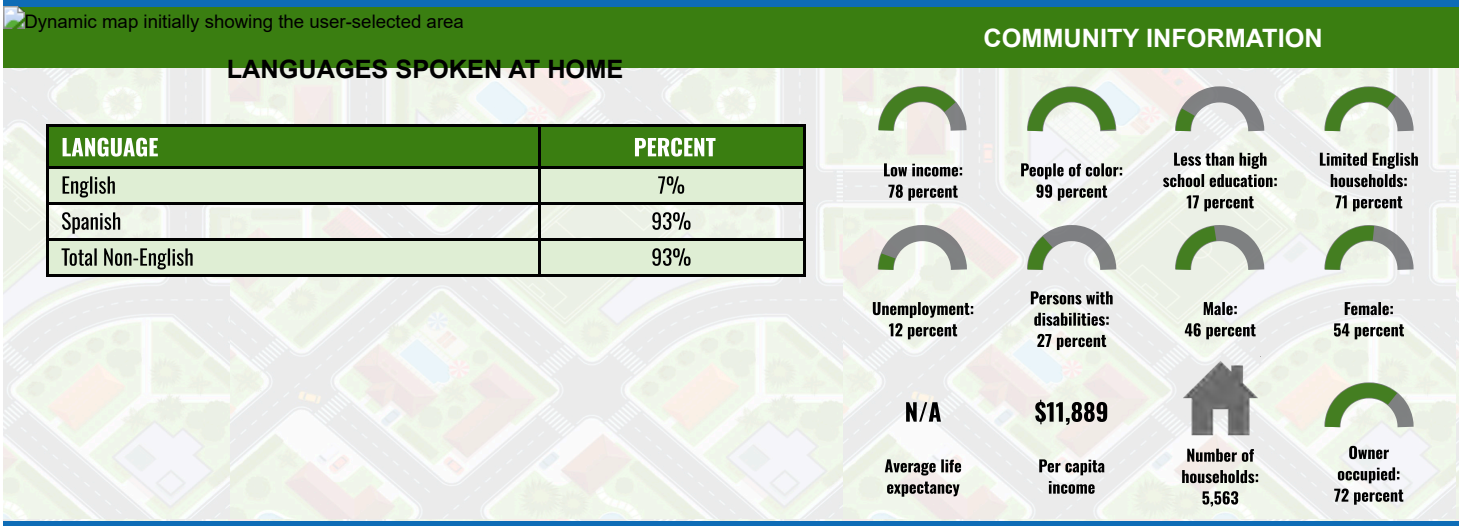
Appendix C: EJScreen Report

EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

Sartorius Stedim Filters Inc.

1 mile Ring Centered at 18.034397,-66.860736
Population: 14,598
Area in square miles: 3.14



LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	7%
Spanish	93%
Total Non-English	93%

COMMUNITY INFORMATION

- Low income: 78 percent
- People of color: 99 percent
- Less than high school education: 17 percent
- Limited English households: 71 percent
- Unemployment: 12 percent
- Persons with disabilities: 27 percent
- Male: 46 percent
- Female: 54 percent
- N/A — Average life expectancy
- $11,889 — Per capita income
- Number of households: 5,563
- Owner occupied: 72 percent

BREAKDOWN BY RACE

- White: 1%
- Black: 0%
- American Indian: 0%
- Asian: 0%
- Hawaiian/Pacific Islander: 0%
- Other race: 0%
- Two or more races: 0%
- Hispanic: 99%

BREAKDOWN BY AGE

From Ages 1 to 4	4%
From Ages 1 to 18	19%
From Ages 18 and up	81%
From Ages 65 and up	23%

LIMITED ENGLISH SPEAKING BREAKDOWN

Speak Spanish	100%
Speak Other Indo-European Languages	0%
Speak Asian-Pacific Island Languages	0%
Speak Other Languages	0%

Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race.
Source: U.S. Census Bureau, American Community Survey (ACS) 2018-2022. Life expectancy data comes from the Centers for Disease Control.

