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:	Boehringer Ingelheim Animal Health Puerto Rico LLC		
EPA ID Number:	PRR000025189		
Date of Inspection:	July 19, 2023		
Generator Status in Record:	Large Quantity Generator (LQG)		
Generator Status at the time of inspection:	LQG		
RCRA Permitted:	No		
Basis for Inspection:	Core Program		
Corrective Action:	No		
Project ID	CEPD-RCRA-23-0432		
Potential EJ Concern	Yes, 7 EJ Indexes above the 80% USA Percentile. (See Appendix C)		
Potential Flood Prone Area	No. (See Appendix D)		
Facility Physical Location: (Municipality, PR, zip code)	RD 2 KM 56.7 Bo Trinidad Barceloneta, PR 00617		
Geographical Coordinates:	18.426041, -66.549388		
Facility Owner:	Boehringer Ingelheim Animal Health PR LLC	787-623-6000	
	PO Box 601 Barceloneta, PR 00617		
Facility Operator:	Boehringer Ingelheim Animal Health PR LLC	787-623-6000	
	RD 2 KM 56.7 Bo Trinidad Barceloneta, PR 00617		
NAICS:	325412; Pharmaceutical Preparation Manufacturing		
SIC:	2834; Pharmaceutical Preparations		
Area:	~188 acres		
Number Employees:	~380 (including contractors and temporary)		
Personnel participating in the inspection:			
Name	Affiliation	Title	Contact Information
Carlos J. Colombani	EPA Region 2 CEPD	Enforcement Officer	787-977-5862; colombani.carlos@epa.gov
Edibal Guilloty	Boehringer Ingelheim	Manager, EHS	787-623-6115 edibal.guilloty@boehringer-ingelheim.com
Migdelis Huertas	Boehringer Ingelheim	Principal Specialist, EHS	787-623-6101 migdelis.huertas@boehringer-ingelheim.com
Melissa Ortiz	Boehringer Ingelheim	Assistant Director	
Status:	Final		

Record Schedule:	1044(d)
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: 2023.07.31 15:44:20 -04'00' Adobe Acrobat version: 2023.003.20244 Carlos Josue Colombani Enforcement Officer
Supervisor Signature/Date	X DAVID CUEVAS-MIRANDA Digitally signed by DAVID CUEVAS-MIRANDA Date: 2023.08.10 08:53:36 -04'00' David N. Cuevas Miranda, Ph.D.

CONTENTS

1 INTRODUCTION

On July 19, 2023, a Resource Conservation and Recovery Act (RCRA) Subtitle C Compliance Evaluation Inspection (CEI) was conducted at the Boehringer Ingelheim Animal Health Puerto Rico LLC (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 2 Kilometer 56.7, Bo Trinidad, Barceloneta, Puerto Rico, 00617. See aerial photograph (Figure 1) below for reference.

Figure 1: Boehringer Ingelheim Animal Health Puerto Rico LLC Aerial Photograph

The purpose of this inspection was to evaluate the Facility's compliance with the RCRA requirements for hazardous waste management. Based on EPA's RCRAInfo database, the Facility is listed as a large quantity generator (LQG) of hazardous waste and was last inspected on July 26, 2018. Under EPA Policy, LQGs are required to be inspected every five (5) years and thus, an inspection was due in July of 2023. The inspection was unannounced.

2 OPENING CONFERENCE

I met with Ms. Migdelis Huertas, Principal Specialist of Environmental Health and Safety and Waste Management, and Mr. Edibal Guilloty, Manager of Environmental Health and Safety for the opening conference. I identified myself as an EPA RCRA enforcement officer, told the Facility representatives

the purpose of the inspection, and offered the representatives 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;
- Biennial report; and
- Weekly inspections.

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 PHYSICAL DESCRIPTION AND OPERATION

The Facility is a leading global provider of animal health products for pets and livestock. It consists of administrative buildings, laboratories, and operation buildings. The plant has been in operation for about fifty-two (52) years. In 2015, former owner/operator Merck Sharp & Dohme (MSD) sold it to Merial Sanofi. Subsequently, Boehringer Ingelheim acquired Merial Sanofi in January of 2017; becoming what is known today as Boehringer Ingelheim Animal Health.

Boehringer Ingelheim in Barceloneta manufactures and packages HEARTGARD® Plus (ivermectin/pyrantel), which is a real beef chew that prevents heartworm disease in dogs and treats and controls hookworm and roundworm infections. The Facility also manufactures and packages NexGard® (afoxolaner), which is approved by the Food and Drug Administration (FDA) for treatment and prevention of flea infestations, and the treatment and control of tick infestations in dogs. It is also the only product that is FDA-approved for the prevention of Lyme infections as a direct result of killing vector ticks.

