

U.S. Department of Housing and Urban Development

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Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: PR-ESP-00264 Del Carmen Senior Living Corp

Responsible Entity: Puerto Rico Department of Housing

Grant Recipient: Department of Economic Development and Commerce (DEDC)

State/Local Identifier: Puerto Rico / San Juan, PR

Preparer: Patricia Carmenatty, Environmental Specialist

Behar Ybarra & Associates LLC patricia.carmenatty@byaea.com

787-783-0290

Certifying Officer Name and Title: Permit and Environmental Compliance Officers:

Aldo A. Rivera Vazquez, PE - Director, Permits and Environmental Compliance Division

Angel G. López Guzmán - Deputy Director, Permits and Environmental Compliance Division

Maria T. Torres-Bregón - Permits and Environmental Compliance Manager

Permits and Environmental Compliance Specialist: Sally Z. Acevedo-Cosme, Limary Vélez Marrero, Ivelisse Lorenzo Torres, Mónica Machuca Rios, Janette I. Cambrelen, Santa Ramírez Lebrón, Abdul Feliciano Plaza, Pedro de León Rodriguez, Javier Mercado Barrera, Priscilla Toro Rivera

Consultant (if applicable): Behar Ybarra & Associates LLC

Direct Comments to: Puerto Rico Department of Housing at

comentariosambiental@vivienda.pr.gov

Project Location: Calle 15 1265 Ext San Agustin, San Juan PR, 00926

Coordinates: 18.390973, -66.035318

Parcel cadastral: 087-045-849-11-001/087-045-849-12-00

Description of the Proposed Project [24 CFR 50.21 & 58.32]:

The subject property is a commercial building located in San Juan, PR serving as a Home for Elderly. The project is located at Calle 15 1265 Ext San Agustin, San Juan PR, 00926, Latitude: 18.390973, Longitude: -66.035318. A Site Map is included in Figure 1 in Appendix 1, illustrating the location of the building. The area is characterized by being urban, near family residences. The nearest highway with access to the building is PR-3 (Ave. 65 de Infanteria).

A field visit was conducted on March 5, 2025, to document existing conditions of the project site. The Field Visit Report is included in Appendix 2. The project scope includes the installation of a photovoltaic (solar) panel system on the existing commercial building's roof and appurtenant storage system (batteries) on a lateral wall, with all improvements limited to the roof, floors, and walls of the existing structure. The proposed system includes 113 Solar Panels (535 Watts) and two Integrated lithium ferrous (LFP) batteries – 15.36 kW, part of the equipment will be privately financed by the applicant. The system will be interconnected with the LUMA Energy distribution network under the Net Metering Program. The proposed project Scope of Work quote is included in Appendix 3.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5: 58.35(a) [3(iii)]. In the case of non-residential structures, including commercial, industrial, and public buildings: (A) The facilities and improvements are in place and will not be changed in size or capacity by more than 20 percent; and (B) The activity does not involve a change in land use, such as from non-residential to residential, commercial to industrial, or from one industrial use to another.

Funding Information

Grant Number	HUD Program	Funding Amount
B-18-DE-72-0001	Community Development Block	Energy Support Incentive
	Grant (CDBG-DR): Electrical	Program 2.0 Set-Aside -
	Power Reliability and Resilience	\$30,000,000 set aside from
	Program (ER2) (Energy Support	ER2 Total –
	Incentive Program 2.0 Set-Aside)	\$1,316,406,180.00.

Estimated Total HUD Funded Amount: \$50,000.00

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]: \$140,995.00

Privately funded by the applicant: \$90,995.00

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Record below the compliance or conformance determinations for each statute, executive order, or regulation. Provide credible, traceable, and supportive source documentation for each authority. Where applicable, complete the necessary reviews or consultations and obtain or note applicable permits of approvals. Clearly note citations, dates/names/titles of contacts, and page references. Attach additional documentation as appropriate.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE OI & 58.6	RDERS, AND R	REGULATIONS LISTED AT 24 CFR 50.4
Airport Hazards 24 CFR Part 51 Subpart D	Yes No	The site is located 30,933 feet from the nearest civil airport, Fernando Ribas Dominicci in San Juan and 18,395 feet from the nearest military airport, Luis Muñoz Marín International Airport in San Juan. This topic is in compliance with HUD's Airport Hazard Regulations without further evaluation. Refer to Airports Map Zone, Figure 2
		included in Appendix 1.
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes No	This project is not located in a CBRS Unit. The project is located 26,485 feet southwest of the nearest Coastal Barrier Resource System, PR-87. Therefore, this project has no potential to impact on a CBRS Unit and is in compliance with the Coastal Barrier Resources Act.
		Refer to Coastal Barrier Resource System Map, Figure 3 included in Appendix 1.
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes No	As per FEMA's FIRM Panel 72000C0370J, effective November 18, 2009, this project is located within Zone X. The project does not require flood insurance or is excepted from flood insurance. The project is in compliance with the Flood Insurance section without further evaluation. Refer to Flood Insurance Rate Map, Figure 4 included in Appendix 1.

Clean Air	Yes	No	The project is located in a non-attainment
Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93			municipality; however, it is not in a non-attainment area. This project includes the installation of a photovoltaic (solar) panel system on the existing commercial building's roof and appurtenant storage system (batteries) on a lateral wall located in the Municipio of San Juan. The project activities do not create new sources of air pollution. As described, the project does not involve new construction or a change in land use to facilitate the development of public, commercial, or industrial facilities, nor does it involve five or more dwelling units. Accordingly, under HUD's environmental review procedures, the project is presumed to result in emissions below de minimis levels and is considered compliant with the Clean Air Act (CAA).
			The project is located 10,882 feet from the nearest Non-attainment area. The proposed project activities will not create new air emission generator sources. Furthermore, under Puerto Rico's air quality regulations, the project meets the exemption criteria outlined in Rule 206 of the RCAP (1995), Regulation No. 5300, and is therefore in compliance with the Clean Air Act and all applicable federal, state, and local air quality standards. The installation and operation of this project will have no impact and is in compliance with the Clean Air Act without further evaluation.
			See attached published list of Puerto Rico Nonattainment/Maintenance Status for each country by year for all criteria pollutants in Appendix 4.
			Refer to Clean Air Map, Figure 5 included in Appendix 1.
Coastal Zone Management	Yes	No	The project is located 8,866 feet from the nearest Coastal Zone Management Area and does not affect a Coastal Zone as defined in

Coastal Zone Management Act, sections 307(c) & (d)		the state Coastal Management Plan. The project is in compliance with the Coastal Zone Management Act. Refer to CZMA map, Figure 6 included in Appendix 1.
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes No	This project includes the installation of a photovoltaic (solar) panel system on the existing commercial building's roof and appurtenant storage system (batteries) on a lateral wall. The project site was evaluated for potential contamination by conducting a field inspection on March 5, 2025, to identify any onsite hazards including, but not limited to, soil staining, above ground storage tanks, signs of underground storage tanks, odors, hazardous debris, potential contamination regarding lead-based paint or asbestos, etc. The site inspection did not identify any onsite hazards.
		In addition, a desktop review of USEPA databases, NEPAssist, and other sources was conducted to determine if the project site was located near dump sites, junk yards, landfills, hazardous waste sites, or industrial sites, including USEPA National Priorities List Sites (Superfund sites), CERCLA or state equivalent sites, RCRA Corrective Action sites with release(s) or suspected release(s) requiring clean-up action and/or further investigation. The desktop review finds fourteen sites within 3,000 feet of the project area. Ten sites are registered as RCRA facilities with no violations, one site as an AIR Pollution facility and three sites as NPDES facilities. Therefore, the sites do not present a risk to the health and safety of project occupants or conflict with the intended use of the property. • ALBANO DRY CLEANER, REGISTRY ID: 110001661434, 1185
		CALLE MAXIMO ALOMAR 65TH INF RIO PIEDRAS – AIR – Minor Emissions. Status: OPERATING. No violations identified. – 2,008 feet

- WALGREENS 891, REGISTRY ID: 110004892395, PR-3 AVE 65TH INF CORNER BARBOSA RIO PIEDRAS – RCRAINFO – The site is inactive. No violations identified. – 2,993 feet
- CROWLEY TOWING & TRANSPORTATION CO, REGISTRY ID: 110007806785, PIER 10 STOP 3.5 FERNANDEZ RCRAINFO The site is inactive. No violations identified. 1,061 feet
- DEPT OF ED VILLA CAPRI SCHOOL, REGISTRY ID: 110007816248, CALLE VERONA – RCRAINFO – The site is inactive. No violations identified. – 2.764 feet
- SHELL CO PR LTD SS 0655 SABANA LLANA, REGISTRY ID: 110007818754, DE DIEGO AVE & TRUJILLO ALTO – RCRAINFO – The site is inactive. No violations identified. – 2,797 feet
- KERCADO AUTO REPAIR, REGISTRY ID: 110009437127, DE DIEGO AVE 1072 – RCRAINFO – The site is inactive. No violations identified. – 2,855 feet
- LOS PRIMOS NISSAN, REGISTRY
 ID: 110014440426, AVE 65
 INFANTERIA KM 5.6 –
 RCRAINFO The site is active. No violations identified. 1,626 feet
- LUMA RIO PIEDRAS TECHNICAL OPERATIONS OFFICE, REGISTRY ID: 110043555462, CALLE JOSE DE DIEGO EQUINA RCRAINFO The site is inactive. No violations identified. 2,791 feet
- BALCONES DE SAN JUAN WASTEWATER COLLECTION SYSTEM, REGISTRY ID: 110064515591, 404 CALLE DE DIEGO, BALCONES DE SAN JUAN – NPDES – Not applicable.

- Non-Major: Unpermitted Facility 2,798 feet
- JARDINES DEL PARAÍSO MODERNIZATION, REGISTRY ID: 110070067203, PARK GARDENS AVE. – NPDES – Non-Major: General Permit Covered Facility. Terminated; Compliance Tracking Off – 1,193 feet
- THE CHURCH OF CHRIST OF LATTER-DAY SAINTS – NEW TEMPLE AND MEETINGHOUSE, REGISTRY ID: 110070528694, RONDA STREET, INTERSECTION WITH PR-181 – NPDES – Non-Major. The site permit is expired – 2,752 feet
- PRASA SJ1A SAGRADO CORAZON FACILITY -REGISTRY ID: 110007822785, SAN JOSE ST VILLA PALMERAS -RCRAINFO, Inactive - No violation identified. - 2,993 feet
- CARIBBEAN PETROLEUM LP SS GULF 005 – Registry ID: 110009437742, PR-3 KM 5.1 AVE 65TH INF - RCRAINFO, Inactive -No violation identified. - 2,993 feet
- HOSPITAL SAN FRANCISCO -REGISTRY ID: 110004889915 -371 AVENIDA DE DIEGO, SAN JUAN - RCRAINFO, Inactive - No violation identified. - 2,999 feet

Refer to the ECHO Reports included in Appendix 5.

The lead-based paint review is subject to the Lead Safe Housing Rule (LSHR) under 24 CFR Part 35, the EPA's Renovation, Repair and Painting (RRP) Rule under 40 CFR Part 745 Subpart E, and Puerto Rico DNER Regulation 9098. A lead-based paint inspection and/or risk assessment is not required if the building was constructed after January 1, 1978. The subject property was built in circa 1960; therefore, it is required to

perform a screen for lead-based paint prior to starting the work.

- The work must be performed by RRP Certified Renovation Firm.
- At least one RRP-Certified Renovator must be at the job site or available when work is being done.
- Workers at the job site must receive on-the-job training from the Certified Renovator.
- Lead Safe Work Practices are recommended if paint disturbance is "di minimis".
- Lead Safe Work Practices are required if paint disturbance exceeds "di minimis" but not EPA's minor repair and maintenance threshold.
- Property Risk Assessment and abatement of all lead-based paint hazards are required prior to commencing work if paint disturbance is significant.

The proposed activities are minor in scope and involve limited surface penetration (e.g., drilling to mount equipment). They do not include demolition or renovation activities that would disturb significant quantities of ACM. The systems being installed have been consistently evaluated as non-invasive and do not trigger permitting thresholds under NESHAP.

While minimal dust or particulate emissions may result from surface drilling, these emissions are expected to remain well below de minimis thresholds and do not result in the release of regulated asbestos fibers. Additionally, the program does not include new construction or land conversion.

Under Puerto Rico's air quality regulations, these activities qualify for permitting exemptions under Rule 206 of the Regulation for the Control of Atmospheric Pollution (RCAP), Regulation No. 5300, confirming

compliance with the Clean Air Act and all applicable federal, state, and local air quality standards.

The Energy Support Incentive Program 2.0 – Set-Aside Program, funded through CDBG-DR, does not involve construction activities that would require a building or use permit. According to Planning Board Regulation 9473, approved on June 16, 2023, Section 9.4.1.3.a.1 states: "Photovoltaic solar installations that are installed on the roofs of structures and whose capacity is up to one megawatt do not require a construction or use permit. Nor will a building permit be required for systems up to one hundred kilowatts above ground."

As such, the proposed activities do not trigger construction permit requirements and do not involve regulated asbestos disturbance. No renovation or demolition activities that would exceed ACM thresholds are included in the program.

On January 11, 2024, HUD issued Notice CPD-23-103, Departmental Policy Addressing Radon in the Environmental Review Process. which requires Responsible Entity (RE) to consider radon as part of the site contamination analysis for projects subject to HUD's contamination regulations at 24 CFR 58.5(i), unless the project qualifies for an exemption. According to the notice, radon must be addressed in environmental reviews for projects involving structures that are or will be occupied for at least four (4) hours per day. The eligible business activities under the Energy Support Incentive Program 2.0 – Set-Aside Program are expected to meet this occupancy threshold and thus would typically require radon consideration as part of the environmental review. However, there is currently no largescale dataset available for Puerto Rico that meets HUD's standards for determining radon hazard levels. On March 6, 2024, the Puerto Rico Department of Housing

(PRDOH) formally consulted with HUD to document the absence of reliable scientific data and to explain that radon testing in Puerto Rico would be impractical and infeasible. This determination was based on prior research efforts that lacked adequate laboratory support, making it difficult to obtain accurate or consistent results.

Additionally, there is a limited number of trained radon testing professionals on the island, which presents another barrier to compliance with HUD's testing requirements. In response, on May 15, 2024, HUD requested that PRDOH consult with relevant agencies—including Environmental Protection Agency (EPA), United States Geological Survey (USGS), University of Puerto Rico - Mayagüez Campus, and the Puerto Rico Department of Natural and Environmental Resources (DNER)—to further document the lack of scientific data, as outlined in Section III.C. of Notice CPD-23-103. On August 20, 2024, PRDOH conducted formal consultations with the above-mentioned agencies and submitted information requests to state and federal entities. Responses were received from the following: United States Geological Survey (USGS); Centers for Disease Control and Prevention (CDC); Puerto Rico Department of Health; United States Environmental Protection Agency (EPA).