Report for 1 mile Ring Centered at 18.034397,-66.860736

Report produced October 17, 2024 using EJScreen Version 2.3

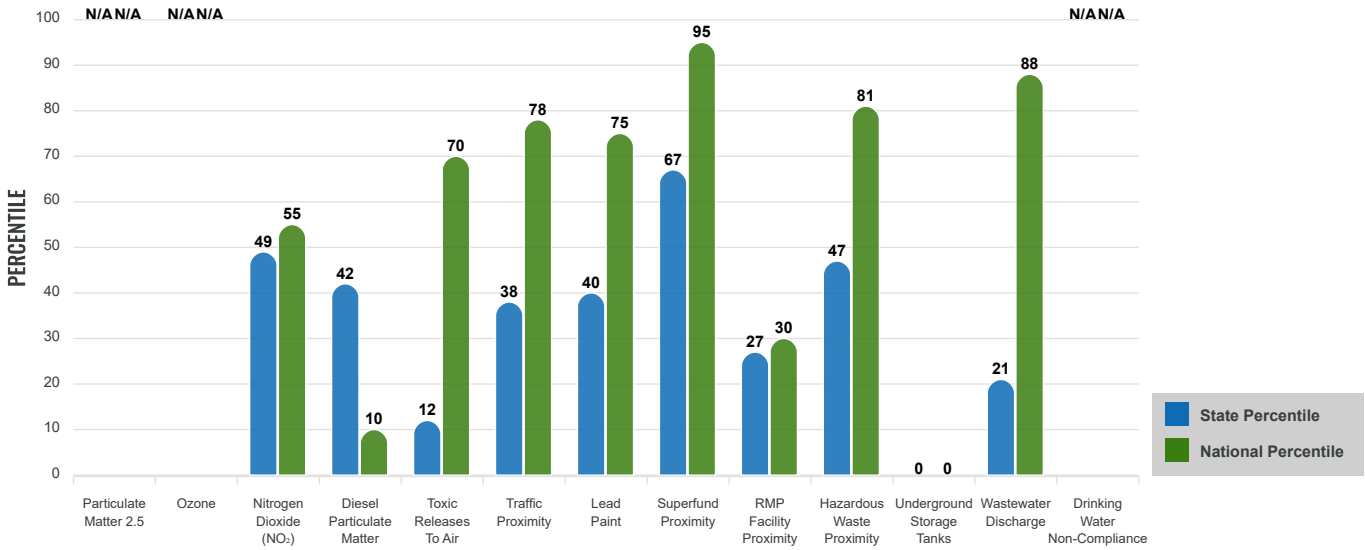
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the EJScreen website.

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

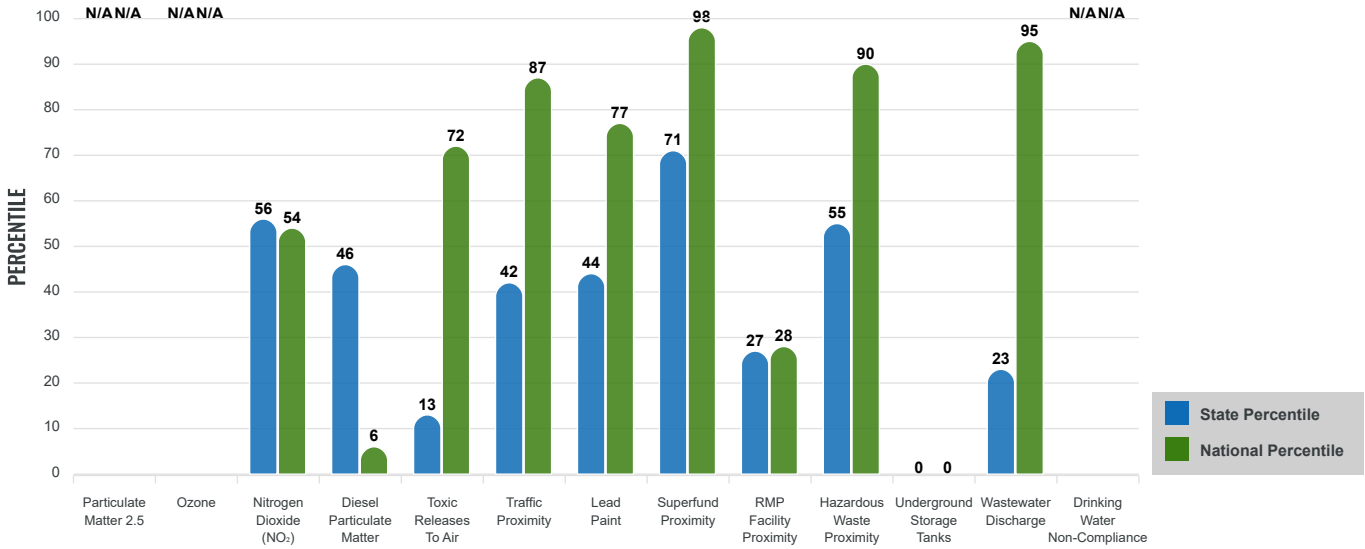
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low income, percent persons with disabilities, percent less than high school education, percent limited English speaking, and percent low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