The Facility representatives reported it currently employs approximately two hundred and forty (240) full-time employees, approximately forty (40) temps, and about one hundred (100) contractors. Boehringer Ingelheim covers an area of about one hundred and eighty-eight (188) acres of land.

2.2 SOLID AND HAZARDOUS WASTE GENERATION

Boehringer Ingelheim Animal Health Puerto Rico LLC generates and stores hazardous and nonhazardous wastes from laboratories, production lines, and facility maintenance and stores them in two (2) central accumulation areas (CAAs), numerous satellite accumulation areas (SAAs), and assigned areas for its universal waste and used oil. The CAAs are identified as Building 78 CAA and Laboratory CAA.

Majority of the hazardous waste generated is shipped under waste codes D001 (ignitable), D002 (corrosive), F-listed spent solvents and F-listed spent nonhalogenated solvents, P-listed acute hazardous waste from discarded commercial chemical products, and U-listed hazardous waste from discarded

commercial chemical products. Its P-listed waste are mainly P012 (arsenic trioxide), P030 (soluble cyanides salts), and P098 (potassium cyanide).

Hazardous waste is generated daily throughout the Facility. The areas with the biggest waste streams are the laboratories, production lines and maintenance shops. Clean Harbors and Veolia are the Facility's dedicated haulers.

3 FACILITY WALKTHROUGH

Ms. Huertas and Mr. Guilloty accompanied me during the facility walkthrough. During the facility walkthrough, the following areas were inspected for compliance:

- F6 SAA;
- Paint Shop SAA;
- Aerosol and Wielding Shop SAA;
- F4A SAA;
- Laboratory SAA;
- Building 32 SAA (NexGard Production);
- General Used Oil Storage;
- General Maintenance Shop (Used Oil Storage);
- Laboratory CAA; and
- Building 78 CAA.

The observations for each area are described below.

3.1 SATELLITE ACCUMULATION AREAS (SAAS)

As mentioned above, the F6, Paint Shop, Aerosol and Wielding Shop, F4A, Building 32 and Laboratory SAAs were visited to evaluate compliance with the RCRA regulations.

At the time of the inspection, the F6 SAA had a 5-gallon container of contaminated isopropyl alcohol (IPA) that was not marked and/or labeled with the words "hazardous waste" nor with an indication of the hazards of the contents (See Appendix A, Photograph 1).

The Paint Shop SAA had a 55-gallon drum of waste paint that was not marked and/or labeled with the words "hazardous waste" nor with an indication of the hazards of the contents (See Appendix A, Photograph 2).

The Aerosol and Wielding Shop SAA had a 30-gallon drum of aerosol cans (See Appendix A, Photograph 3).

At the F4A SAA, there was a container of corrosive and toxic hazardous waste (See Appendix A, Photograph 4).

At the Laboratory SAA, we were greeted by Ms. Gladys Perez, Laboratory Manager. Ms. Perez escorted us to Hood 85-01 where a 55-gallon drum of solvent waste was being used as the laboratory's SAA.

Building 32 had a 16-gallon drum of contaminated IPA being used for process waste generated from the production of NexGard.

Except for the F6 and Paint Shop SAAs, the drums at all the other SAAs that I visited were properly labeled with the words "hazardous waste", with an indication of the nature of the hazard being stored, closed, and at or near the point of generation.

3.2 CENTRAL ACCUMULATION AREAS (CAAS)

Laboratory CAA

The Laboratory CAA was storing the following hazardous waste:

- two (2) grounded 55-gallon drums of solvent waste.

Ms. Perez stated that only one drum is used at a time. The drum is connected via a pipeline that pumps in the hazardous waste generated in the laboratory's hood.

Building 78 CAA

Mr. Santos Vidot, Senior Group Leader of Waste Management, joined us for this portion of the walkthrough. The Building 78 CAA was storing the following hazardous waste:

- a 55-gallon drum of waste pending analysis from a construction/demolition project dated June 21, 2023;
- a 55-gallon drum of solvent waste dated July 3, 2023;
- a 55-gallon drum of solvent waste dated July 5, 2023;
- a 55-gallon drum of solvent waste dated July 11, 2023;
- a 55-gallon drum of solvent waste dated July 13, 2023;
- a 55-gallon drum of ignitable D001 waste dated July 17, 2023.

At the time of the inspection, both CAAs had emergency spill kits and an eye washing station readily available, a telephone at reach in case emergency protocols had to be activated, fire extinguishers present, the emergency contact information signage posted, and adequate aisle space to conduct a thorough inspection of the hazardous waste storage drums. All the hazardous waste drums were properly labeled with the words "hazardous waste" and with an indication of the nature of its hazard, closed and dated with accumulation start dates that did not exceed the 90-day storage limit for an LQG facility.