All responding agencies confirmed the absence of reliable, large-scale radon data for Puerto Rico and acknowledged the technical and logistical challenges associated with radon testing on the island. Based on these consultations and findings, radon testing is deemed infeasible and impracticable for the Energy Support Incentive Program 2.0 – Set-Aside Program. Therefore, no further consideration or evaluation of radon is required as part of the environmental review, in accordance with HUD Notice CPD-23-103. Supporting documentation is provided in Appendix 5. In conclusion, after reviewing

		the program in the context of the site contamination analysis requirements under 24 CFR 58.5(i), PRDOH has determined that radon testing is impractical and infeasible, and no further evaluation is required for radon. The project is in compliance with Contamination and Toxic Substances requirements. Refer to Contamination and Toxic Substances, Figure 7 included in Appendix 1.
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes No	After reviewing data from the United States Fish and Wildlife Service (USFWS) Information and Planning Consultation (IPaC), the Puerto Rican boa (<i>Chilabothrus inornatus</i>) could be found in the project area. The scope of work includes the installation of a photovoltaic (solar) panel system on the existing commercial building's roof and appurtenant storage system (batteries) on a lateral wall. Since the work to be carried out is limited to the roof and wall of the structure, it does not involve any type of ground disturbance or removal of vegetation. The nature of the project, scope of work, information available, a careful analysis of the IpaC, the Caribbean Dkey in the US Fish and Wildlife Service's online IPaC application, and the observations during the field visit on March 5, 2025, were used to evaluate the potential impacts to federally listed species from this project. Based on the answers provided, a consistency letter was obtained for the Puerto Rican boa which determined that the proposed actions for this project would have "No Effect" (NE) for this species. The nearest Critical Habitat is 57,200 feet from the project site. Agency consultation was submitted on May 8, 2025, and response was received on June 6, 2025. The project is in compliance with the Endangered Species Act of 1973. If a Puerto Rican Boa is found in the project activity site, work shall cease until the Boa

		moves off on its own. If the Boa does not move off, the Construction Manager shall contact the Puerto Rico Department of Natural and Environmental Resources and ask them to relocate the Boa. As established by the USFWS Puerto Rican Boa Conservation Measures Guideline. https://ipac.ecosphere.fws.gov/guideline/design/population/156/office/41430.pdf Refer to Threatened and Endangered Species Map, Figure 8 included in Appendix 1. See USFWS "No Effect" Memo and supporting documentation in Appendix 6.
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes No	This project includes the installation of a photovoltaic (solar) panel system on the existing commercial building's roof and appurtenant storage system (batteries) on a lateral wall and will not result in increased densities, conversion to residential uses, or making a vacant building habitable. The project itself is not the development of a hazardous facility, nor will the project increase residential densities or result in land conversion. The project is in compliance with HUD Explosive and Flammable Hazards.
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes No	This project does not include any activities that could potentially convert agricultural land to non-agricultural use. The project is in an area that has not been rated. The project is in compliance with the Farmland Protection Policy Act. Refer to Farmland Protection Map, Figure 9 included in Appendix 1.
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes No	PFIRMs in Puerto Rico was only developed for certain sections of the municipalities of Carolina, Canovanas, Loiza, San Juan, Trujillo Alto and Rio Grande. The proposed project is located in the municipality of San Juan. However, PFIRM information is not available for the area and considered in the review. As per the FEMA Advisory Based Flood Elevation Maps (ABFE), the project site is

		located within Zone X (area of minimal flood hazard). As the project site is not located within the FEMA-designated Special Flood Hazard Areas for the 1 percent (100-year) or 0.2 percent (500-year) flood zones, it is not classified as being within the floodplain. The project is in compliance with the HUD Floodplain Management Regulations and the Executive Order 11988. Refer to Preliminary FIRM Figure 4-A and Advisory Base Flood Elevation Map, Figure 10 included in Appendix 1.
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes No	The State Historic Preservation Office reviewed the proposed project location in accordance with 54 U.S.C. 306108 (commonly known as Section 106 of the National Historic Preservation Act) and 36 CFR Part 800: Protection of Historic Properties. Documentation with photographs and maps was subsequently submitted to SHPO (attached Appendix 7). In response from PR SHPO dated June 17, 2025, SHPO concurred with a finding of "No Historic Properties Affected" within the project's Area of Potential Effects. The property is not considered historic or contributing to an historic district (See attached Historic map, Figure 11). Therefore, this activity is in compliance with the National Historic Preservation Act. Refer to Historic Preservation Map, Figure 11 included in Appendix 1.
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes No	This project includes the installation of a photovoltaic (solar) panel system on the existing commercial building's roof and appurtenant storage system (batteries) on a lateral wall. The project does not include new construction for residential use or rehabilitation of an existing residential property. The site is urban developed and there will be no impact to or from the surrounding area from a noise perspective. This topic is in compliance with Noise

		abatement and Control without further evaluation.
		Refer to Noise Abatement and Control Map, Figure 12 included in Appendix 1.
Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes No	According to the USEPA's Source Water Protection, Sole Source Aquifer Protection Program, there are no sole source aquifers in Puerto Rico. Therefore, the proposed project site is not located within a sole source aquifer, nor will it directly or indirectly impact one. Therefore, the project is in compliance with the Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 C.F.R. Part 149 without further evaluation.
		Refer to Sole Source Aquifer Map, Figure 13 included in Appendix 1.
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes No	The project does not involve new constructions and/or activities that may have a direct or indirect adverse impact on any on site wetlands, there are no wetlands within or in the vicinity of the project area. The closest wetland is located 881 feet from the Project Site. The project does not have the potential to impact wetlands. The project is in compliance with E.O. 11990.
		Refer to Wetlands Map, Figure 14 included in Appendix 1.
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes No	This project is not within proximity of the NWSRS river. The project is located 91,093 feet from the nearest Wild and Scenic River (De la Mina River). The project is in compliance with the Wild and Scenic Rivers Act.
		Refer to Wild and Scenic Rivers Map, Figure 15 included in Appendix 1.

Field Inspection: March 5, 2025, by Egon Gonzalez and Patricia Carmenatty.

Summary of Findings and Conclusions: The proposed activity has been found to not have any adverse effects on the environment nor is there a requirement for further consultation with any agency. There is no environmental review topics addressed that result in the need for formal compliance steps or the requirement for mitigation.

Mitigation Measures and Conditions

Summarize below all mitigation measures adopted by the Responsible Entity to reduce, avoid, or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements, and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

Law, Authority, or Factor	Mitigation Measure
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	 The subject property was built circa 1970; therefore, it is required to perform a screen for lead-based paint prior to starting the work. The work must be performed by RRP Certified Renovation Firm. At least one RRP-Certified Renovator must be at the job site or available when work is being done. Workers at the job site must receive on-the-job training from the Certified Renovator. Lead Safe Work Practices are recommended if paint disturbance is "di minimis". Lead Safe Work Practices are required if paint disturbance exceeds "di minimis" but not EPA's minor repair and maintenance threshold. Property Risk Assessment and abatement of all lead-based paint hazards is required prior to commencing work if paint disturbance is significant.

Deterr	mination:		
	This categorically excluded activity/project converts to E no circumstances which require compliance with any o §58.5. Funds may be committed and drawn down after the CP.	of the fed	eral laws and authorities cited at
	EXEMPT project; OR This categorically excluded activity/project cannot circumstances which require compliance with one or re-	nore fed	
	§58.5. Complete consultation/mitigation protocol require publish NOI/RROF and obtain "Authority to Use G 58.70 and 58.71 before committing or drawing down and second consultation of the second consultation of t	rant Fu	
	This project is now subject to a full Environmental Asset to extraordinary circumstances (Section 58.35(c)).	ssment a	ccording to Part 58 Subpart E due
Prepare	er Signature:	Date:	8/12/2025
Name/	Title/Organization: Patricia Carmenatty Santiago Environmental Specialist, Behar Ybarra & Associates LLC	C	
Respon	nsible Entity Agency Official Signature:		
			Date: <u>8/18/20</u> 25
Name/	Title: Abdul X. Feliciano Plaza, Permits and En	vironm	ental Specialist

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24

CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).



Appendices



List of Appendices

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Appendix 1: Figures



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12	Noise Abatement and Control Map
13	Sole Source Aquifer
14	Wetlands Map
15	Wild and Scenic Rivers Map



Location: Aerial Map
Electrical Power Reliability and Resilience Program (ER2)

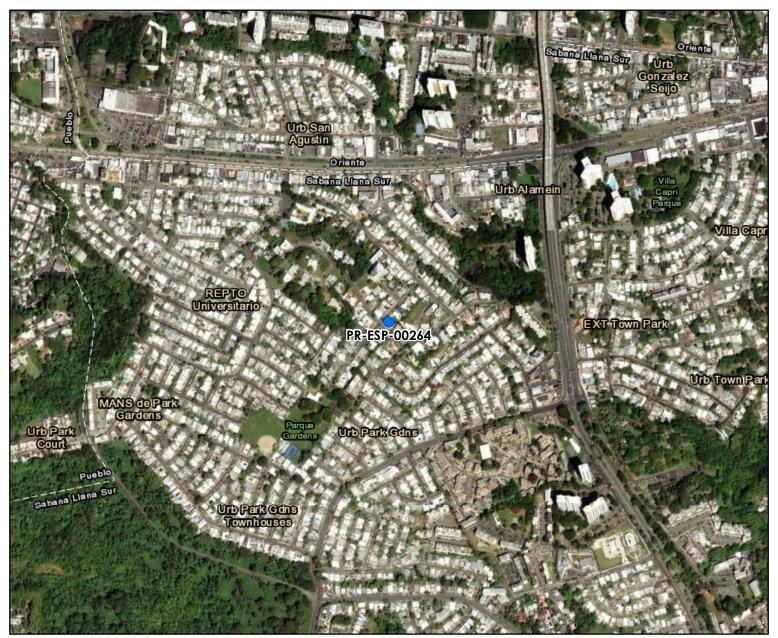
Application ID: PR-ESP-00264

Del Carmen Senior Living Corp Calle 15 1265

> Ext. San Agustín, San Juan PR 00926

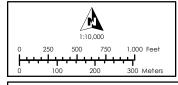
Catastro: 087-045-849-11-001/ 087-045-849-12-000

Lat: 18.390973, Lon: -66.035318



Legend:

PR-ESP-00264





Service Laver Credits:

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Centro de Recaudación de Ingresos Municipales (CRIM) https://catastro.crimpr.net/cdprpc/



Airports MapElectrical Power Reliability and Resilience Program (ER2)

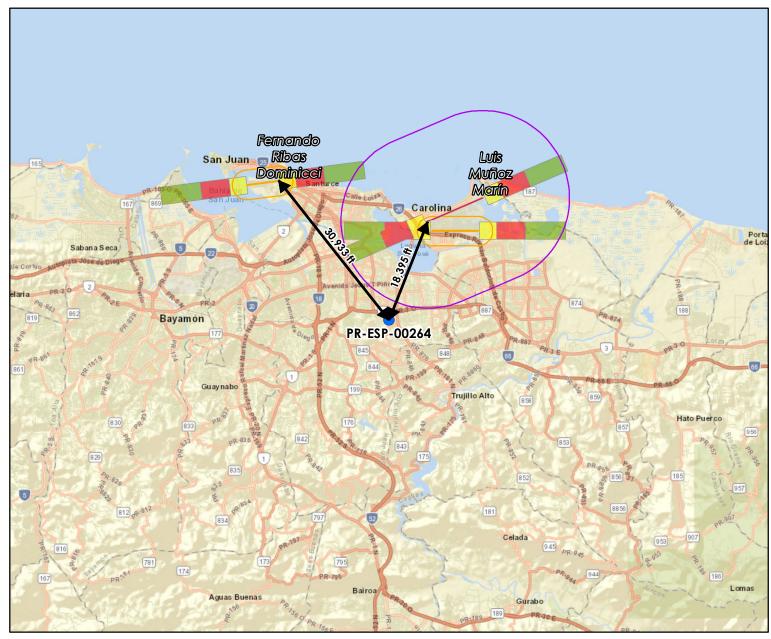
Application ID: PR-ESP-00264

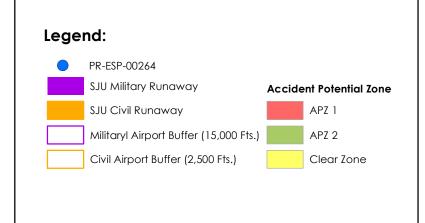
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Catastro: 087-045-849-11-001/ 087-045-849-12-000

Lat: 18.390973, Lon: -66.035318







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Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

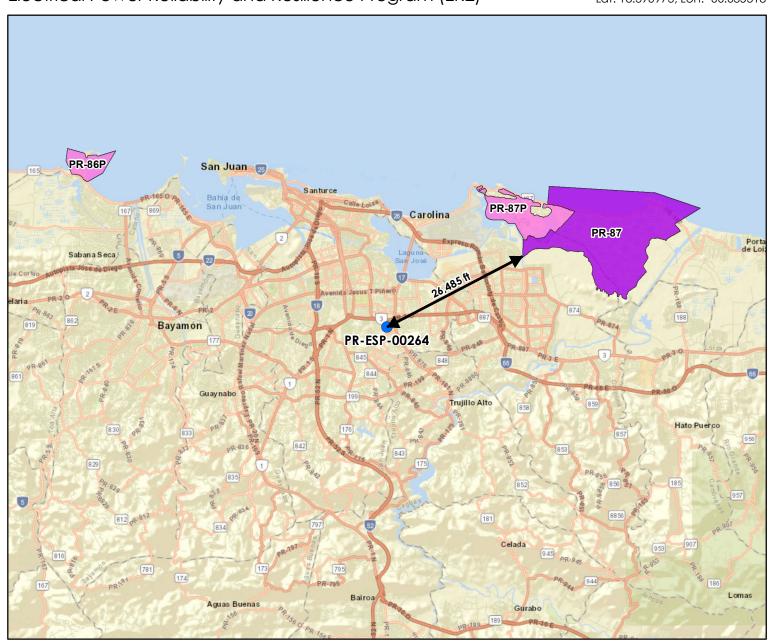
Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

Federal Aviation Administration (FAA) https://adds-faa.opendata.arcgis.com/ The Environmental Protection Agency https://www.epa.gov/nepa/nepassist



Coastal Barrier Resource System MapElectrical Power Reliability and Resilience Program (ER2)

Del Carmen Senior Living Corp Calle 15 1265 Ext. San Agustín, San Juan PR 00926 Catastro: 087-045-849-11-001/ 087-045-849-12-000 Lat: 18.390973, Lon: -66.035318



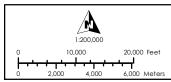


PR-ESP-00264

Coastal Barrier Resources System

Otherwise Protected Area

System Unit





Service Laver Credits:

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

U.S. Fish and Wildlife Service (FWS)

https://www.fws.gov/program/coastal-barrier-resources-act



Application ID: PR-ESP-00264

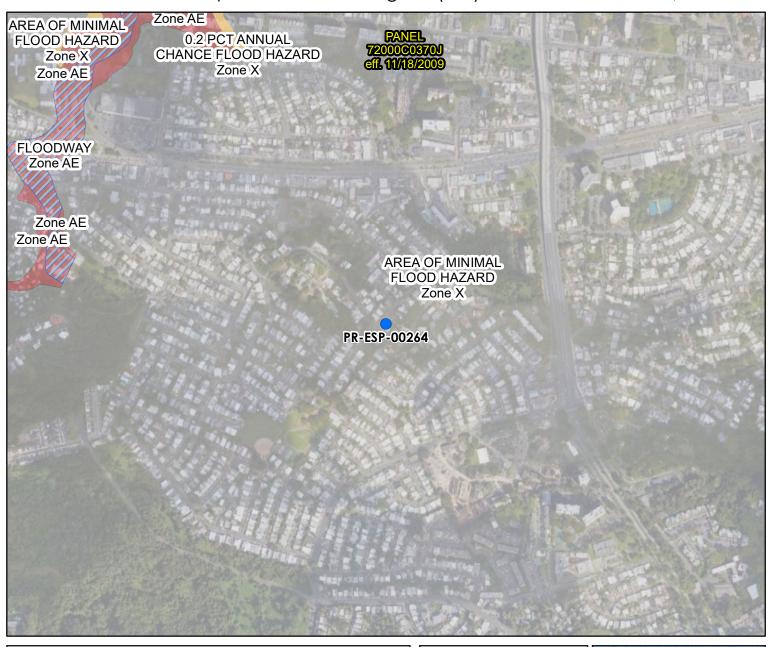
Del Carmen Senior Living Corp Calle 15 1265

Ext. San Agustín, San Juan PR 00926

Catastro: 087-045-849-11-001/ 087-045-849-12-000

Lat: 18.390973, Lon: -66.035318

Figure 4 Flood Insurance Rate Map Electrical Power Reliability and Resilience Program (ER2)



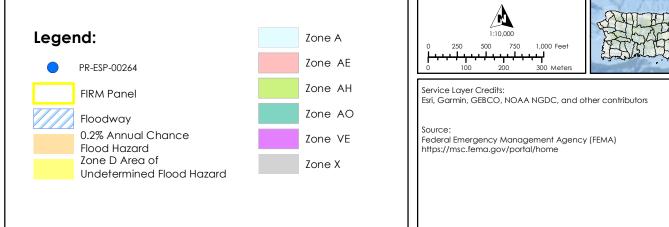
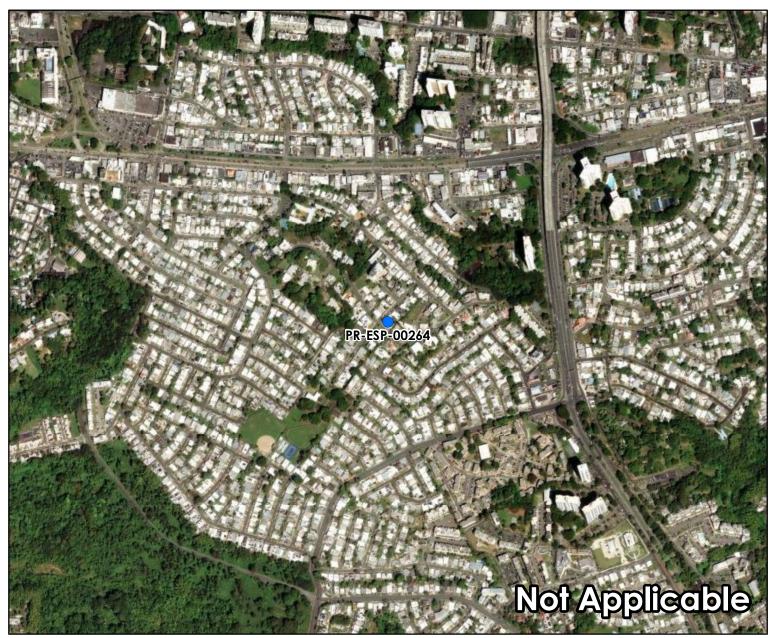