Report for 1 mile Ring Centered at 18.034397,-66.860736

Report produced October 17, 2024 using EJScreen Version 2.3

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
ENVIRONMENTAL BURDEN INDICATORS					
Particulate Matter 2.5 ($\mu g/m^3$)	N/A	N/A	N/A	8.45	N/A
Ozone (ppb)	N/A	N/A	N/A	61.8	N/A
Nitrogen Dioxide (NO_2) (ppbv)	4.3	5.5	48	7.8	16
Diesel Particulate Matter ($\mu g/m^3$)	0.0291	0.0618	42	0.191	2
Toxic Releases to Air (toxicity-weighted concentration)	110	4,300	12	4,600	25
Traffic Proximity (daily traffic count/distance to road)	430,000	1,100,000	37	1,700,000	36
Lead Paint (% Pre-1960 Housing)	0.069	0.16	42	0.3	30
Superfund Proximity (site count/km distance)	0.12	0.23	66	0.39	63
RMP Facility Proximity (facility count/km distance)	0.01	0.66	27	0.57	28
Hazardous Waste Proximity (facility count/km distance)	0.73	1.2	44	3.5	39
Underground Storage Tanks (count/km^2)	0	0	0	3.6	0
Wastewater Discharge (toxicity-weighted concentration/m distance)	45	670000	21	700000	48
Drinking Water Non-Compliance (points)	N/A	N/A	N/A	2.2	N/A
SOCIOECONOMIC INDICATORS					
Demographic Index USA	3.4	N/A	N/A	1.34	98
Supplemental Demographic Index USA	4.41	N/A	N/A	1.64	99
Demographic Index State	4.89	4.63	55	N/A	N/A
Supplemental Demographic Index State	2.98	2.72	59	N/A	N/A
People of Color	99%	97%	28	40%	96
Low Income	78%	70%	55	30%	96
Unemployment Rate	12%	14%	53	6%	87
Limited English Speaking Households	71%	66%	53	5%	99
Less Than High School Education	17%	20%	44	11%	77
Under Age 5	4%	3%	69	5%	47
Over Age 64	23%	23%	51	18%	74

*Diesel particulate matter index is 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. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.

Sites reporting to EPA within defined area:

- Superfund 0
- Hazardous Waste, Treatment, Storage, and Disposal Facilities 0
- Water Dischargers 7
- Air Pollution 0
- Brownfields 5
- Toxic Release Inventory 1

Other community features within defined area:

- Schools 10
- Hospitals 1
- Places of Worship 0

Other environmental data:

- Air Non-attainment ..... No
- Impaired Waters ..... Yes

- Selected location contains American Indian Reservation Lands* ..... No
- Selected location contains a "Justice40 (CEJST)" disadvantaged community ..... Yes
- Selected location contains an EPA IRA disadvantaged community ..... Yes