3.3 USED OIL STORAGE AREA

The Facility stores its used oil in a couple of designated areas throughout the site. These are known as the General Used Oil Storage building and the General Maintenance Shop. At the time of the inspection, both areas were storing a 55-gallon drum of used oil properly labeled, closed and in good condition.

3.4 UNIVERSAL WASTE STORAGE AREA

The Facility has a dedicated area solely for universal waste, specifically used fluorescent bulbs and batteries located in the right-hand side corner of Building 78 CAA. At the time of the inspection, no universal waste was being stored due to a recent hauler pickup.

4 DOCUMENT REVIEW

During the inspection, I requested the documents listed under Section 2 of this report. The following were reviewed on-site except for the Contingency Plan and RCRA personnel training records.

- Hazardous waste manifests;
- Land disposal restrictions;
- Biennial Report; and
- Weekly inspections.

I requested that a copy of the Contingency Plan be sent electronically since it must include specific information and it would require a more in-depth review. Also, the Facility's RCRA personnel training records.

All the hazardous waste manifests listed in Appendix B 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).

In 2020, the Facility shipped approximately 22,040 kilograms of hazardous waste, and 144 kilograms of acute hazardous waste. In 2021, it shipped approximately 25,170 kilograms of hazardous waste, and 1,206 kilograms of acute hazardous waste. In 2022, the Facility shipped approximately 27,547 kilograms of hazardous waste, and 9 kilograms of acute hazardous waste. So far, in 2023, the Facility has shipped approximately 9,404 kilograms of hazardous waste (from January through April of 2023).

Thus, based on the manifests reviewed for the past three years, and conversations with the Facility representatives, it appears that the Facility routinely generated more than 1,000 kg per month of hazardous waste and more than a kilogram of acute hazardous waste. Consequently, the Facility appears to be correctly classified as a LQG.

The following table summarizes the amount of non-acute and acute hazardous waste shipped by calendar year.

Manifest Year	Acute?	Amount of Waste (kg)
2020	Acute	144
2020	Non-Acute	22,040
2021	Acute	1,206
2021	Non-Acute	25,170
2022	Acute	9
2022	Non-Acute	27,547
2023	Non-Acute	9,404

Annual personnel training was provided electronically for staff associated with the hazardous waste operations of the Facility. Participant rosters were provided alongside the training material slides. These records were provided for 2020, 2021 and 2022, as requested.

The Facility provided proof of its Biennial Report submission. This was verified in RCRAInfo for the reporting cycle of calendar year 2021. The report was received on February 27, 2022.

The weekly inspection records for both CAAs were audited on-site since they were readily available while I conducted the walkthrough. The Facility keeps a binder for the weekly inspection records going back more than three (3) years. The inspection checklist includes checking for leaking containers and for deterioration of containers caused by corrosion or other factors, and for proper hazardous waste labels and accumulation start dates. Boehringer Ingelheim ships its hazardous waste typically every two (2) months but often sooner given the amount that is being generated.

On July 24, 2023, Ms. Huertas uploaded via the provided OneDrive folder, the requested Contingency Plan. I verified that the plan was submitted to local emergency response agencies and that the Facility made arrangements with local responders, that it 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. A quick reference guide was also provided, and I verified that it included the required information.

5 CLOSING CONFERENCE

On July 19, 2023, after completion of the walkthrough and onsite document review, I met with Ms. Melissa Ortiz, Associate Director, Ms. Huertas and Mr. Guilloty 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 REGULATORY CONCERNS

Based on observations made during the walkthrough of the facility and/or a review of records provided to EPA by the facility afterwards, the regulatory concerns below were identified.

REGULATORY, STATUTORY OR PERMIT REFERENCE	FIELD OBSERVATION
RCRA – Hazardous Waste	
40 CFR § Part 262.15(a)(5)(i): A generator must mark or label its container with the following: the words “hazardous waste”.	At the F6 SAA, a 5-gallon container of isopropyl alcohol was not marked and/or labeled with the words “hazardous waste”. (See Appendix A, Photograph 1) At the Paint Shop SAA, a 55-gallon drum of waste paint was not marked and/or labeled with the words “hazardous waste”. (See Appendix A, Photograph 2)