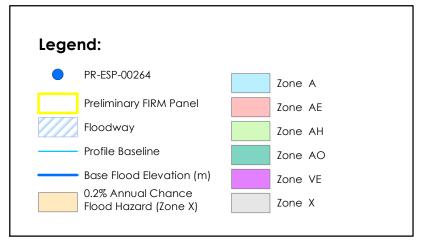


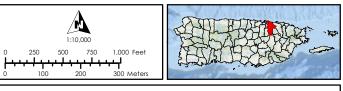
Figure 4-A

Preliminary Flood Insurance Rate Map Electrical Power Reliability and Resilience Program (ER2)

Del Carmen Senior Living Corp Calle 15 1265 Ext. San Agustín, San Juan PR 00926 Catastro: 087-045-849-11-001/ 087-045-849-12-000 Lat: 18.390973, Lon: -66.035318







Service Laver Credits:

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

Federal Emergency Management Agency (FEMA) https://msc.fema.gov/portal/home



Clean Air Map
Electrical Power Reliability and Resilience Program (ER2)

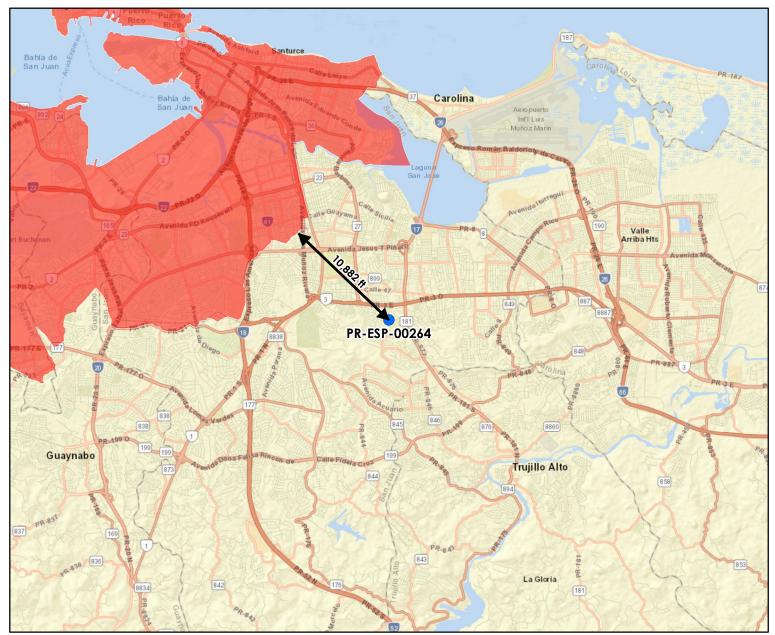
Application ID: PR-ESP-00264

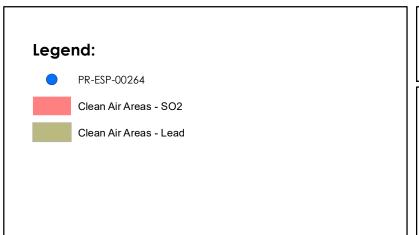
Del Carmen Senior Living Corp Calle 15 1265

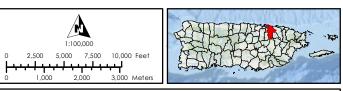
Ext. San Agustín, San Juan PR 00926

Catastro: 087-045-849-11-001/ 087-045-849-12-000

Lat: 18.390973, Lon: -66.035318







Service Laver Credits:

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

U.S. Geological Survey (USGS) https://pubs.er.usgs.gov



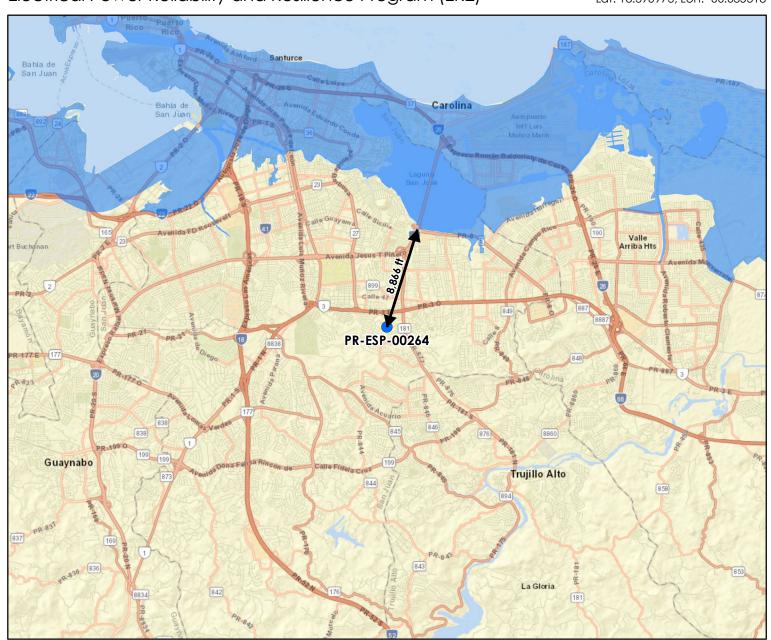
Coastal Zone Management MapElectrical Power Reliability and Resilience Program (ER2)

Application ID: PR-ESP-00264

Del Carmen Senior Living Corp Calle 15 1265 Ext. San Agustín, San Juan PR 00926

Catastro: 087-045-849-11-001/ 087-045-849-12-000

Lat: 18.390973, Lon: -66.035318



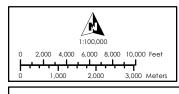




PR-ESP-00264



Coastal Zone Management Act Boundary





Service Laver Credits:

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

NOAA Office for Coastal Management (NOAA/OCM) https://www.fisheries.noaa.gov/inport/item/53132



Toxic and Hazardous Facilities Map Electrical Power Reliability and Resilience Program (ER2)

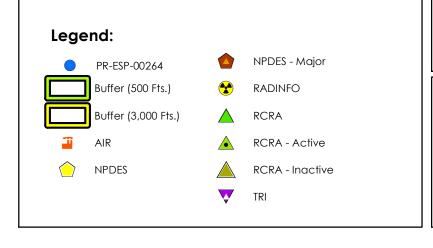
Application ID: PR-ESP-00264

Del Carmen Senior Living Corp Calle 15 1265 Ext. San Agustín,

San Juan PR 00926 Catastro: 087-045-849-11-001/

087-045-849-12-000 Lat: 18.390973, Lon: -66.035318







Service Laver Credits:

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

EPA Facility Registry Service (FRS) https://www.epa.gov/frs



Application ID: PR-ESP-00264

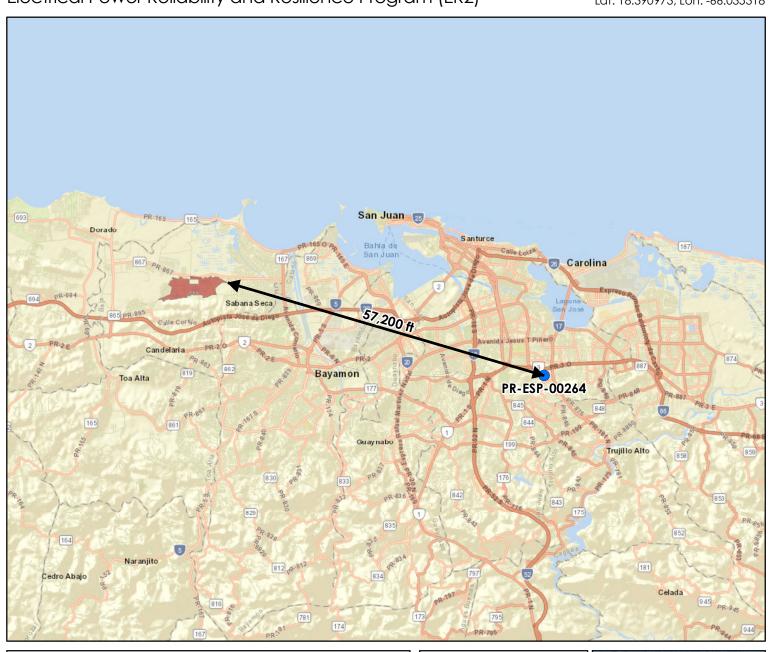
Del Carmen Senior Living Corp Calle 15 1265 Ext. San Agustín, San Juan PR 00926

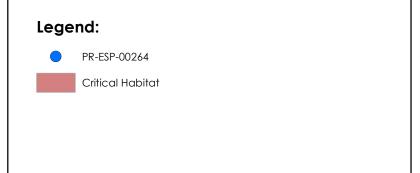
Catastro: 087-045-849-11-001/ 087-045-849-12-000

Lat: 18.390973, Lon: -66.035318

Figure 8 Threatened and Endangered Species Map

Electrical Power Reliability and Resilience Program (ER2)







Service Laver Credits:

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

NOAA Office of Response and Restoration https://response.restoration.noaa.gov/

Application ID: PR-ESP-00264

Del Carmen Senior Living Corp Calle 15 1265

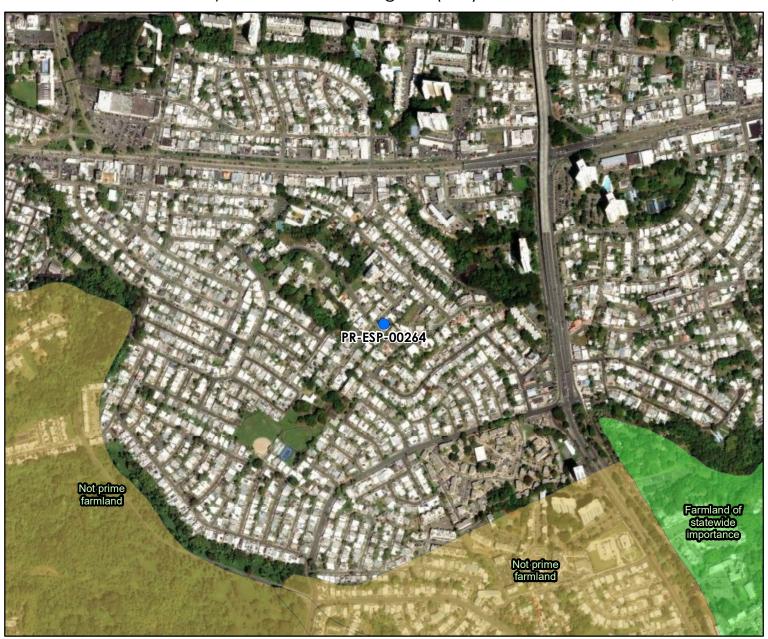
> Ext. San Agustín, San Juan PR 00926

Catastro: 087-045-849-11-001/ 087-045-849-12-000

Lat: 18.390973, Lon: -66.035318

Figure 9 Farmland Protection

Electrical Power Reliability and Resilience Program (ER2)







PR-ESP-00264

Farm Class



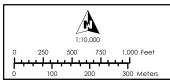
Farmland of statewide importance



Not prime farmland



Not rated





Service Layer Credits:

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

Source:

Underground Storage Tanks (USTs) https://www.epa.gov/ust



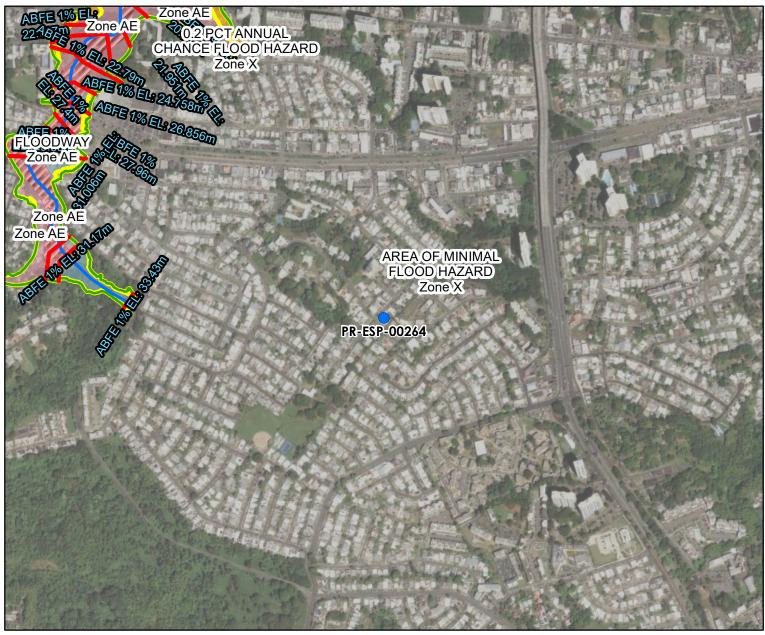
Advisory Base Flood Elevation Map Electrical Power Reliability and Resilience Program (ER2)

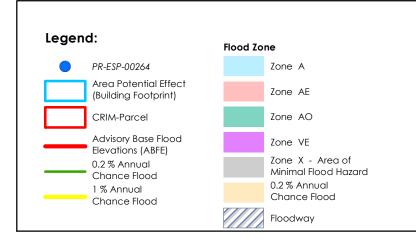
Application ID: PR-ESP-00264

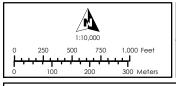
Del Carmen Senior Living Corp Calle 15 1265

Ext. San Agustín, San Juan PR 00926 Catastro: 087-045-849-11-001/

087-045-849-12-000 Lat: 18.390973, Lon: -66.035318









Service Laver Credits:

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

Federal Emergency Management Agency (FEMA), https://gis-r2-fema.hub.arcgis.com/

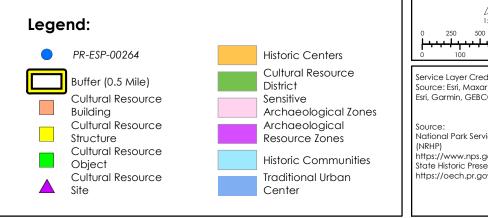
Junta de Planificacion de Puerto Rico (JP), https://maps.jp.pr.gov/ Mapas de Niveles de Inundacion Base Recomendados

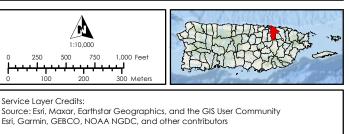


Historic Preservation MapElectrical Power Reliability and Resilience Program (ER2)

Del Carmen Senior Living Corp Calle 15 1265 Ext. San Agustín, San Juan PR 00926 Catastro: 087-045-849-11-001/ 087-045-849-12-000







National Park Service (NPS) - National Register of Historic Places

https://www.nps.gov/subjects/nationalregister/index.htm State Historic Preservation Office (SHPO) https://oech.pr.gov/Pages/default.aspx



Noise Abatement and Control Map Electrical Power Reliability and Resilience Program (ER2)