Report for 1 mile Ring Centered at 18.034397,-66.860736

Report produced October 17, 2024 using EJScreen Version 2.3

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	N/A	N/A	N/A	20%	N/A
Heart Disease	N/A	N/A	N/A	5.8	N/A
Asthma	N/A	N/A	N/A	10.3	N/A
Cancer	N/A	N/A	N/A	6.4	N/A
Persons with Disabilities	27.4%	22.7%	77	13.7%	97

CLIMATE INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	N/A	N/A	N/A	12%	N/A
Wildfire Risk	N/A	N/A	N/A	14%	N/A

CRITICAL SERVICE GAPS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	37%	29%	72	13%	95
Lack of Health Insurance	6%	7%	52	9%	46
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access Burden	No	N/A	N/A	N/A	N/A
Food Desert	No	N/A	N/A	N/A	N/A

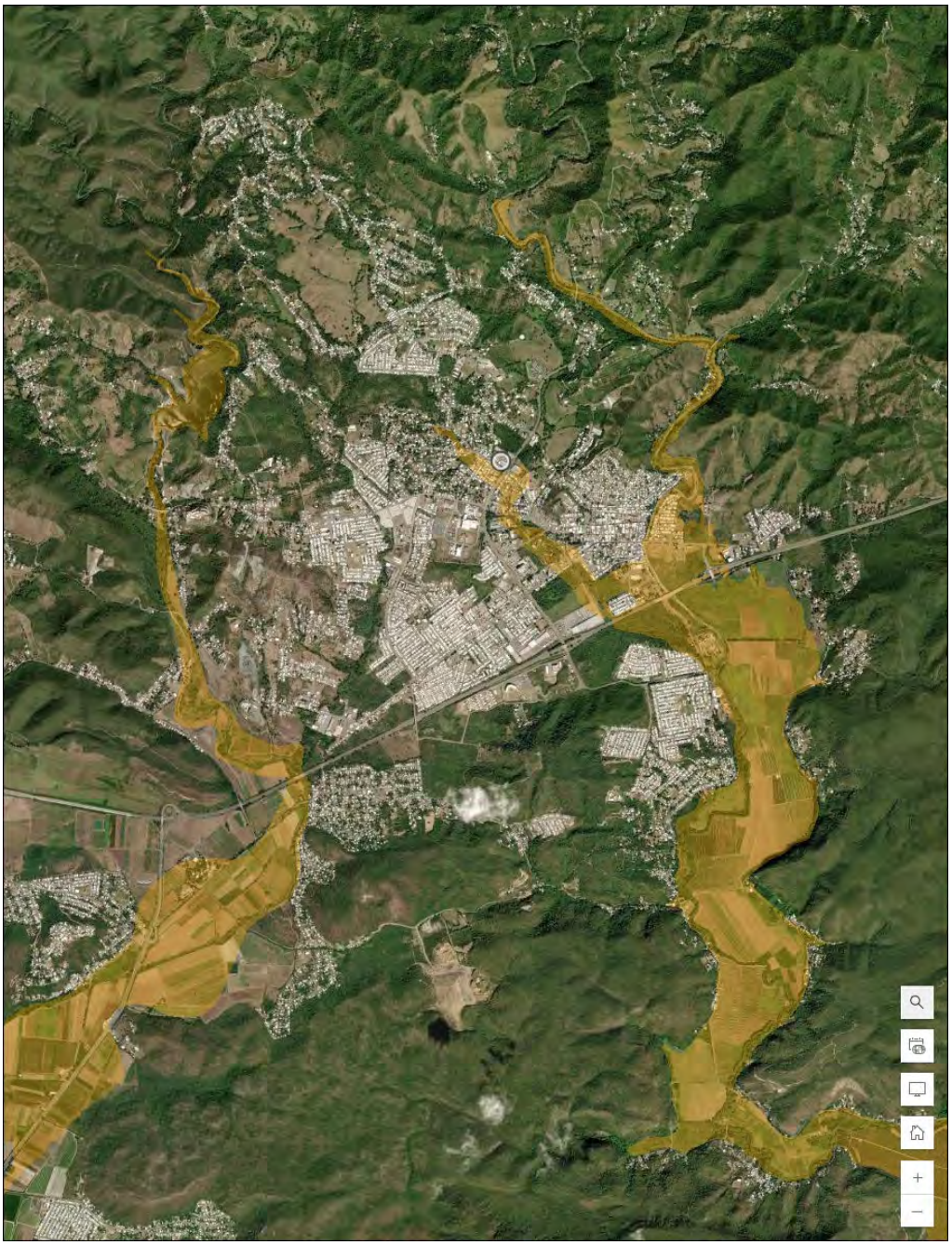
Report for 1 mile Ring Centered at 18.034397,-66.860736