REGULATORY, STATUTORY OR PERMIT REFERENCE	FIELD OBSERVATION
	Corrective action: The Facility corrected the regulatory concerns the same day of the inspection and provided evidence proving the words "hazardous waste" were marked and/or labeled on the drums. (See Appendix A, Photographs 5 and 6)
40 CFR § Part 262.15(a)(5)(ii): A generator must mark or label its container with the following: an indication of the hazards of the contents.	At the F6 SAA, a 5-gallon container of isopropyl alcohol was not marked and/or labeled with an indication of the hazards of the contents. (See Appendix A, Photograph 1) At the Paint Shop SAA, a 55-gallon drum of waste paint was not marked and/or labeled with an indication of the hazards of the contents. (See Appendix A, Photograph 2) Corrective action: The Facility corrected the regulatory concerns the same day of the inspection and provided evidence proving an indication of the hazard of the contents were marked and/or labeled on the drums. (See Appendix A, Photographs 5 and 6)

7 ENVIRONMENTAL ASSISTANCE

Based on the observations made during the inspection, the Facility should 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/
- 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 1: F6 SAA; 5-gallon container of isopropyl alcohol not marked and/or labeled with the words “hazardous waste” nor with an indication of the hazards of the contents.

Photograph 2: Paint Shop SAA; 55-gallon drum of waste paint not marked and/or labeled with the words “hazardous waste” nor with an indication of the hazards of the contents.

Photograph 3: Aerosol and Wielding Shop SAA; 30-gallon drum of aerosol cans waste.

Photograph 4: F4A SAA; a container of toxic and corrosive ink waste.

Photograph 5: Facility's corrective action – F6 SAA with a 5-gallon container of isopropyl alcohol marked and/or labeled with the words "hazardous waste" and with an indication of the hazards of the contents.

Photograph 6: Facility's corrective action – Paint Shop SAA with a 55-gallon drum of waste paint marked and/or labeled with the words "hazardous waste" and with an indication of the hazards of the contents.

Appendix B: Hazardous Waste Manifests

Manifest Tracking Number	Shipping Date	~ Quantity (kg)
002066387VES	4/21/2023	249
002066386VES	4/21/2023	45
002066386VES	4/21/2023	5
002066387VES	4/21/2023	242
002066386VES	4/21/2023	72
002066386VES	4/21/2023	8
002066386VES	4/21/2023	9
002066386VES	4/21/2023	102
002066386VES	4/21/2023	181
002066386VES	4/21/2023	26
002066388VES	4/21/2023	363
002066386VES	4/21/2023	159
002066386VES	4/21/2023	25
018199127FLE	4/14/2023	126
018199129FLE	4/14/2023	303
018199129FLE	4/14/2023	2,705
018199129FLE	4/14/2023	19
017848204FLE	2/15/2023	1,456
017848204FLE	2/15/2023	2,081
002067133VES	2/2/2023	8
002067134VES	2/2/2023	21
002067134VES	2/2/2023	1
002067133VES	2/2/2023	159
002067134VES	2/2/2023	21
002067134VES	2/2/2023	13
002067134VES	2/2/2023	11
002067134VES	2/2/2023	19
002067132VES	2/2/2023	339
002067134VES	2/2/2023	1
002067134VES	2/2/2023	632
002067134VES	2/2/2023	2
002067134VES	2/2/2023	2
017846676FLE	12/28/2022	121
017846676FLE	12/28/2022	2,497
002066258VES	12/21/2022	151
002066260VES	12/21/2022	35
002066260VES	12/21/2022	5

002066260VES	12/21/2022	18
002066258VES	12/21/2022	306
002066259VES	12/21/2022	71
002066260VES	12/21/2022	42
002066260VES	12/21/2022	20
002066260VES	12/21/2022	11
002066261VES	12/21/2022	378
002066261VES	12/21/2022	15
002066260VES	12/21/2022	7
002066260VES	12/21/2022	2
015728993FLE	11/17/2022	182
015728993FLE	11/17/2022	1,873
015728993FLE	11/17/2022	19
002066087VES	10/13/2022	18
002066089VES	10/13/2022	16
002066089VES	10/13/2022	8
002066087VES	10/13/2022	238
002066088VES	10/13/2022	109
002066089VES	10/13/2022	23
002066088VES	10/13/2022	33
002066089VES	10/13/2022	10
002066089VES	10/13/2022	2
015728937FLE	10/12/2022	2,505
015728937FLE	10/12/2022	242
015728937FLE	10/12/2022	2,289
017086141FLE	9/2/2022	182
017086141FLE	9/2/2022	3,113
002069922VES	8/11/2022	240
002069924VES	8/11/2022	45
002069924VES	8/11/2022	3
002069922VES	8/11/2022	329
002069923VES	8/11/2022	69
002069924VES	8/11/2022	16
002069923VES	8/11/2022	35
002069924VES	8/11/2022	27
002069925VES	8/11/2022	726
002069924VES	8/11/2022	5
002069925VES	8/11/2022	43
002069924VES	8/11/2022	6