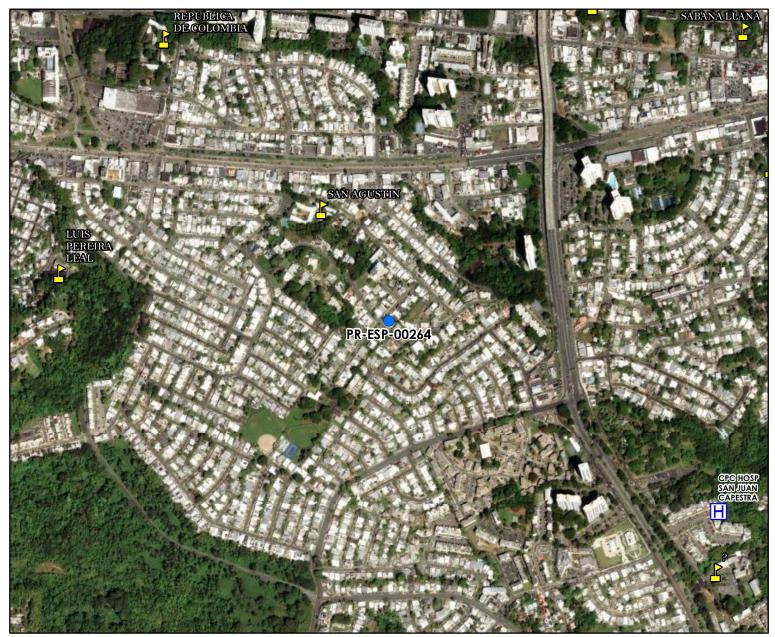
Application ID: PR-ESP-00264

Del Carmen Senior Living Corp Calle 15 1265

Ext. San Agustín, San Juan PR 00926

Catastro: 087-045-849-11-001/ 087-045-849-12-000

Lat: 18.390973, Lon: -66.035318



Legend:



PR-ESP-00264



University



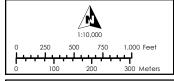
School



Hospital



Emergency Hospital





Service Laver Credits:

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

U.S. Geological Survey (USGS)

https://pubs.er.usgs.gov/publication/ofr20201022



Application ID: PR-ESP-00264

Del Carmen Senior Living Corp Calle 15 1265

> Ext. San Agustín, San Juan PR 00926

Catastro: 087-045-849-11-001/ 087-045-849-12-000

Lat: 18.390973, Lon: -66.035318

Figure 13 **EPA Sole Source Aquifers**Electrical Power Reliability and Resilience Program (ER2)



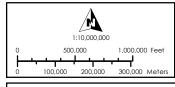
Legend:



PR-ESP-00264



EPA Sole Source Aquifers





Service Laver Credits:

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

U.S. Environmental Protection Agency https://epa.maps.arcgis.com/apps/webappviewer/index.html ?id=9ebb047ba3ec41ada1877155fe31356b



Wetlands Map
Electrical Power Reliability and Resilience Program (ER2)

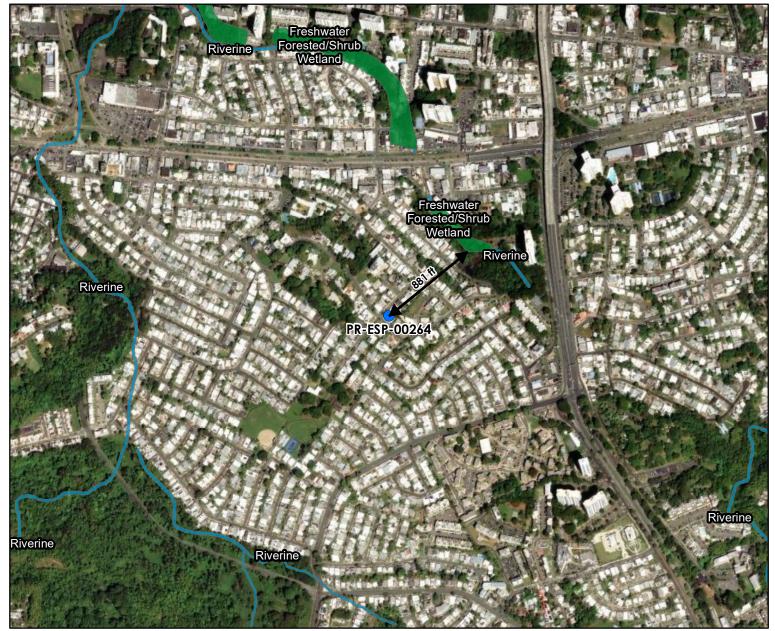
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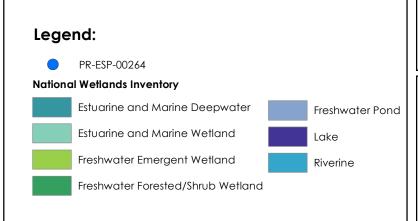
Del Carmen Senior Living Corp Calle 15 1265

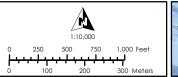
> Ext. San Agustín, San Juan PR 00926

Catastro: 087-045-849-11-001/ 087-045-849-12-000

Lat: 18.390973, Lon: -66.035318









Service Laver Credits:

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

U.S. Fish and Wildlife Service - National Weatlands Inventory https://www.fws.gov/program/national-wetlands-inventory

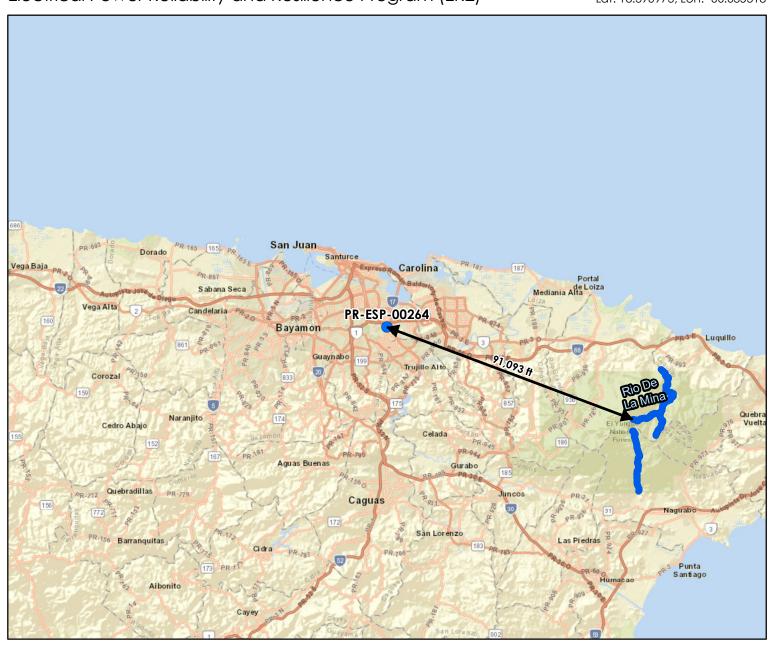


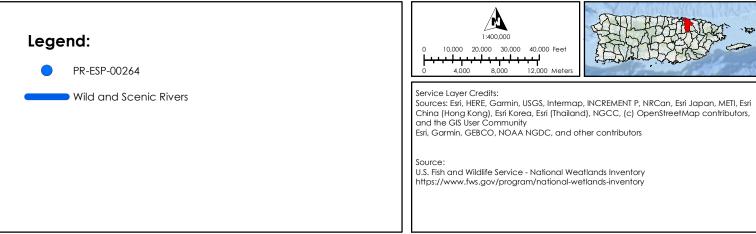


Wild and Scenic Rivers Map

Electrical Power Reliability and Resilience Program (ER2)

Del Carmen Senior Living Corp Calle 15 1265 Ext. San Agustín, San Juan PR 00926 Catastro: 087-045-849-11-001/ 087-045-849-12-000 Lat: 18.390973, Lon: -66.035318







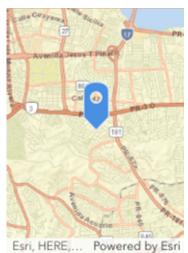
Appendix 2: Field Visit Report





Environmental Field Assessment Form - PR-ESP-00264

	APPLICAN	IT/LOCATION INFORMATION
Applicant ID:	PR-ESP-00264	
Applicant Name:	Del Carmen Senior Living Corp	Sie Grayama Sicilia
Parcel ID:	087-045-849-11-001/087-045-849-12-000	Avenida Jesus T Pinero
Coordinates:	18.390973, -66.035318	B Cal C
Street Address:	CALLE 15 1265 EXT SAN AGUSTIN	181
Municipio:	San Juan	
Zip Code:	00926	
Site Inspector:	Egon Gonzalez	
Date of Visit:	March 5, 2025	
Time of Visit:	14:01	Seri USDS Payered by
Year Built:	circa 1980	Esri, HERE, Powered by





	В	Building Information						
	Question	Answer	Notes					
1.	Location verified:	Yes	18.390973, -66.035318					
2.	Is the building correct on GIS?	Yes	Building is correct on GIS					
3.	Building Type:	Commercial						
4.	# of Stories:	2						
5.	Building Foundation:	Concrete Slab						
6.	Is the building in use?	Yes	Building is in use					
7.	Does the building have a detached garage / carport present?	No						
8.	Is the electricity connected?	Yes	Electricity is connected					
9.	Is the water connected?	Yes	Water is connected					
10.	Are there signs of poor housekeeping on site? (mounds of rubble, garbage, storm debris, solid waste, petroleum products, paint, pesticides, cleaning fluids, vehicle batteries, abandoned vehicles, pits, pools, ponds of hazardous substances, electrical equipment etc.)	No						
11.	Is a septic system present? If Yes report apparent condition.	No						
12.	Are there any obvious signs of animals, birds nesting or burrows near the site?	No						





	Parcel	Condition	s
	Question	Answer	Notes
1)	Are there any 55-gallon drums visible on site? If yes, are they leaking?	No	
2)	Are there any (or signs of any) underground storage tanks on the property?	No	
3)	Are there signs of AST on the parcel or adjacent parcel? If yes, list approximate size and contents, if known.	Yes	(1) 300lbs Propane tank located in front of structure. (2) 800gal Water cistern located on right side of structure. 200gal Diesel tank located on right side of structure.
4)	Is there any stained soil or pavement on the parcel?	No	
5)	Are there any potentially hazardous trees that could fall?	No	
6)	Are there any groundwater monitoring wells on the site or adjacent parcel?	No	
7)	Is there distressed vegetation on the parcel?	No	
8)	Are any additional environmental or non-environmental site hazards observed?	No	
9)	Is there any permanent standing water, such as a pond or stream, located on the site(do not include ponding from recent rain / weather events)?	No	
10)	Does the subject property have water frontage?	No	
11)	Is the applicant aware of any significant historical event or persons associated with the structure, or of it being located in a historic district/ area?	No	
12)	Is a historic marker present?	No	
13)	Based on the above finding, does additional information need to be obtained from the applicant to determine whether an environmental hazard is present?	No	





	Building Environmental Conditions									
	Question	Answer	Notes							
1.	Is there any visible evidence of asbestos, chipping, and flaking or peeling paint, or hazardous materials present in or on the structure?	No								
2.	Is there any visible indication of mold?	No								
3.	Are there any pungent, foul or noxious odors?	No								

Additiona	nalysis	
Question	Answer	Notes
Based on the above findings, does additional information need to be obtained from the applicant to determine whether an environmental hazard is present?	No	

I verify that I have physically visited this property and that the findings outlined above are accurate.

Inspector Signature

Egon Gonzalez

March 5, 2025





Front of Structure

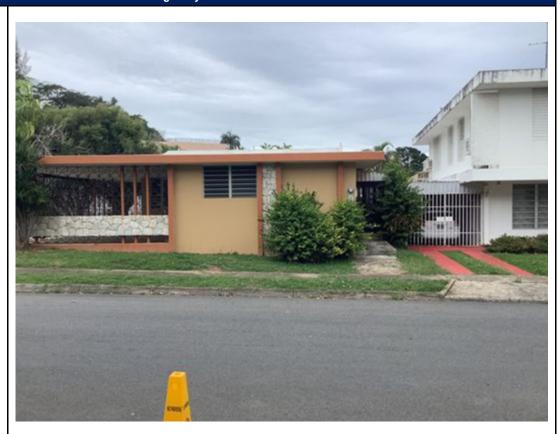
Photo Direction: Northwest

Comments:



Facing Away from Front

Photo Direction: Northwest







Side #1 of Structure

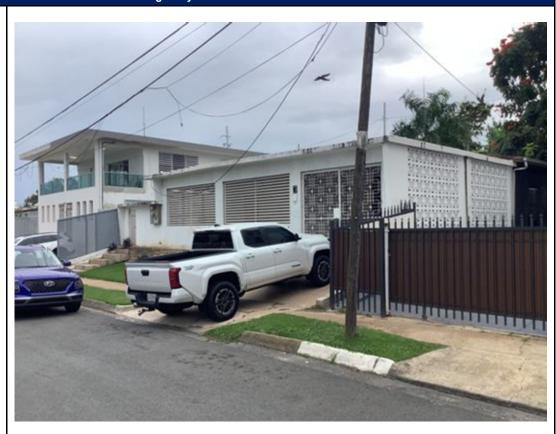
Photo Direction: Southeast

Comments:



Facing Away From Side #1

Photo Direction: East







Back of Structure

Photo Direction: Northwest

Comments:



Facing Away from Back

Photo Direction: Northeast







Side #2 of Structure

Photo Direction: East

Comments:



Facing Away from Side #2

Photo Direction: Southeast







Streetscape #1

Photo Direction: Southwest

Comments:



Streetscape #2

Photo Direction: Northeast







Address

Photo Direction: Southeast

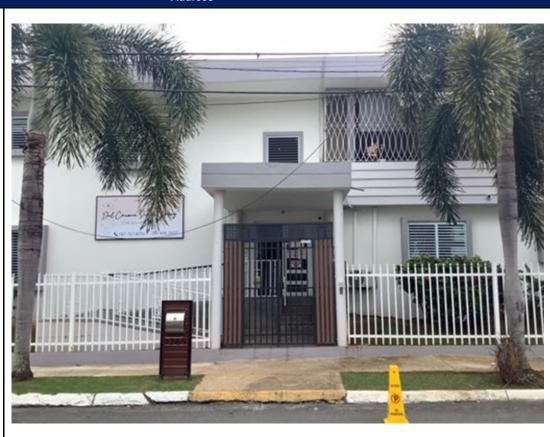
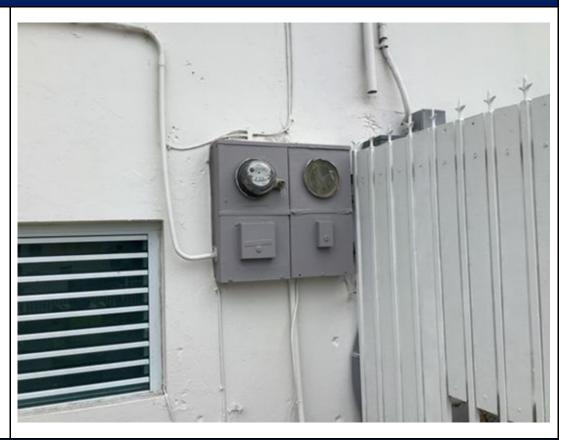






Photo Direction:

Photo Description: Electricity is connected



Architectural Details 2

Photo Direction:

Photo Description: Water is connected







Photo Direction:

Photo Description: 200gal Diesel tank for generator located on righ side of structure



Architectural Details 4

Photo Direction:

Photo Description: General interior view

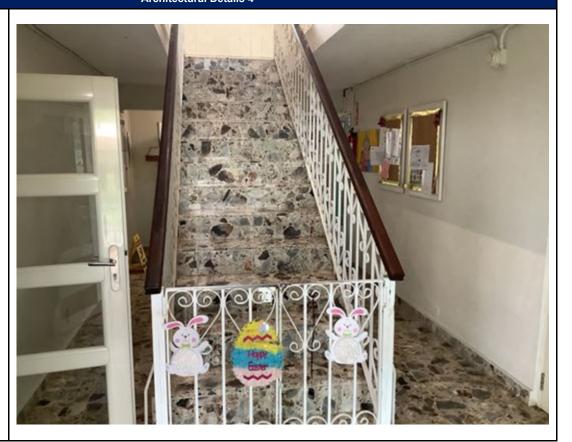






Photo Direction:

Photo Description: General interior view



Architectural Details 6

Photo Direction:

Photo Description: (1) 300lbs Propane tank located in front of structure







Photo Direction:

Photo Description: (2) 800gal Water Cisterns located on right side of structure



Architectural Details 8

Photo Direction:

Photo Description: Detached storage structure located in backyard







Photo Direction:

Photo Description: Additional back of structure view



Architectural Details 10

Photo Direction:

Photo Description: 500gal Water cistern located on left side of structure

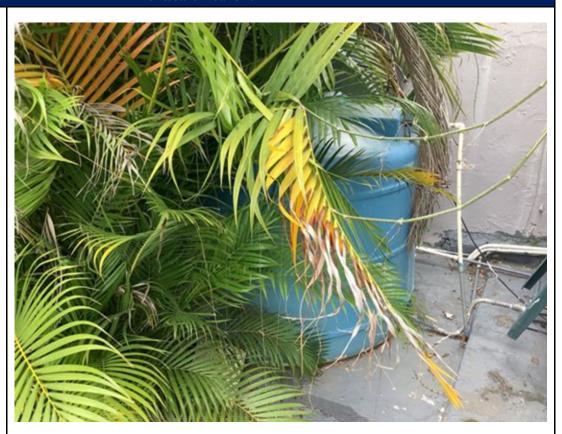






Photo Direction:

Photo Description: Proposed location for battery storage system



Photo Direction: Photo Description:

Architectural Details 12



Appendix 3: Quote





BiHiKu6520 W ~ 550 W BIFACIAL MONO PERC CS6W-520|525|530|535|540|545|550MB-AG (IEC1000 V) CS6W-520|525|530|535|540|545|550MB-AG (IEC1500 V)



MORE POWER



Module power up to 550 W Module efficiency up to 21.4 %



Up to 12.3 % lower LCOE Up to 5.2 % lower system cost



Comprehensive LID / LeTID mitigation technology, up to 50% lower degradation



Compatible with mainstream trackers, cost effective product for utility power plant



Better shading tolerance

MORE RELIABLE



Minimizes micro-crack impacts



Heavy snow load up to 5400 Pa, wind load up to 2400 Pa*

Enhanced Product Warranty on Materials and Workmanship*



Linear Power Performance Warranty*

1st year power degradation no more than 2% Subsequent annual power degradation no more than 0.45%

 $\hbox{*According to the applicable Canadian Solar Limited Warranty Statement.}\\$

MANAGEMENT SYSTEM CERTIFICATES*

ISO 9001:2015 / Quality management system ISO 14001:2015 / Standards for environmental management system ISO 45001: 2018 / International standards for occupational health & safety

PRODUCT CERTIFICATES*

* The specific certificates applicable to different module types and markets will vary, and therefore not all of the certifications listed herein will simultaneously apply to the products you order or use. Please contact your local Canadian Solar sales representative to confirm the specific certificates available for your Product and applicable in the regions in which the products will be used.