Report produced October 17, 2024 using EJScreen Version 2.3

Appendix D: Flood Zone Map

Federal Emergency Management Agency (FEMA) 100 Year Flood Zones and EPA's Region 2 Composite Flood Risk Layer

Facility Name: Sartorius Stedim Filters, Inc.

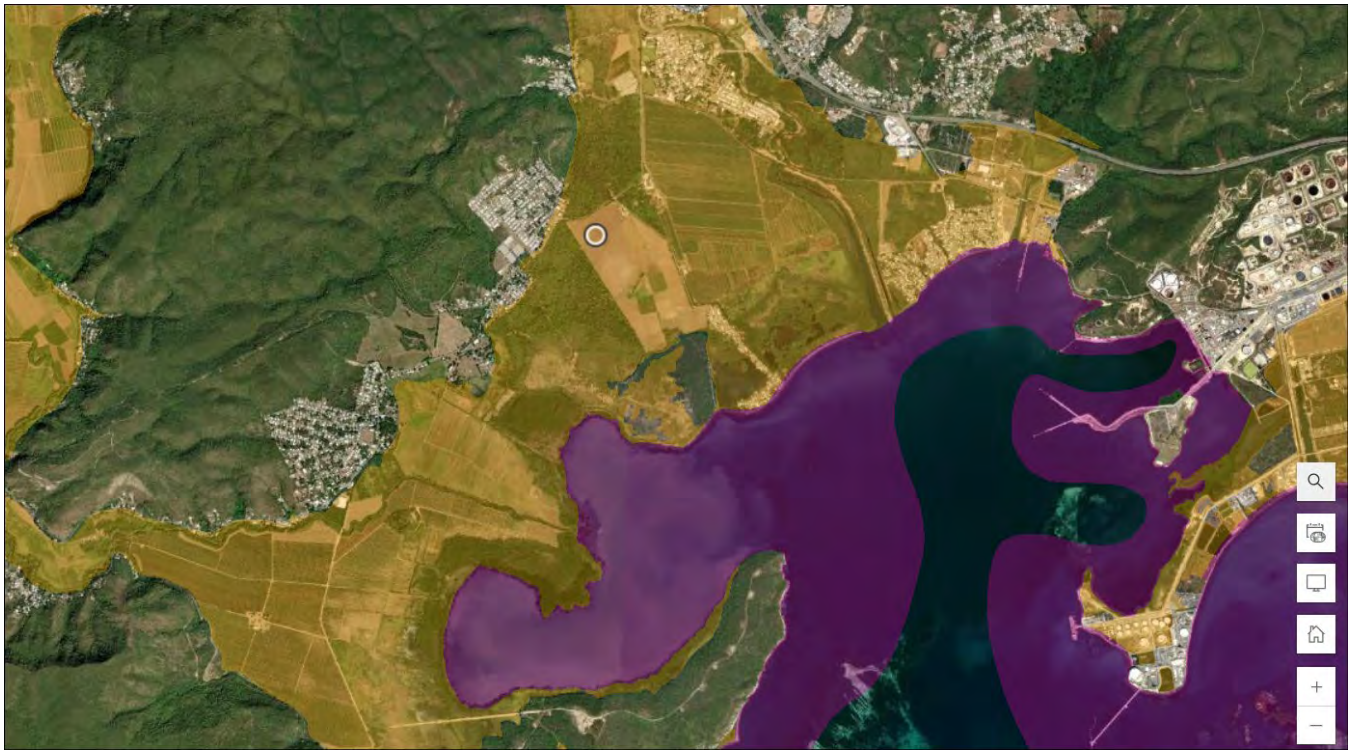


The Facility is located within the FEMA 100-Year Flood Zones layer.