002069924VES	8/11/2022	2
002069924VES	8/11/2022	5
017086970FLE	7/14/2022	2,289
017086929FLE	6/10/2022	624
015721850FLE	5/25/2022	2,913
015721848FLE	5/25/2022	19
002064372VES	5/24/2022	132
002064374VES	5/24/2022	64
002064374VES	5/24/2022	5
002064374VES	5/24/2022	2
002064374VES	5/24/2022	9
002064372VES	5/24/2022	424
002064373VES	5/24/2022	112
002064374VES	5/24/2022	16
002064373VES	5/24/2022	23
002064374VES	5/24/2022	7
002064374VES	5/24/2022	41
002064374VES	5/24/2022	2
015722288FLE	3/11/2022	79
015722288FLE	3/11/2022	2,289
002064061VES	3/9/2022	163
002064060VES	3/9/2022	54
002064060VES	3/9/2022	10
002064061VES	3/9/2022	394
002064059VES	3/9/2022	132
002064060VES	3/9/2022	22
002064059VES	3/9/2022	69
002064060VES	3/9/2022	7
002064060VES	3/9/2022	57
002064060VES	3/9/2022	43
002064060VES	3/9/2022	2
002064060VES	3/9/2022	1
002064059VES	3/9/2022	2
017088359FLE	1/28/2022	1,456
015722317FLE	12/22/2021	1,665
002069526VES	12/17/2021	127
002069527VES	12/17/2021	36
002069527VES	12/17/2021	4
002069527VES	12/17/2021	1

002069527VES	12/17/2021	27
002069526VES	12/17/2021	454
002069525VES	12/17/2021	130
002069527VES	12/17/2021	19
002069525VES	12/17/2021	89
002069527VES	12/17/2021	4
002069527VES	12/17/2021	5
002069527VES	12/17/2021	78
002069528VES	12/17/2021	18
002069527VES	12/17/2021	1
002069527VES	12/17/2021	1
002069525VES	12/17/2021	23
002069527VES	12/17/2021	1
015721991FLE	11/30/2021	61
015721991FLE	11/30/2021	2,081
016425258FLE	10/15/2021	61
016425258FLE	10/15/2021	1,248
016425203FLE	9/24/2021	121
016425203FLE	9/24/2021	2,913
002065248VES	9/21/2021	111
002065247VES	9/21/2021	35
002065247VES	9/21/2021	9
002065247VES	9/21/2021	1
002065247VES	9/21/2021	34
002065248VES	9/21/2021	494
002065246VES	9/21/2021	212
002065247VES	9/21/2021	22
002065246VES	9/21/2021	50
002065247VES	9/21/2021	3
002065247VES	9/21/2021	101
002065247VES	9/21/2021	1
002065247VES	9/21/2021	1
002065247VES	9/21/2021	1
002065247VES	9/21/2021	11
001850647VES	8/16/2021	1,161
016425072FLE	8/12/2021	242
016425074FLE	8/12/2021	2,497
001513484VES	6/29/2021	168
001513483VES	6/29/2021	73

001513483VES	6/29/2021	32
001513483VES	6/29/2021	1
001513483VES	6/29/2021	2
001513487VES	6/29/2021	30
001513483VES	6/29/2021	533
001513484VES	6/29/2021	461
001513483VES	6/29/2021	32
001513485VES	6/29/2021	156
001513485VES	6/29/2021	104
001513483VES	6/29/2021	1
001513483VES	6/29/2021	2
001513483VES	6/29/2021	2
001513483VES	6/29/2021	13
001513486VES	6/29/2021	381
001513483VES	6/29/2021	10
001513486VES	6/29/2021	6
001513483VES	6/29/2021	1
001513483VES	6/29/2021	1
001513483VES	6/29/2021	1
001513485VES	6/29/2021	18
016434203FLE	6/28/2021	1,665
016434203FLE	6/28/2021	1,040
015722478FLE	6/8/2021	1,665
015456020FLE	4/1/2021	61
001659941VES	4/1/2021	272
001659940VES	4/1/2021	16
015456020FLE	4/1/2021	2,913
001659940VES	4/1/2021	6
001659940VES	4/1/2021	20
001659941VES	4/1/2021	515
001659940VES	4/1/2021	226
001659940VES	4/1/2021	31
001659940VES	4/1/2021	5
001659940VES	4/1/2021	66
001659940VES	4/1/2021	15
001659940VES	4/1/2021	5
001659940VES	4/1/2021	9
015455594FLE	3/12/2021	1,665
015455959FLE	12/23/2020	57