CSI Solar Co., Ltd. is committed to providing high quality solar products, solar system solutions and services to customers around the world. Canadian Solar was recognized as the No. 1 module supplier for quality and performance/price ratio in the IHS Module Customer Insight Survey, and is a leading PV project developer and manufacturer of solar modules, with over 50 GW deployed around the world since 2001.

¹² Years

^{*} For detailed information, please refer to the Installation Manual.

ENGINEERING DRAWING (mm)

Rear View Frame Cross Section A-A Mounting Hole 1134

ELECTRICAL DATA | STC*

N		Nominal	Opt.	Opt.	Open	Short	
		Max. Power	Operating Voltage	Operating		Circuit	Module
		(Pmax)	(Vmp)	(Imp)	(Voc)	(Isc)	Efficiency
CS6W-520MI	B-AG	520 W	40.5 V	12.84 A	48.4 V	13.70 A	20.2%
	5%	546 W	40.5 V	13.48 A	48.4 V	14.39 A	21.2%
Bifacial	10%	572 W	40.5 V	14.12 A	48.4 V	15.07 A	22.3%
Gain**	20%	624 W	40.5 V	15.41 A	48.4 V	16.44 A	24.3%
CS6W-525MI	B-AG	525 W	40.7 V	12.90 A	48.6 V	13.75 A	20.4%
	5%	551 W	40.7 V	13.55 A	48.6 V	14.44 A	21.4%
Bifacial Gain**	10%	578 W	40.7 V	14.21 A	48.6 V	15.13 A	22.5%
daiii	20%	630 W	40.7 V	15.48 A	48.6 V	16.50 A	24.5%
CS6W-530MI	B-AG	530 W	40.9 V	12.96 A	48.8 V	13.80 A	20.6%
D:6 : 1	5%	557 W	40.9 V	13.62 A	48.8 V	14.49 A	21.7%
Bifacial Gain**	10%	583 W	40.9 V	14.26 A	48.8 V	15.18 A	22.7%
daiii	20%	636 W	40.9 V	15.55 A	48.8 V	16.56 A	24.8%
CS6W-535MI	B-AG	535 W	41.1 V	13.02 A	49.0 V	13.85 A	20.8%
Diff. 1 I	5%	562 W	41.1 V	13.68 A	49.0 V	14.54 A	21.9%
Bifacial Gain**	10%	589 W	41.1 V	14.34 A	49.0 V	15.24 A	22.9%
	20%	642 W	41.1 V	15.62 A	49.0 V	16.62 A	25.0%
CS6W-540MI	B-AG	540 W	41.3 V	13.08 A	49.2 V	13.90 A	21.0%
Diff. 1 I	5%	567 W	41.3 V	13.73 A	49.2 V	14.60 A	22.1%
Bifacial Gain**	10%	594 W	41.3 V	14.39 A	49.2 V	15.29 A	23.1%
	20%	648 W	41.3 V	15.70 A	49.2 V	16.68 A	25.2%
CS6W-545MI	B-AG	545 W	41.5 V	13.14 A	49.4 V	13.95 A	21.2%
D:6 : 1	5%	572 W	41.5 V	13.80 A	49.4 V	14.65 A	22.3%
Bifacial Gain**	10%	600 W	41.5 V	14.46 A	49.4 V	15.35 A	23.3%
	20%	654 W	41.5 V	15.77 A	49.4 V	16.74 A	25.5%
CS6W-550MI	B-AG	550 W	41.7 V	13.20 A	49.6 V	14.00 A	21.4%
Diferial	5%	578 W	41.7 V	13.87 A	49.6 V	14.70 A	22.5%
Bifacial Gain**	10%	605 W	41.7 V	14.52 A	49.6 V	15.40 A	23.5%
+ II - d - Ct - d - d -	20%	660 W	41.7 V	15.84 A	49.6 V	16.80 A	25.7%

^{*} Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C. Measurement uncertainty: ±3 % (Pmax).

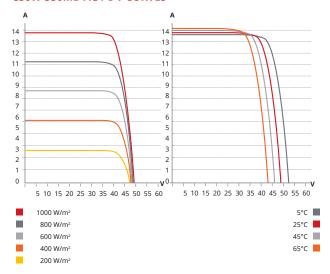
ELECTRICAL DATA

Operating Temperature	-40°C ~ +85°C
Max. System Voltage	1500 V (IEC/UL) or 1000 V (IEC/UL)
Madula Fira Darfarmanca	TYPE 29 (UL 61730)
Module Fire Performance	or CLASS C (IEC61730)
Max. Series Fuse Rating	30 A
Application Classification	Class A
Power Tolerance	0 ~ + 5 W
Power Bifaciality*	70 %
+ D D:C : I': D / D	I II D I I STC DIS 1 II

Power Bifaciality = $Pmax_{rear}$ / $Pmax_{front}$, both $Pmax_{rear}$ and $Pmax_{front}$ are tested under STC, Bifaciality Tolerance: ± 5 %

Please be kindly advised that PV modules should be handled and installed by qualified people who have professional skills and please carefully read the safety and installation instructions before using our PV modules.

CS6W-530MB-AG / I-V CURVES



ELECTRICAL DATA | NMOT*

	Nominal Max. Power (Pmax)	Opt. Operating Voltage (Vmp)	Opt. Operating Current (Imp)		Short Circuit Current (Isc)
CS6W-520MB-AG	390 W	38.0 V	10.27 A	45.7 V	11.05 A
CS6W-525MB-AG	394 W	38.2 V	10.32 A	45.9 V	11.09 A
CS6W-530MB-AG	397 W	38.3 V	10.38 A	46.1 V	11.13 A
CS6W-535MB-AG	401 W	38.5 V	10.42 A	46.3 V	11.17 A
CS6W-540MB-AG	405 W	38.7 V	10.47 A	46.5 V	11.21 A
CS6W-545MB-AG	409 W	38.9 V	10.52 A	46.7 V	11.25 A
CS6W-550MB-AG	412 W	39.1 V	10.55 A	46.9 V	11.29 A
* Under Nominal Modu	le Operating	Temperature	NMOT) irradi:	ance of 800	W/m ²

spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

MECHANICAL DATA

_ Specification	Data
Cell Type	Mono-crystalline
Cell Arrangement	144 [2 x (12 x 6)]
Dimensions	2266 × 1134 × 35 mm (89.2 × 44.6 × 1.38 in)
Weight	32.2 kg (71.0 lbs)
Front / Back Glass	2.0 mm heat strengthened glass
Frame	Anodized aluminium alloy
J-Box	IP68, 3 diodes
Cable	4.0 mm ² (IEC), 12 AWG (UL)
_ Cable Length (Including Connector)	410 mm (16.1 in) (+) / 290 mm (11.4 in) (-) or customized length*
Connector	T4-PC-1 (IEC 1000 V) or PV-KST4/xy-UR, PV-KBT4/xy-UR (IEC 1000 V) or T4-PC-1 (IEC 1500 V) or T4-PPE-1 (IEC 1500 V) or PV-KST4-EVO2/XY, PV-KBT4-EVO2/XY (IEC 1500 V) or UTXCFA4AM, UTXCMA4AM (IEC 1500 V)
^e Per Pallet	30 pieces
Per Container (40' HQ)	600 pieces

^{*} For detailed information, please contact your local Canadian Solar sales and technical

TEMPERATURE CHARACTERISTICS

Specification	Data
Temperature Coefficient (Pmax)	-0.34 % / °C
Temperature Coefficient (Voc)	-0.26 % / °C
Temperature Coefficient (Isc)	0.05 % / °C
Nominal Module Operating Temperature	41 ± 3°C

PARTNER SECTION

•••	••	• • •	 • • •	 	 	 	 • • •	 • • •	 •••	• • •	••	• • •	 • • •	 • • •	 	 	 	 	•••	•••	 • • •	 	 	

^{**} Bifacial Gain: The additional gain from the back side compared to the power of the front side at the standard test condition. It depends on mounting (structure, height, tilt angle etc.) and albedo of the

^{*} The specifications and key features contained in this datasheet may deviate slightly from our actual products due to the on-going innovation and product enhancement. CSI Solar Co., reserves the right to make necessary adjustment to the information described herein at any time without further notice.







IQ8H-240 Microinverter

Our newest IQ8 Microinverters are the industry's first microgrid-forming, software-defined microinverters with split-phase power conversion capability to convert DC power to AC power efficiently. The brain of the semiconductor-based microinverter is our proprietary application-specific integrated circuit (ASIC), which enables the microinverter to operate in grid-tied or off-grid modes. This chip is built in advanced 55-nm technology with high-speed digital logic and has superfast response times to changing loads and grid events, alleviating constraints on battery sizing for home energy systems.



Part of the Enphase Energy System, IQ8 Series Microinverters integrate with the IQ Battery, IQ Gateway, and the Enphase App monitoring and analysis software.



Connect PV modules quickly and easily to IQ8 Series Microinverters using the included Q-DCC-2 adapter cable with plug-and-play MC4 connectors.



IQ8 Series Microinverters redefine reliability standards with more than one million cumulative hours of power-on testing, enabling an industry-leading limited warranty of up to 25 years.



IQ8 Series Microinverters are UL Listed as PV rapid shut down equipment and conform with various regulations when installed according to the manufacturer's instructions.

Easy to install

- Lightweight and compact with plug-and-play connectors
- Power line communication (PLC) between components
- · Faster installation with simple two-wire cabling

High productivity and reliability

- · Produces power even when the grid is down*
- More than one million cumulative hours of testing
- · Class II double-insulated enclosure
- Optimized for the latest high-powered PV modules

Microgrid-forming

- Complies with the latest advanced grid support**
- Remote automatic updates for the latest grid requirements
- Configurable to support a wide range of grid profiles
- Meets CA Rule 21 (UL 1741-SB) requirements

NOTE:

- IQ8 Microinverters cannot be mixed together with previous generations of Enphase microinverters (IQ7 Series, IQ6 Series, etc) in the same system.
- IQ Gateway is required to change the default grid profile at the time of installation to meet local authority having jurisdiction (AHJ) requirements.

 $^{^{\}star}$ Meets UL 1741 only when installed with IQ System Controller 2.

^{**} IQ8H-240 supports split-phase, 240 V.

IQ8H-240 Microinverter

NPUT DATA (DC)	UNITS	IQ8H-240-72-2-US										
Commonly used module pairings ¹	W	320-540										
Module compatibility		To meet compatibility, PV modules must be within the following maximum input DC voltage and maximum module I _{sc} . Module compatibility can be checked at https://enphase.com/installers/microinverters/calculator										
MPPT voltage range	V	36-45										
Operating range	V	16–58										
Minimum/Maximum start voltage	V	22/58										
Maximum input DC voltage	V	60										
Maximum continuous input DC current	Α	12										
Maximum input DC short-circuit current	Α	25										
Maximum module I _{sc}	Α	20										
Overvoltage class DC port		II										
DC port backfeed current	mA	0										
PV array configuration		1×1 ungrounded array; no additional DC side protection required; AC side protection requires max 20 A per branch circuit										
DUTPUT DATA (AC)	UNITS	108H-240-72-2-US										
Peak output power	VA	384										
Maximum continuous output power	VA	380										
Nominal (L-L) voltage	٧	240, split-phase (L-L), 180°										
Minimum and maximum grid voltage ²	٧	211–264										
Maximum continuous output current	Α	1.58										
Nominal frequency	Hz	60										
Extended frequency range	Hz	47-68										
AC short-circuit fault current over three cycles	Arms	2										
Maximum units per 20 A (L-L) branch circuit ³		10										
Total harmonic distortion		<5%										
Overvoltage class AC port		III										
AC port backfeed current	mA	30										
Power factor setting		1.0										
Grid-tied power factor (adjustable)		0.85 leading 0.85 lagging										
Peak efficiency	%	97.6										
CEC weighted efficiency	%	97										
Nighttime power consumption	mW	22										
MECHANICAL DATA												
Ambient temperature range		-40°C to 60°C (-40°F to 140°F)										
Relative humidity range		4% to 100% (condensing)										
DC connector type		MC4										
Dimensions (H × W × D)		212 mm (8.3") × 175 mm (6.9") × 30.2 mm (1.2")										
Weight		1.08 kg (2.38 lbs)										
Cooling		Natural convection – no fans										
Approved for wet locations		Yes										

⁽¹⁾ No enforced DC/AC ratio.

⁽²⁾ Nominal voltage range can be extended beyond nominal if required by the utility.

MECHANICAL DATA				
Pollution degree	PD3			
Enclosure	Class II double-insulated, corrosion-resistant polymeric enclosure			
Environmental category/UV exposure rating	NEMA Type 6/outdoor			
Altitude	<2600 m (8530 ft)			
COMPLIANCE				
Certifications	CA Rule 21 (UL 1741-SB), UL 62109-1, UL1741 / IEEE1547, FCC Part 15 Class B, ICES-0003 Class B, CAN / CSA-C22.2 NO. 107.1-01 This product is UL Listed as PV rapid shut down equipment and conforms with NEC 2014, NEC 2017, NEC 2020, and NEC 2023 section 690.12 and C22.1-2018 Rule 64-218 Rapid Shutdown of PV Systems, for AC and DC conductors, when installed			
	according to manufacturer's instructions.			

Revision history

REVISION	DATE	DESCRIPTION
DSH-00241-1.0	November 2023	Initial release.

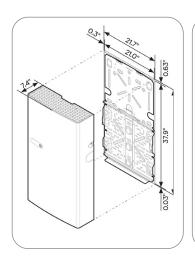


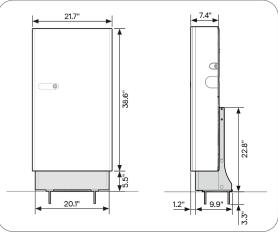


IQ Battery 5P

The IQ Battery 5P all-in-one AC-coupled system is powerful, reliable, simple, and safe. It has a total usable energy capacity of 5.0 kWh and includes six embedded grid-forming microinverters with a 3.84 kVA continuous power rating. It provides backup capability, and installers can quickly design the right system size to meet the customer needs.