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

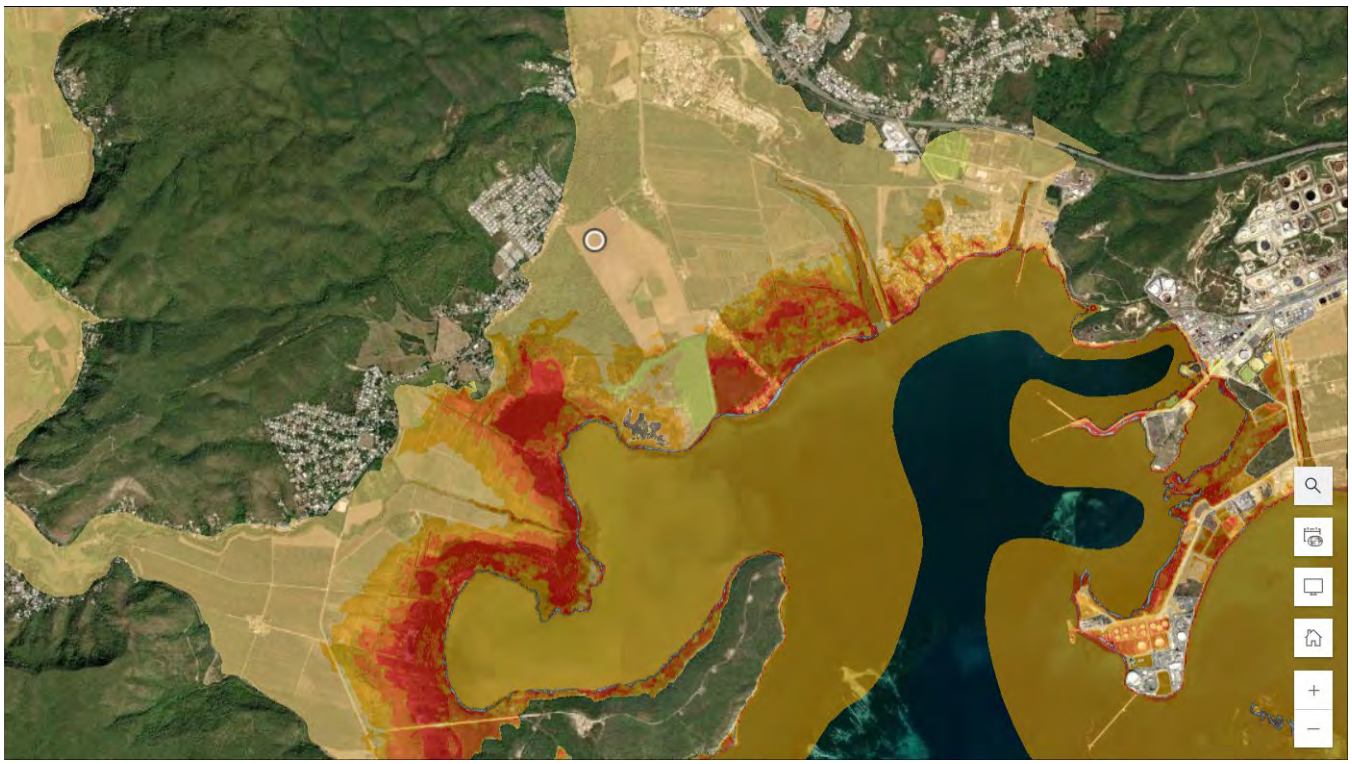
Federal Emergency Management Agency (FEMA) 100 Year Flood Zones and EPA's Region 2 Composite Flood Risk Layer

Facility Name: Demaco Terminal Operations, Corp.



The Facility is located within the FEMA 100-Year Flood Zones layer.

Facility Name: Demaco Terminal Operations, Corp.



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