015455959FLE	12/23/2020	2,289
001513415VES	12/18/2020	54
001513416VES	12/18/2020	5
001513415VES	12/18/2020	168
001513414VES	12/18/2020	79
001513414VES	12/18/2020	34
001513416VES	12/18/2020	20
001513416VES	12/18/2020	5
001513416VES	12/18/2020	5
001513416VES	12/18/2020	5
001513416VES	12/18/2020	5
001513414VES	12/18/2020	36
013486197FLE	11/24/2020	303
013486197FLE	11/24/2020	2,497
001513261VES	11/23/2020	219
001513263VES	11/23/2020	5
001513263VES	11/23/2020	15
001513263VES	11/23/2020	25
001513263VES	11/23/2020	2
001513263VES	11/23/2020	2
001513263VES	11/23/2020	2
001513261VES	11/23/2020	370
001513264VES	11/23/2020	170
001513262VES	11/23/2020	304
001513262VES	11/23/2020	40
001513263VES	11/23/2020	2
001513263VES	11/23/2020	2
001513263VES	11/23/2020	25
001513263VES	11/23/2020	132
001513263VES	11/23/2020	2
001513263VES	11/23/2020	15
001513262VES	11/23/2020	7
001513263VES	11/23/2020	1
013822620FLE	10/29/2020	182
013822620FLE	10/29/2020	1,040
013822620FLE	10/29/2020	624
001849978VES	9/10/2020	493
001849979VES	9/10/2020	5
001849979VES	9/10/2020	18

001849979VES	9/10/2020	5
001849978VES	9/10/2020	442
001849979VES	9/10/2020	104
001849978VES	9/10/2020	106
001849979VES	9/10/2020	5
001849979VES	9/10/2020	236
001849980VES	9/10/2020	95
001849979VES	9/10/2020	5
001849980VES	9/10/2020	41
001849979VES	9/10/2020	20
001849980VES	9/10/2020	23
001849979VES	9/10/2020	2
015158431FLE	9/1/2020	61
015158431FLE	9/1/2020	3,121
001850032VES	6/16/2020	73
001513243VES	6/16/2020	16
001513243VES	6/16/2020	5
001513243VES	6/16/2020	5
001513243VES	6/16/2020	25
001513243VES	6/16/2020	5
001513243VES	6/16/2020	5
001850032VES	6/16/2020	401
001850031VES	6/16/2020	171
001850032VES	6/16/2020	23
001513243VES	6/16/2020	70
001513243VES	6/16/2020	5
001513243VES	6/16/2020	41
001850031VES	6/16/2020	263
001850031VES	6/16/2020	95
001513243VES	6/16/2020	5
001850031VES	6/16/2020	29
001513243VES	6/16/2020	2
001513243VES	6/16/2020	5
014172754FLE	6/5/2020	121
014172754FLE	6/5/2020	3,121
014172754FLE	6/5/2020	19
001850061VES	3/24/2020	195
001850059VES	3/24/2020	27
001850059VES	3/24/2020	1

001850059VES	3/24/2020	20
001850058VES	3/24/2020	369
001850058VES	3/24/2020	114
001850061VES	3/24/2020	50
001850059VES	3/24/2020	55
001850059VES	3/24/2020	4
001850059VES	3/24/2020	2
001850059VES	3/24/2020	33
001850060VES	3/24/2020	544
001850060VES	3/24/2020	36
001850059VES	3/24/2020	2
001850058VES	3/24/2020	2
001850058VES	3/24/2020	38
014173737FLE	3/20/2020	2,497
014173737FLE	3/20/2020	19
001850038VES	1/9/2020	18
001850038VES	1/9/2020	11
001850038VES	1/9/2020	5
001850038VES	1/9/2020	5
001850038VES	1/9/2020	11
001850039VES	1/9/2020	29
001850038VES	1/9/2020	9
001850038VES	1/9/2020	5
001850038VES	1/9/2020	24
001850038VES	1/9/2020	1
001850038VES	1/9/2020	5
001850038VES	1/9/2020	5
001850039VES	1/9/2020	16

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.