Dimensions in inches





Wall mounted

Floor mounted with pedestal (sold separately)







Powerful

- Provides 3.84 kVA continuous and 7.68 kVA peak power
- Doubles the available power per kWh of prior generations of IQ Battery
- Includes six embedded IQ8D-BAT (SKU: IQ8D-BAT-240) Microinverters

Reliable

- 15-year limited warranty
- Cools passively with no moving parts or fans
- Uses wired communication for fast and consistent connection
- Updates software and firmware remotely

Simple

- · Fully integrated AC battery system
- · Installs and commissions easily
- Supports Backup, Self-Consumption, and time-of-use (TOU) modes
- Offers homeowners remote monitoring and control from the Enphase App
- · Field replaceable components

Safe

- Evaluated to UL 9540A for large scale fire testing and reduced separation distance as required in 2021 IRC R328.3.1, 2021 IFC 1207.1.5, and 2023 NFPA 855 15.3.1 and 9.1.5.1
- Uses lithium iron phosphate (LFP) chemistry for maximum safety and longevity

¹Follow all installation instructions and local codes and requirements of the Authority Having Jurisdiction (AHJ) when installing Enphase Energy System.

IQ Battery 5P

MODEL NUMBER					
IQBATTERY-5P-1P-NA	The IQ Battery 5P system with integrated IQ Microinverters and battery management system (BMS) we battery controller				
WHAT'S IN THE BOX					
IQ Battery 5P unit	IQ Battery 5P unit (B05-T02-US00-1-3)				
ID cover and conduit cover	IQ Battery 5P cover with two conduit covers for the left and right sides of the unit				
Bottom mounting bracket and top shield	Bottom mounting bracket for mounting the battery on the wall. One top shield is required for UL 9540A				
M5 seismic screws	Two M5 seismic screws for securing the battery unit on the bottom mounting bracket				
M4 grounding screws	Two M4 grounding screws for securing the top shield on the bottom mounting bracket				
M5 ID cover grounding screws	Two M5 ID cover grounding screws for the EMI/EMC requirement				
Cable ties	Six cable ties for securing field cables to the unit				
Control (CTRL) connector	Spare CTRL connector without resistor for CTRL wiring				
Control (CTRL) connector with resistor	Spare CTRL connector with resistor for CTRL wiring				
Quick install guide (QIG)	QIG for IQ Battery unit installation instructions				
OPTIONAL ACCESSORIES AND REPLACEMENT PARTS					
IQ8D-BAT-RMA	IQ8D-BAT Microinverter for field replacement				
B05-T02-US00-1-3-RMA	IQ Battery 5P Battery unit for field replacement				
B05-CX-0550-O	IQ Battery 5P cover for field replacement				
B05-PI-0550-O	IQ Battery 5P pedestal mount				
B05-CP-096-O	IQ Battery 5P conduit plates for field replacement. Includes one left-side and one right-side conduit plate				
B05-WB-0543-O	IQ Battery 5P wall bracket for field replacement. Includes one bottom mounting bracket and one top shield				
IQBATTERY-HNDL-5	IQ Battery 5P lifting handles. Includes one left-side and one right-side lifting handle				
B05-ACFB-080-O	IQ Battery 5P AC filter board for field replacement				
B05-BMSNA-0490-O	IQ Battery 5P BMS board for field replacement				
B05-CANB-063-O	IQ Battery 5P control communication board for field replacement				
B05-NICS-0524-O, B05-NUCS-0524-O	IQ Battery 5P control switch is preinstalled on the wiring cover for field replacement				
OUTPUT (AC)	@240 VAC ²				
Rated (continuous) output power	3.84 kVA				
Peak output power	7.68 kVA (3 seconds), 6.14 kVA (10 seconds)				
Nominal voltage/range	240/211-264 VAC				
Nominal frequency/range	60/57-63 Hz				
Rated output current (@240 VAC)	16 A				
Peak output current (@240 VAC)	32 A (3 seconds), 25.6 A (10 seconds)				
Power Start capability	Up to 48 A LRA ³				
Power factor (adjustable)	0.85 leading 0.85 lagging				
Maximum units per 20 A branch circuit	One unit (single-phase)				
Maximum conductor size supported	3 AWG				
Overcurrent protection device (OCPD) for 3 AWG cable	80 A				
Interconnection	Single-phase				
AC round-trip efficiency⁴	90%				

 $^{^2\,\}mbox{Supported}$ in both grid-connected and backup/off-grid operations.

 $^{^{\}rm 3}\,{\rm Power}\,{\rm Start}$ capability may vary.

 $^{^4\}mbox{AC}$ to the battery to AC at 50% power rating.

BATTERY	
Total capacity	5.0 kWh
Usable capacity	5.0 kWh
DC round-trip efficiency	96%
Nominal DC voltage	76.8 V
Maximum DC voltage	86.4 V
Ambient operating temperature range (charging)	-20°C to 50°C (-4°F to 122°F) non-condensing
Ambient operating temperature range (discharging)	-20°C to 55°C (-4°F to 131°F) non-condensing
Optimum operating temperature range	0°C to 30°C (32°F to 86°F)
Chemistry	Lithium iron phosphate (LFP)
MECHANICAL DATA	
Dimensions (H x W x D)	980 mm × 550 mm × 188 mm (38.6 in × 21.7 in × 7.4 in)
Lifting weight	66.3 kg (146.1 lb)
Total installed weight	78.9 kg (174 lb)
Enclosure	Outdoor-NEMA 3R
IQ8D-BAT Microinverter enclosure	NEMA type 6
Cooling	Natural convection
Altitude	Up to 2,500 meters (8,202 feet)
Mounting	Wall-mount or pedestal-mount (sold separately)
FEATURES AND COMPLIANCE	
Compatibility	Compatible with IQ and M Series Microinverters, IQ System Controller 3/3G, IQ Combiner 5/5C, and IQ Gateway for grid-tied and backup operation
Communication	Wired control communication
Services	Backup, Self-Consumption, TOU, and NEM integrity
Monitoring	Enphase Installer Platform and Enphase App monitoring options; API integration
Compliance	CA Rule 21 (UL 1741-SA), IEEE 1547:2018 (UL 1741-SB, 3rd Ed.) CAN/CSA C22.2 No. 107.1-16 UL 9540 ⁵ , UL 9540A, UN 38.3, UL 1998, UL 991, NEMA Type 3R, AC156 EMI: 47 CFR, Part 15, Class B, ICES 003 Cell module: UL 1973, UN 38.3 Inverters: UL 62109-1, IEC 62109-2
LIMITED WARRANTY	
Limited warranty	>60% capacity, up to 15-year or 6,000 cycles ⁶

⁵ Following local standards, choose a well-ventilated, non-habitable, indoor location (like a 2-car garage) or an outdoor location, which is out of direct sunlight and where the ambient temperature and humidity are within -20°C to 45°C (-4°F to 113°F) and 5% to 95% RH, non-condensing.

⁶ Whichever occurs first. Restrictions apply.

Revision history

REVISION	DATE	DESCRIPTION
DSH-00010-5.0	February 2024	Updated the SKU on page 1.
DSH-00010-4.0	November 2023	Updated the "Output (AC)" table.
DSH-00010-3.0	September 2023	Updated product images. Editorial updates.
DSH-00010-2.0	July 2023	Added battery isometric view on the first page.Editorial updates.
DSH-00010-1.0	May 2023	Initial release.





X-IQ-AM1-240-5 X-IQ-AM1-240-5C

IQ Combiner 5/5C

The IQ Combiner 5/5C consolidates interconnection equipment into a single enclosure and streamlines IQ Series Microinverters and IQ Gateway installation by providing a consistent, pre-wired solution for residential applications. IQ Combiner 5/5C uses wired control communication and is compatible with IQ System Controller 3/3G and IQ Battery 5P.

The IQ Combiner 5/5C, IQ Series Microinverters, IQ System Controller 3/3G, and IQ Battery 5P provide a complete grid-agnostic Enphase Energy System.



IQ Series Microinverters

The high-powered smart grid-ready IQ Series Microinverters (IQ6, IQ7, and IQ8 Series) simplify the installation process.



IQ Battery 5P

Fully integrated AC battery system. Includes six field-replaceable IQ8D-BAT Microinverters.



IQ System Controller 3/3G

Provides microgrid interconnection device (MID) functionality by automatically detecting grid failures and seamlessly transitioning the home energy system from grid power to backup power.



IQ Load Controller

Helps prioritize essential appliances during a grid outage to optimize energy consumption and prolong battery life.









- · Includes IQ Gateway for communication and control
- · Includes Enphase Mobile Connect (CELLMODEM-M1-06-SP-05), only with IQ Combiner 5C
- · Supports flexible networking: Wi-Fi, Ethernet, or cellular
- · Provides production metering (revenue grade) and consumption monitoring

Easy to install

- · Mounts to one stud with centered brackets
- · Supports bottom, back, and side conduit entries
- Supports up to four 2-pole branch circuits for 240 VAC plug-in breakers (not included)
- · 80 A total PV branch circuits
- · Bluetooth-based Wi-Fi provisioning for easy Wi-Fi setup

Reliable

- · Durable NRTL-certified NEMA type 3R enclosure
- 5-year limited warranty
- · 2-year labor reimbursement program coverage included for both the IQ Combiner SKUs^{*}
- UL1741 Listed

^{*}For country-specific warranty information, see the https://enphase.com/installers/resources/warranty page.

IQ Combiner 5/5C

IQ Combiner 5 (X-IQ-AM1-240-5)	IQ Combiner 5 with IQ Gateway printed circuit board for integrated revenue-grade PV production metering (ANSIC12.20 ±0.5%), consumption monitoring (±2.5%), and IQ Battery monitoring (±2.5% Includes a silver solar shield to deflect heat.				
IQ Combiner 5C (X-IQ-AM1-240-5C)	IQ Combiner 5C with IQ Gateway printed circuit board for integrated revenue-grade PV production metering (ANSI C12.20 ±0.5%), consumption monitoring (±2.5%) and IQ Battery monitoring (±2.5%). Includes Enphase Mobile Connect cellular modem (CELLMODEM-M1-06-SP-05)¹. Includes a silver solar shield to deflect heat.				
WHAT'S IN THE BOX					
IQ Gateway printed circuit board	IQ Gateway is the platform for total energy management for comprehensive, remote maintenance, a management of the Enphase Energy System				
Busbar	80 A busbar with support for $1\times 1Q$ Gateway breaker and 4×20 A breaker for installing $1Q$ Series Microinverters and $1Q$ Battery $5P$				
IQ Gateway breaker	Circuit breaker, 2-pole, 10 A/15 A				
Production CT	Pre-wired revenue-grade solid-core CT, accurate up to ±0.5%				
Consumption CT	Two consumption metering clamp CTs, shipped with the box, accurate up to $\pm 2.5\%$				
IQ Battery CT	One battery metering clamp CT, shipped with the box, accurate up to ±2.5%				
CTRL board	Control board for wired communication with IQ System Controller 3/3G and the IQ Battery 5P				
Enphase Mobile Connect (only with IQ Combiner 5C)	4G-based LTE-M1 cellular modem (CELLMODEM-M1-06-SP-05) with a 5-year T-Mobile data plan				
Accessories kit	Spare control headers for the COMMS-KIT-02 board				
ACCESSORIES AND REPLACEMENT PARTS (NOT INCLUDED,	ORDER SEPARATELY)				
CELLMODEM-M1-06-SP-05	4G-based LTE-M1 cellular modem with a 5-year T-Mobile data plan				
CELLMODEM-M1-06-AT-05	4G-based LTE-M1 cellular modem with a 5-year AT&T data plan				
Circuit breakers (off-the-shelf)	Supports Eaton BR2XX, Siemens Q2XX and GE/ABB THQL21XX Series circuit breakers (XX represer 10, 15, 20, 30, 40, 50, or 60). Also supports Eaton BR220B, BR230B, and BR240B circuit breakers compatible with the hold-down kit.				
Circuit breakers (provided by Enphase)	BRK-10A-2-240V, BRK-15A-2-240V, BRK-20A-2P-240V, BRK-15A-2P-240V-B, and BRK-20A-2P-240V-B (more details in the "Accessories" section)				
XA-SOLARSHIELD-ES	Replacement solar shield for IQ Combiner 5/5C				
XA-ENV2-PCBA-5	IQ Gateway replacement printed circuit board (PCB) for IQ Combiner 5/5C				
X-IQ-NA-HD-125A	Hold-down kit compatible with Eaton BR-B Series circuit breakers (with screws)				
XA-COMMS2-PCBA-5	Replacement COMMS-KIT-02 printed circuit board (PCB) for IQ Combiner 5/5C				
ELECTRICAL SPECIFICATIONS					
Rating	80 A				
System voltage and frequency	120/240 VAC, 60 Hz				
Busbar rating	125 A				
Fault current rating	10 kAIC				
Maximum continuous current rating (input from PV/storage)	64 A				
Branch circuits (solar and/or storage)	Up to four 2-pole Eaton BR, Siemens Q, or GE/ABB THQL Series distributed generation (DG) break only (not included)				
Maximum total branch circuit breaker rating (input)	80 A of distributed generation/95 A with IQ Gateway breaker included				
IQ Gateway breaker	10 A or 15 A rating GE/Siemens/Eaton included				
Production metering CT	200 A solid core pre-installed and wired to IQ Gateway				
Consumption monitoring CT (CT-200-CLAMP)	A pair of 200 A clamp-style current transformers is included with the box				
IQ Battery metering CT	200 A clamp-style current transformer for IQ Battery metering, included with the box				

^{1.} A plug-and-play industrial-grade cell modem for systems of up to 60 microinverters. Available in the United States, Canada, Mexico, Puerto Rico, and the US Virgin Islands, where there is adequate cellular service in the installation area.