Barceloneta Municipio, PR

1 mile Ring Centered at 18.426036,-66.549393
Population: 3,504
Area in square miles: 3.14

LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	3%
Spanish	97%
Total Non-English	97%

COMMUNITY INFORMATION

- Low income: 74 percent
- People of color: 100 percent
- Less than high school education: 38 percent
- Limited English households: 84 percent
- Unemployment: 7 percent
- Persons with disabilities: 17 percent
- Male: 49 percent
- Female: 51 percent
- 0 years — Average life expectancy
- $12,957 — Per capita income
- Number of households: 1,239
- Owner occupied: 72 percent

BREAKDOWN BY RACE

- White: 51%
- Black: 4%
- Asian: 0%
- Hispanic: 100%
- American Indian: 1%
- Hawaiian/Pacific Islander: 0%
- Other race: 15%
- Two or more races: 28%

BREAKDOWN BY AGE

From Ages 1 to 4	2%
From Ages 1 to 18	16%
From Ages 18 and up	84%
From Ages 65 and up	20%

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 popultion can be of any race.
Source: U.S. Census Bureau, American Community Survey (ACS) 2017 -2021. Life expectancy data comes from the Centers for Disease Control.

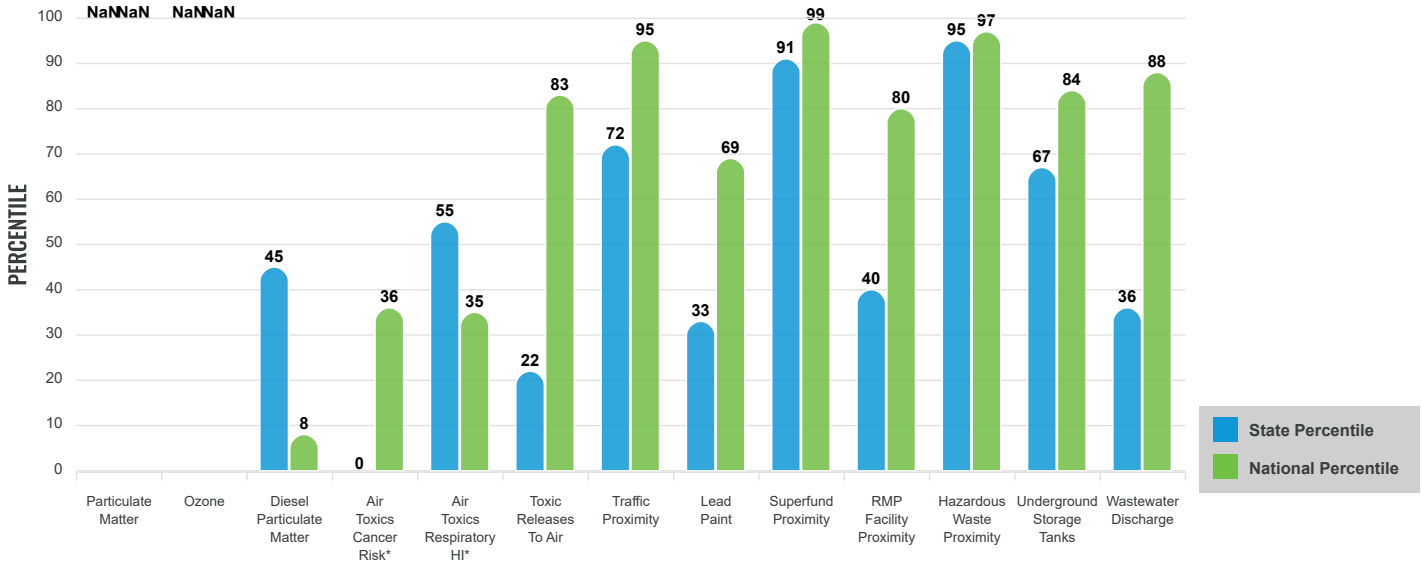
Environmental Justice & Supplemental Indexes

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.