Discussions (W+H+D) 37.5 cm+ 48.5 cm+ 18.8 cm (M2.75*+18.5* c.6.3*). Height is 21.06* (63.5 cm) with mounting backets Weight 15.5 kg (8.5 lbs) Ambient temperature range -40°C to 46°C (-40°F to 18°F) Cooling Natural convection, plus heat shield Enclosure environmental rating Outdoor, NRTL-certified, NEMA type 378, polycarbonate construction Wire sizes 2.0 A to 50 A broaker inputs: 14 to 4 AWS copper conductors - 8.0 A broaker branch input; 4 to 10°A Wire copper conductors - 8.0 A broaker branch input; 4 to 10°A Wire copper conductors - 8.0 A broaker branch input; 4 to 10°A Wire copper conductors - 9.0 A broaker branch input; 4 to 10°A Wire copper conductors - 9.0 A broaker branch input; 4 to 10°A Wire copper conductors ship. Communication (in-premise convenience) Built-in-GTRL board for wired communication with 10°B atterty 97° and 10°System Controller 37.0% Charles followed communication with 10°B atterty 97° and 10°System Controller 37.0% Charles Wire followed three communications with 10°B atterty 97° and 10°System Controller 37° All Wire followed three communications of 10°D series Microinverters Meterpated Wir-Fi 3002115/97/n (dual band 2.4 GHz/B GHz), for connecting the Enphase Cloud through the internal charles of three previous p	MECHANICAL DATA						
Anbient temperature range Cooling Natural convection, plus heart shield Enclosure environmental rating Processor of the plus heart shield Enclosure environmental rating Processor of the plus heart shield Enclosure environmental rating Processor of the plus heart shield Enclosure environmental rating Processor of the plus heart shield Processor of the plus heart shield Processor of the plus heart shield Processor of the plus heart shield (Processor of the plus heart shield) Processor of the plus heart shield of the plus heart shield (Processor of the plus heart shield) Communication (In-premise constructivity) Bull-to TCI, board for wide communication with 10 Battery SP and 10 System Controller 3/36, Integrated power line communication with 10 Battery SP and 10 System Controller 3/36, Integrated power line communication with 10 Battery SP and 10 System Controller 3/36, Integrated power line communication with 10 Battery SP and 10 System Controller 3/36, Integrated Power line communication with 10 Battery SP and 10 System Controller 3/36, Integrated Power line communication with 10 Battery SP and 10 System Controller 3/36, Integrated Power line communication with 10 Battery SP and 10 System Controller 3/36, Integrated Power line communication with 10 Battery SP and 10 System Controller 3/36, Integrated Power line communication with 10 Battery SP and 10 System Controller 3/36, Integrated Power line communication of 10 Series Microller Sp Battery SP and 10 System Controller 3/36, Integrated Power line communication of 10 Series Microller Power line communication Power line communic	Dimensions (W × H × D)						
Cooling Enclosure environmental rating Find convention, plus heat shield Outdoor, NRTL-certified, NEMA type 3R, polycarbonate construction 2 OA to 30 A breaker inputs. 14 to 4 AW/6 copper conductors 4 AW/6 copper conductors 5 Aways follow float pour 15 to 2/0 AW/6 copper conductors 5 Aways follow float pour 15 to 2/0 AW/6 copper conductors 5 Aways follow float pour 15 to 2/0 AW/6 copper conductors 5 Aways follow float pour 15 to 2/0 AW/6 copper conductors 6 Aways follow float pour 15 to 2/0 AW/6 copper conductors 7 Aways follow float pour 15 to 2/0 AW/6 copper conductors 8 Aways follow float pour 15 to 2/0 AW/6 copper conductors 8 Aways follow float pour 15 to 2/0 AW/6 copper conductors 9 Aways follow float pour 15 to 2/0 AW/6 copper conductors 15 Aways follow float pour 15 to 2/0 AW/6 copper conductors 16 Aways follow float pour 15 to 2/0 AW/6 copper conductors 17 Aways float float pour 15 to 2/0 AW/6 copper conductors 18 Aways follow float pour 15 to 2/0 AW/6 copper conductors 18 Aways follow float pour 15 to 2/0 AW/6 copper conductors 18 Aways float float pour 15 to 2/0 AW/6 copper conductors 18 Aways float float pour 15 to 2/0 AW/6 copper conductors 18 Aways float float pour 15 to 2/0 AW/6 copper conductors 19 Aways float float pour 15 to 2/0 AW/6 copper conductors 19 Aways float float pour 15 to 2/0 AW/6 copper conductors 19 Aways float float pour 15 to 2/0 AW/6 copper conductors 19 Aways float float pour 15 to 2/0 AW/6 Copper conductors 19 Aways float float pour 15 to 2/0 AW/6 Copper conductors 19 Aways float float pour 15 to 2/0 AW/6 Copper conductors 19 Aways float float pour 15 to 2/0 AW/6 Copper conductors 20 Aways float float pour 15 to 2/0 AW/6 Copper conductors 20 Aways float float pour 15 to 2/0 AW/6 Copper conductors 20 Aways float float pour 15 to 2/0 AW/6 Copper conductors 20 Aways float float pour 15 to 2/0 AW/6 Copper conductors 20 Aways float float pour 15 to 2/0 AW/6 Copper conductors 20 Aways float float pour 15 to 2/0 AW/6 Copper conductors 20 Aways float float pour 15 to 2/0 AW/6 Coppe	Weight		7.5 kg (16.5 lbs)				
Enclosure environmental rating Outdoor, NRTL-certified, NEMA type 3R, polycarbonate construction ***20 A to 80 A breaker inputs 14 to 4 ANIC copper conductors construction of the second sec	Ambient temperature range		-40°C to 46°C (-40°F to 115°F)				
Wire sizes - 20 A to 50 A breaker inputs: 14 to 4 AWG copper conductors - 60 A breaker inputs: 14 to 10 AWG copper conductors - Main lug combined output: 10 20 /2 AWG copper conductors - Neutral and ground: 14 to 10 Copper conductors - Neutral and ground: 14 to 10 Copper conductors - Neutral and ground: 14 to 10 Copper conductors sizing - Allitude - We be a communication with 10 Battery SP and IQ System Controller 3/36. Integrated power line communication for IQ Series Microinverters - Allitude - We be 2,500 meters (8,530 feet) - COMMUNICATION INTERFACES - Integrated Wi-Fi - 802.11b/g/n (dual band 2.4 GHz/5 GHz), for connecting the Enphase Cloud through the internet - Wi-Fi range (recommended) - Un 03.2.8 feet) - BLE42, 10 m range to configure Wi-Fi SSID - Ethernet - Optional 8,02.3. Cat5E (or Cat 6) UTP Ethernet cable (not included), for connecting to the Enphase Cloud through the internet - Cellular/Mobile Connect - Cellular/Mobile Connect - Cellular/Mobile Connect - Cellular/Mobile Connect - Optional 8,02.3. Cat5E (or Cat 6) UTP Ethernet cable (not included), for connecting to the Enphase Cloud through the internet - Cellular/Mobile Connect - Colombin-Mi-10-6-SP-05 or CELLMODEM-MI-06-AT-05 (included with IQ Combiner 5C) - Digital Input/output for grid operator control - USB 2.0 - Mobile Connect, COMMS-KIT-01 for IQ Battery 3/31/10/107, COMMS-KIT-02 for IQ Battery 5/ - For connection between the IQ Gateway and a mobile device running the Enphase Installer App - Metering ports - Up to two Consumption CTs, one IQ Battery CT, and one Production CT - Power line communication - Very Experiment Consumption CTs, one IQ Battery CT, and one Production CT - Very Experiment Consumption CTs, one IQ Battery CT, and one Production CT - Very Experiment CT, one IQ Battery CT, one IQ Battery CT, and one Production CT - Very Experiment CT,	Cooling		Natural convection, plus heat shield				
Parameter Par	Enclosure environmental rating		Outdoor, NRTL-certified, NEMA type 3R, polycarbonate construction				
Integrated power line communication for IQ Series Microinverters Altitude Up to 2,600 meters (8,530 feet) COMMUNICATION INTERFACES Integrated Wi-Fi Wi-Fi range (recommended) Up to 2,600 meters (8,530 feet) 802.1lb/g/n (dual band 2.4 GHz/5 GHz), for connecting the Enphase Cloud through the internet Wi-Fi range (recommended) Up to 32.8 feet) Subject to the Enphase Cloud through the internet Up to 32.8 feet) Cellular/Mobile Connect Cellular/Mobile Connect Cellular/Mobile Connect Cellular/Mobile Connect Cellular/Mobile Connect Up to two Consumption CFa, one IQ Battery 3/37/10/10T, COMMS-KIT-02 for IQ Battery 5P Access point (AP) mode For connection between the IQ Gateway and a mobile device running the Enphase Installer App Metering ports Up to two Consumption CFa, one IQ Battery CT, and one Production CT Power line communication Web API See https://developer-u4.enphase.com COMPILIANCE COMPILIANCE UL 1741, CAN/CSA C22.2 No. 1071, Title 47 CFR, Part 15, Class B, ICES 003, NOM-208-SCFI-2016, UL 69601-I/CANCSA 222.2 No. 61010-I, IEEE 1547; 2018 (UL 1741-SB, 3rd Ed.), IEEE 2030.5/CSIP COMPILIANCE COMPATIBILITY PV Microinverters UR 5 System Controller EQ System Controller EQ System Controller EQ System Controller EQ System Controller 2 EQ System Controller 3 EQ System Controller 4 EQ System Controller 3 EQ System Controller 4 EQ System Controller 4 EQ System Controller 5 EQ System Controller 5 EQ System Controller 5 EQ System Controller 6 EQ System Controller 7 EQ System Controller	Wire sizes		 60 A breaker branch input: 4 to 1/0 AWG copper conductors Main lug combined output: 10 to 2/0 AWG copper conductors Neutral and ground: 14 to 1/0 copper conductors 				
Integrated Wi-Fi Integrated Wi-Fi Integrated Wi-Fi ange (recommended) Integrated Wi-Fi ange (recommended) BLE4.2,10 m range to configure Wi-Fi SSID Bluetooth Ethernet Optional, 802.3, Cat5E (or Cat 6) UTP Ethernet cable (not included), for connecting to the Enphase Cloud through the internet Cellular/Mobile Connect Cellular/Callular/Callular/ Cellular/Callular	Communication (in-premise conne	ectivity)					
Integrated Wi-Fi Wi-Fi range (recommended) 10 m (32.8 feet) Bluetooth Ethernet Cellular/Mobile Connect Connection Detardor Control Cellular Controller Connection Detardor Control Connection Detardor Control Connection Detardor Collular Col	Altitude		Up to 2,600 meters (8,530 feet)				
Wi-Fi range (recommended) Bluetooth BLE4.2.10 m range to configure Wi-Fi SSID Optional, 802.3, Cat5E (or Cat 6) UTP Ethernet cable (not included), for connecting to the Enphase Cloud through the internet Cellular/Mobile Connect CELLMODEM-MI-06-SP-05 or CELLMODEM-MI-06-AT-05 (included with IQ Combiner 5C) Digital I/VO Digital input/output for grid operator control USB 2.0 Access point (AP) mode For connection between the IQ Gateway and a mobile device running the Enphase installer App Metering ports Up to two Consumption CTs, one IQ Battery CT, and one Production CT Power line communication Web API See https://developer-v4.enphase.com Local API COMPLIANCE UL 1741, CAN/CSA C22.2 No. 1071, Title 47 CFR, Part 15, Class B, ICES 003, NOM-208-SCFI-2016, UL 60601-I/CANCSA 22.2 No. 61010-1, IEEE 1547: 2018 (UL 1741-SB, 3rd Ed.), IEEE 2030.5/CSIP Compliant, Production metering: ANSI C12.20 accuracy class 0.5 (PV production) COMPLIBILITY PV Microinverters IQ System Controller EP200G101-M240US00 EOMMS-KIT-012 IQ System Controller 2 EP200G101-M240US01 ENCAMMS-KIT-023 IQ System Controller 3 SC200D111C240US01, SC200G111C240US01	COMMUNICATION INTERFACES						
Bluetooth BLE4.2, 10 m range to configure Wi-Fi SSID Chever Internet Cellular/Mobile Connect Cellular/Mobile Connect Cellular/Mobile Connect CELLMODEM-MI-06-SP-05 or CELLMODEM-MI-06-AT-05 (included with IQ Combiner 5C) Digital In/O USB 2.0 Mobile Connect, COMMS-KIT-01 for IQ Battery 3/37/10/10T, COMMS-KIT-02 for IQ Battery 5P Access point (AP) mode For connection between the IQ Gateway and a mobile device running the Enphase Installer App Metering ports Up to two Consumption CTs, one IQ Battery CT, and one Production CT Power line communication Web API Local API COMPLIANCE COMPLIANCE COMPLIANCE UL 1741, CAN/CSA C22.2 No. 1071, Title 47 CFR, Part 15, Class B, ICES 003, NOM-208-SCFI-2016, UL 60601-1/CANCSA 22.2 No. 61010-1, IEEE 1547: 2018 (UL 1741-SB, 3rd Ed.), IEEE 2030.5/CSIP Compliant, Production metering: ANSI CT2.20 accuracy class 0.5 (PV production) COMPATIBILITY PV MicroInverters IQ 6, IQ7, and IQ8 Series Microinverters IQ 5 system Controller 2 EP200G101-M240US00 COMMS-KIT-01² IQ Battery IQ 5 system Controller 2 EP200G101-M240US01 COMMS-KIT-02³ IQ 5 system Controller 3 SC200D111C240US01, SC200G111C240US01	Integrated Wi-Fi		802.11b/g/n (dual band 2.4 GHz/5 GHz), for connecting the Enphase Cloud through the internet				
Ethernet	Wi-Fi range (recommended)		10 m (32.8 feet)				
Cloud through the internet Cellular/Mobile Connect CELLMODEM-M1-06-SP-05 or CELLMODEM-M1-06-AT-05 (included with IQ Combiner 5C) Digital I/O Digital I/O Digital input/output for grid operator control WSB 2.0 Mobile Connect, COMMS-KIT-01 for IQ Battery 3/3T/10/10T, COMMS-KIT-02 for IQ Battery 5P Access point (AP) mode For connection between the IQ Gateway and a mobile device running the Enphase Installer App Metering ports Up to two Consumption CTs, one IQ Battery CT, and one Production CT Power line communication Web API See https://developer-v4.enphase.com COMPLIANCE UL 1741, CAN/CSA C22.2 No. 107.1, Title 47 CFR, Part 15, Class B, ICES 003, NOM-208-SCFI-2016, UL 60601-I/CANCSA 22.2 No. 61010-1, IEEE 1547: 2018 (IU. 1741-SB, 3rd Ed.), IEEE 2030.5/CSIP Compliant, Production metering: ANSI C12.20 accuracy class 0.5 (PV production) COMPATIBILITY PV Microinverters IQ System Controller P200G101-M240US00 COMMS-KIT-01² IQ System Controller 2 IQ System Controller 3 EP200G101-M240US01 COMMS-KIT-02³ IQ System Controller 3 EC200D111C240US01, SC200G111C240US01	Bluetooth		BLE4.2, 10 m range to configure Wi-Fi SSID				
Digital I/O USB 2.0 Mobile Connect, COMMS-KIT-01 for IQ Battery 3/37/10/10T, COMMS-KIT-02 for IQ Battery 5P Access point (AP) mode For connection between the IQ Gateway and a mobile device running the Enphase Installer App Metering ports Up to two Consumption CTs, one IQ Battery CT, and one Production CT Power line communication 90-110 kHz Web API See https://developer-v4.enphase.com Local API COMPLIANCE UL 1741, CAN/CSA C22.2 No. 1071, Title 47 CFR, Part 15, Class B, ICES 003, NOM-208-SCFI-2016, UL 60601-1/CANCSA 22.2 No. 61010-1, IEEE 1547: 2018 (UL 1741-SB, 37d Ed.), IEEE 2030.5/CSIP Compliant, Production metering: ANSI C12.20 accuracy class 0.5 (PV production) COMPATIBILITY PV Microinverters IQ System Controller EP200G101-M240US00 COMMS-KIT-012 IQ System Controller 2 EP200G101-M240US01 ENCHARGE-3-IP-NA, ENCHARGE-10-IP-NA, ENCHARGE-3T-IP-NA, ENCHARGE-10T-IP-NA COMMS-KIT-023 Digital input/output for grid operator controller 3 Digital input/output for IQ Battery 57 Mobile 2 EP200G101-M240US01 ENCHARGE-3-IP-NA, ENCHARGE-10-IP-NA, ENCHARGE-3T-IP-NA, ENCHARGE-10T-IP-NA	Ethernet						
USB 2.0 Mobile Connect, COMMS-KIT-01 for IQ Battery 3/3T/10/10T, COMMS-KIT-02 for IQ Battery 5P Access point (AP) mode For connection between the IQ Gateway and a mobile device running the Enphase Installer App Metering ports Up to two Consumption CTs, one IQ Battery CT, and one Production CT Power line communication 90-110 kHz Web API See https://developer-v4.enphase.com Local API COMPLIANCE UL 1741, CAN/CSA C22.2 No. 107.1, Title 47 CFR, Part 15, Class B, ICES 003, NOM-208-SCFI-2016, UL 60601-1/CANCSA 22.2 No. 61010-1, IEEE 1547: 2018 (UL 1741-SB, 3rd Ed.), IEEE 2030.5/CSIP Compliant, Production metering: ANSI C12.20 accuracy class 0.5 (PV production) COMPATIBILITY PV Microinverters IQ System Controller EP200G101-M240US00 COMMS-KIT-012 IQ Battery ENCHARGE-3-IP-NA, ENCHARGE-10-IP-NA, ENCHARGE-3T-IP-NA, ENCHARGE-10T-IP-NA COMMS-KIT-023 SC200D111C240US01, SC200G111C240US01	Cellular/Mobile Connect		CELLMODEM-M1-06-SP-05 or CELLMODEM-M1-06-AT-05 (included with IQ Combiner 5C)				
Access point (AP) mode For connection between the IQ Gateway and a mobile device running the Enphase Installer App Metering ports Up to two Consumption CTs, one IQ Battery CT, and one Production CT Power line communication 90-110 kHz See https://developer-v4.enphase.com Local API COMPLIANCE UL 1741, CAN/CSA C22.2 No. 107.1, Title 47 CFR, Part 15, Class B, ICES 003, NOM-208-SCFI-2016, UL 60801-1/CANCSA 22.2 No. 61010-1, IEEE 1547: 2018 (UL 1741-SB, 3rd Ed.), IEEE 2030.5/CSIP Compliant, Production metering: ANSI C12.20 accuracy class 0.5 (PV production) COMPATIBILITY PV Microinverters IQ System Controller EP200G101-M240US00 COMMS-KIT-01² IQ System Controller 2 EP200G101-M240US01 ENCHARGE-3-1P-NA, ENCHARGE-10-1P-NA, ENCHARGE-3T-1P-NA, ENCHARGE-10T-1P-NA COMMS-KIT-02³ SC200D111C240US01, SC200G111C240US01	Digital I/O		Digital input/output for grid operator control				
Metering ports Up to two Consumption CTs, one IQ Battery CT, and one Production CT Power line communication 90-110 kHz See https://developer-v4.enphase.com Local API COMPLIANCE UL 1741, CAN/CSA C22.2 No. 107.1, Title 47 CFR, Part 15, Class B, ICES 003, NOM-208-SCFI-2016, UL 60601-1/CANCSA 22.2 No. 61010-1, IEEE 1547: 2018 (UL 1741-SB, 3rd Ed.), IEEE 2030.5/CSIP Compliant, Production metering: ANSI C12.20 accuracy class 0.5 (PV production) COMPATIBILITY PV Microinverters IQ6, IQ7, and IQ8 Series Microinverters IQ System Controller EP200G101-M240US00 COMMS-KIT-01 ² IQ System Controller 2 EP200G101-M240US01 IQ Battery ENCHARGE-3-IP-NA, ENCHARGE-10-IP-NA, ENCHARGE-3T-IP-NA, ENCHARGE-10T-IP-NA COMMS-KIT-02 ³ IQ System Controller 3 SC200D111C240US01	USB 2.0		Mobile Connect, COMMS-KIT-01 for IQ Battery 3/3T/10/10T, COMMS-KIT-02 for IQ Battery 5P				
Power line communication 90-110 kHz Web API See https://developer-v4.enphase.com Local API See guide for local API COMPLIANCE IQ Combiner with IQ Gateway UL 1741, CAN/CSA C22.2 No. 107.1, Title 47 CFR, Part 15, Class B, ICES 003, NOM-208-SCFI-2016, UL 60601-1/CANCSA 22.2 No. 61010-1, IEEE 1547: 2018 (UL 1741-SB, 3rd Ed.), IEEE 2030.5/CSIP Compliant, Production metering: ANSI C12.20 accuracy class 0.5 (PV production) COMPATIBILITY PV Microinverters IQ 6, IQ7, and IQ8 Series Microinverters LQ System Controller EP200G101-M240US00 COMMS-KIT-012 IQ System Controller 2 EP200G101-M240US01 LQ Battery ENCHARGE-3-IP-NA, ENCHARGE-10-IP-NA, ENCHARGE-3T-IP-NA, ENC	Access point (AP) mode		For connection between the IQ Gateway and a mobile device running the Enphase Installer App				
Web API See https://developer-v4.enphase.com Local API COMPLIANCE UL 1741, CAN/CSA C22.2 No. 1071, Title 47 CFR, Part 15, Class B, ICES 003, NOM-208-SCFI-2016, UL 60601-1/CANCSA 22.2 No. 61010-1, IEEE 1547: 2018 (UL 1741-SB, 3rd Ed.), IEEE 2030.5/CSIP Compliant, Production metering: ANSI C12.20 accuracy class 0.5 (PV production) COMPATIBILITY PV Microinverters IQ System Controller EP200G101-M240US00 COMMS-KIT-01² IQ System Controller 2 EP200G101-M240US01 ENCHARGE-3-1P-NA, ENCHARGE-10-1P-NA, ENCHARGE-3T-1P-NA, ENCHARGE-10T-1P-NA COMMS-KIT-02³ Veg System Controller 3 SC200D111C240US01, SC200G111C240US01	Metering ports		Up to two Consumption CTs, one IQ Battery CT, and one Production CT				
Local API See guide for local API	Power line communication		90–110 kHz				
COMPLIANCE UL 1741, CAN/CSA C22.2 No. 107.1, Title 47 CFR, Part 15, Class B, ICES 003, NOM-208-SCFI-2016, UL 60601-1/CANCSA 22.2 No. 61010-1, IEEE 1547: 2018 (UL 1741-SB, 3rd Ed.), IEEE 2030.5/CSIP Compliant, Production metering: ANSI C12.20 accuracy class 0.5 (PV production) COMPATIBILITY	Web API		See https://developer-v4.enphase.com				
UL 1741, CAN/CSA C22.2 No. 107.1, Title 47 CFR, Part 15, Class B, ICES 003, NOM-208-SCFI-2016, UL 60601-1/CANCSA 22.2 No. 61010-1, IEEE 1547: 2018 (UL 1741-SB, 3rd Ed.), IEEE 2030.5/CSIP Compliant, Production metering: ANSI C12.20 accuracy class 0.5 (PV production) COMPATIBILITY	Local API		See guide for local API				
UL 60601-1/CANCSA 22.2 No. 61010-1, IEEE 1547: 2018 (UL 1741-SB, 3rd Ed.), IEEE 2030.5/CSIP Compliant, Production metering: ANSI C12.20 accuracy class 0.5 (PV production) COMPATIBILITY PV Microinverters IQ6, IQ7, and IQ8 Series Microinverters IQ System Controller EP200G101-M240US00 COMMS-KIT-01² IQ System Controller 2 EP200G101-M240US01 IQ Battery ENCHARGE-3-1P-NA, ENCHARGE-10-1P-NA, ENCHARGE-10T-1P-NA COMMS-KIT-02³ SC200D111C240US01, SC200G111C240US01	COMPLIANCE						
PV Microinverters IQ6, IQ7, and IQ8 Series Microinverters IQ System Controller EP200G101-M240US00 COMMS-KIT-01² IQ System Controller 2 EP200G101-M240US01 IQ Battery ENCHARGE-3-1P-NA, ENCHARGE-10-1P-NA, ENCHARGE-3T-1P-NA, ENCHARGE-10T-1P-NA COMMS-KIT-02³ IQ System Controller 3 SC200D111C240US01, SC200G111C240US01	IQ Combiner with IQ Gateway		UL 60601-1/CANCSA 22.2 No. 61010-1, IEEE 1547: 2018 (UL 1741-SB, 3rd Ed.), IEEE 2030.5/CSIP				
IQ System Controller	COMPATIBILITY	COMPATIBILITY					
COMMS-KIT-01 ² IQ System Controller 2 IQ Battery EP200G101-M240US01 ENCHARGE-3-1P-NA, ENCHARGE-10-1P-NA, ENCHARGE-3T-1P-NA, ENCHARGE-10T-1P-NA COMMS-KIT-02 ³ EP200G101-M240US01 ENCHARGE-3-1P-NA, ENCHARGE-3T-1P-NA, ENCHARGE-10T-1P-NA SC200D111C240US01, SC200G111C240US01	PV	Microinverters	IQ6, IQ7, and IQ8 Series Microinverters				
IQ Battery ENCHARGE-3-1P-NA, ENCHARGE-10-1P-NA, ENCHARGE-3T-1P-NA, ENCHARGE-10T-1P-NA IQ System Controller 3 SC200D111C240US01, SC200G111C240US01		IQ System Controller	EP200G101-M240US00				
IQ System Controller 3 SC200D111C240US01, SC200G111C240US01 COMMS-KIT-02 ³	COMMS-KIT-01 ²	IQ System Controller 2	EP200G101-M240US01				
COMMS-KIT-02 ³		IQ Battery	ENCHARGE-3-1P-NA, ENCHARGE-10-1P-NA, ENCHARGE-3T-1P-NA, ENCHARGE-10T-1P-NA				
	COMMS-KIT-02 ³	IQ System Controller 3	SC200D111C240US01, SC200G111C240US01				
	COMMO KIT OF	IQ Battery	IQBATTERY-5P-1P-NA				