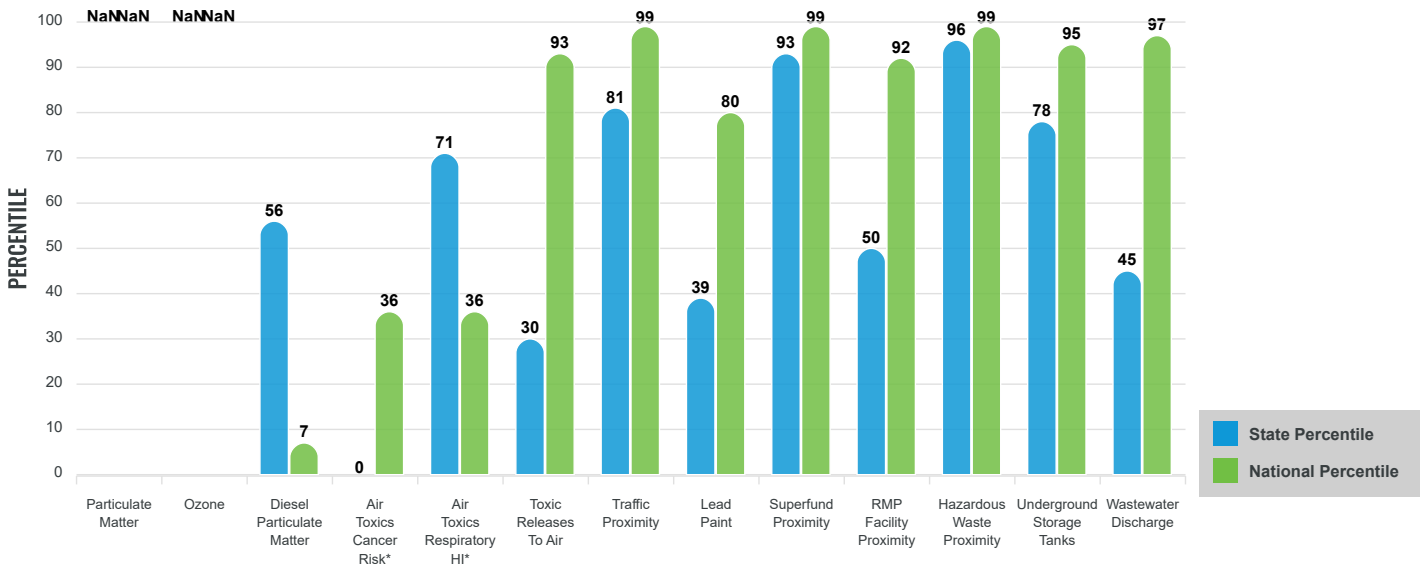
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

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

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for 1 mile Ring Centered at 18.426036,-66.549393

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter (µg/m^3)	N/A	N/A	N/A	8.08	N/A
Ozone (ppb)	N/A	N/A	N/A	61.6	N/A
Diesel Particulate Matter (µg/m^3)	0.0319	0.0667	42	0.261	2
Air Toxics Cancer Risk* (lifetime risk per million)	20	23	0	28	3
Air Toxics Respiratory HI*	0.2	0.19	17	0.31	4
Toxic Releases to Air	320	4,300	21	4,600	39
Traffic Proximity (daily traffic count/distance to road)	190	180	69	210	73
Lead Paint (% Pre-1960 Housing)	0.048	0.16	33	0.3	26
Superfund Proximity (site count/km distance)	0.43	0.15	94	0.13	93
RMP Facility Proximity (facility count/km distance)	0.13	0.47	39	0.43	40
Hazardous Waste Proximity (facility count/km distance)	2.8	0.76	94	1.9	80
Underground Storage Tanks (count/km^2)	1.1	1.7	68	3.9	48
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.0014	2.3	38	22	51
SOCIOECONOMIC INDICATORS					
Demographic Index	87%	83%	46	35%	98
Supplemental Demographic Index	50%	43%	68	14%	99
People of Color	100%	96%	28	39%	96
Low Income	74%	70%	46	31%	95
Unemployment Rate	7%	15%	32	6%	68
Limited English Speaking Households	84%	67%	83	5%	99
Less Than High School Education	38%	21%	88	12%	95
Under Age 5	2%	4%	38	6%	21
Over Age 64	20%	22%	43	17%	67
Low Life Expectancy	N/A	N/A%	N/A	20%	N/A

*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.

Sites reporting to EPA within defined area:

Superfund 0
Hazardous Waste, Treatment, Storage, and Disposal Facilities 1
Water Dischargers 2
Air Pollution 2
Brownfields 0
Toxic Release Inventory 5

Other community features within defined area:

Schools 2
Hospitals 0
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 18.426036,-66.549393

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS

INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	N/A	-99999900%	N/A	20%	N/A
Heart Disease	N/A	-999999	N/A	6.1	N/A
Asthma	N/A	-999999	N/A	10	N/A
Cancer	N/A	-999999	N/A	6.1	N/A
Persons with Disabilities	18.1%	21.6%	30	13.4%	79

CLIMATE INDICATORS

INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	N/A	-99999900%	N/A	12%	N/A
Wildfire Risk	N/A	-99999900%	N/A	14%	N/A

CRITICAL SERVICE GAPS

INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	44%	32%	74	14%	96
Lack of Health Insurance	6%	7%	50	9%	45
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access	No	N/A	N/A	N/A	N/A
Food Desert	No	N/A	N/A	N/A	N/A

Footnotes

Report for 1 mile Ring Centered at 18.426036,-66.549393

Appendix D: Flood Zone Map

Federal Emergency Management Agency (FEMA) 100 Year Flood Zones

Facility Name: Boehringer Ingelheim Animal Health Puerto Rico LLC

The Facility is not located within the FEMA 100 Year Flood Zones area.