For information about IQ Combiner 5/5C compatibility with the 2nd-generation batteries, refer to the <u>compatibility matrix</u>.
 IQ Combiner 5/5C comes pre-equipped with COMMS-KIT-02.

Accessories



Mobile Connect

4G-based LTE-M1 cellular modem with a 5-year data plan

(CELLMODEM-M1-06-SP-05 for Sprint and CELLMODEM-M1-06-AT-05 for AT&T)



Circuit breakers

BRK-10A-2-240V Circuit breaker, 2-pole, 10 A, Eaton BR210 BRK-15A-2-240V Circuit breaker, 2-pole, 15 A, Eaton BR215 BRK-20A-2P-240V Circuit breaker, 2-pole, 20 A, Eaton BR220 BRK-15A-2P-240V-B Circuit breaker, 2-pole, 15 A, Eaton BR215B with hold-down kit support

BRK-20A-2P-240V-B Circuit breaker, 2-pole, 20 A, Eaton BR220B with hold-down kit support

CT-200-SOLID



200 A revenue-grade solid core Production CT with < 0.5% error rate (replacement SKU)



CT-200-CLAMP

200 A clamp-style consumption and battery metering CT with <2.5% error rate (replacement SKU)

Revision history

REVISION	DATE	DESCRIPTION
DSH-00007-3.0	March 2024	Updated accessories and replacement parts, communication interfaces, and compatibility specifications.
DSH-00007-2.0	September 2023	Included Bluetooth specifications.
DSH-00007-1.0	May 2023	Initial release.



XR Rail® Family

Solar Is Not Always Sunny

Over their lifetime, solar panels experience countless extreme weather events. Not just the worst storms in years, but the worst storms in 40 years. High winds capable of ripping panels from a roof, and snowfalls weighing enough to buckle a panel frame.

XR Rails® are the structural backbone preventing these results. They resist uplift, protect against buckling and safely and efficiently transfer loads into the building structure. Their superior spanning capability requires fewer roof attachments, reducing the number of roof penetrations and the amount of installation time.



Force-Stabilizing Curve

Sloped roofs generate both vertical and lateral forces on mounting rails which can cause them to bend and twist. The curved shape of XR Rails[®] is specially designed to increase strength in both directions while resisting the twisting. This unique feature ensures greater security during extreme weather and a longer system lifetime.

Compatible with Flat & Pitched Roofs



XR Rails® are compatible with FlashFoot® and other pitched roof attachments.



IronRidge® offers a range of tilt leg options for flat roof mounting applications.

Corrosion-Resistant Materials

All XR Rails® are made of 6000-series aluminum alloy, then protected with an anodized finish. Anodizing prevents surface and structural corrosion, while also providing a more attractive appearance.



XR Rail[®] Family

The XR Rail[®] Family offers the strength of a curved rail in three targeted sizes. Each size supports specific design loads, while minimizing material costs. Depending on your location, there is an XR Rail[®] to match.



XR10

XR10 is a sleek, low-profile mounting rail, designed for regions with light or no snow. It achieves spans up to 6 feet, while remaining light and economical.

- · 6' spanning capability
- · Moderate load capability
- · Clear & black anodized finish
- · Internal splices available



XR100

XR100 is a residential and commercial mounting rail. It supports a range of wind and snow conditions, while also maximizing spans up to 10 feet.

- · 10' spanning capability
- · Heavy load capability
- · Clear & black anodized finish
- Internal splices available



XR1000

XR1000 is a heavyweight among solar mounting rails. It's built to handle extreme climates and spans up to 12 feet for commercial applications.

- 12' spanning capability
- · Extreme load capability
- Clear anodized finish
- Internal splices available

Rail Selection

The table below was prepared in compliance with applicable engineering codes and standards.* Values are based on the following criteria: ASCE 7-16, Gable Roof Flush Mount, Roof Zones 1 & 2e, Exposure B, Roof Slope of 8 to 20 degrees and Mean Building Height of 30 ft. Visit IronRidge.com for detailed certification letters.

Load		Rail Span					
Snow (PSF)	Wind (MPH)	4'	5' 4"	6'	8'	10'	12'
	90						
None	120						
None	140	XR10		XR100		XR1000	
	160						
	90						
20	120						
20	140						
	160						
30	90						
30	160						
40	90						
40	160						
80	160						
120	160						

^{*}Table is meant to be a simplified span chart for conveying general rail capabilities. Use approved certification letters for actual design guidance.



www.cjqengineering.com info: cquinones@cjqengineering.com phone: 787-529-4903

MEMORANDUM

To: Carlos E. Martinez, PE

Solar Roots, LLC

From: Carlos J. Quiñones, MECE, PE

Date: September 28, 2020

Subject: Structural Evaluation & Design

Solar Roof Mount System

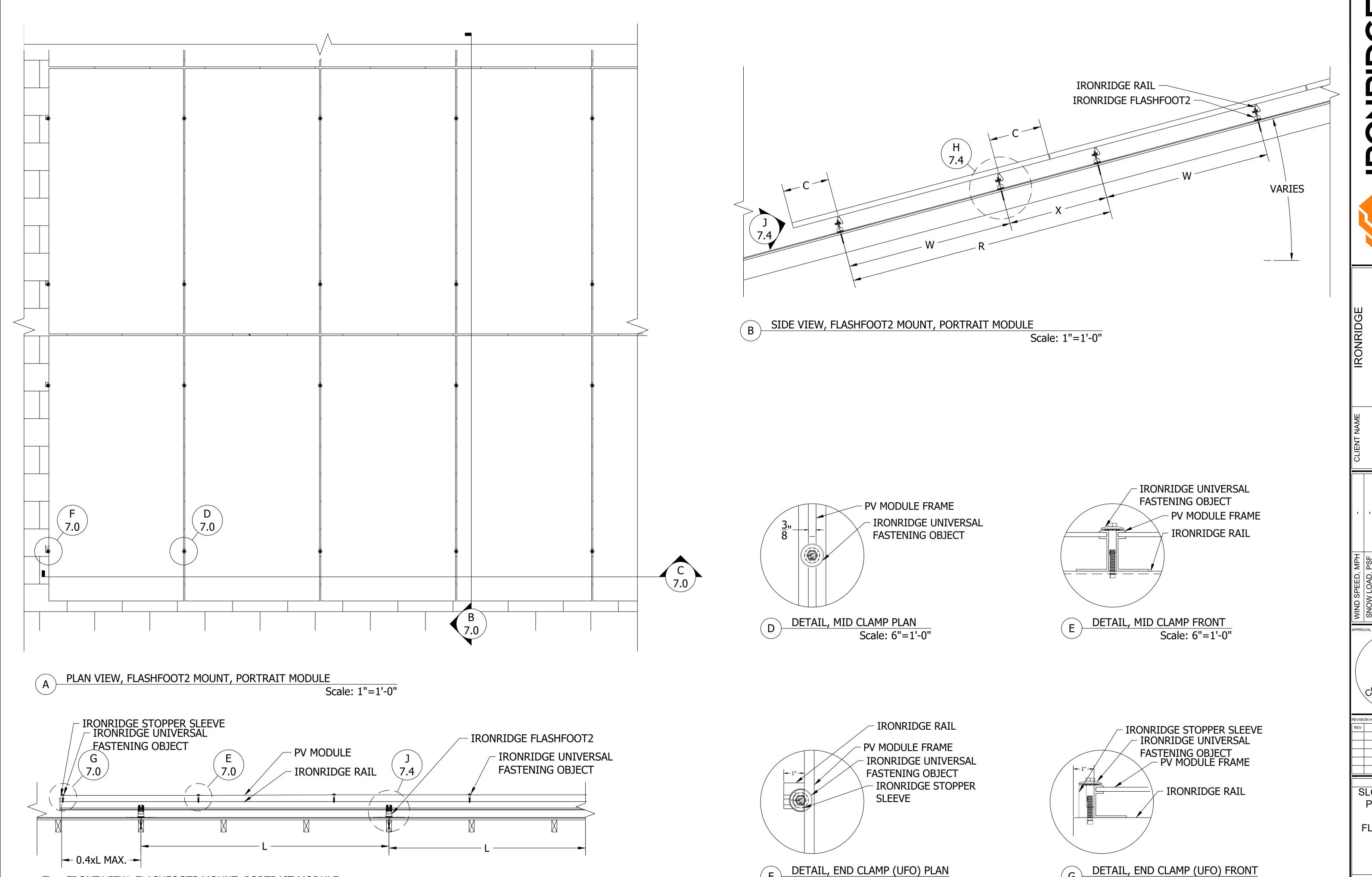
San Juan, P.R.



Per your request our office performs a structural evaluation for the installation for typical solar system on residential project. On the evaluation, the residential roofs are considered to be 5 inches minimum thickness of reinforced concrete slab and maximum height of 25 feet. The design load used for the design was ASCE 7-16 with wind speed of 180 mph (3 second gust wind) Exposure C.

The structural design consists of the two Iron Ridge rail per PV panels attached to concrete roof slab. The L-foot structure anchorage with stainless steel ½" diameter rod bar & nuts spaced not more than 4 feet. The inclination of the structure shall be not more than 5 degree. I certify that the structural design proposed to the residential projects is adequate to support the solar system at the roof and complied with the required loads per PR codes.

If you have any question please contact me.



Scale: 6"=1'-0"

FRONT VIEW, FLASHFOOT2 MOUNT, PORTRAIT MODULE

Scale: 1"=1'-0"

THOS ZEPHYR AVE, HAYWARD, CA 94544
800.227.9523 IRONRIDGE.COM

IRONRIDGE

ED ROOF MOUNT SYSTEM

PROJECT NAME SLOPED RO
PROJECT
ADDRESS

SNOW LOAD, PSF -EXPOSURE CAT -RISK CAT -MODULE TYPE 72-CELL, GENERI
MODULE W DC --

NOTFORTION

ON HISTORY

DESCRIPTION

DA

SHEET NAME

SLOPED ROOF

PV SYSTEM

DETAILS:

FLASHFOOT2

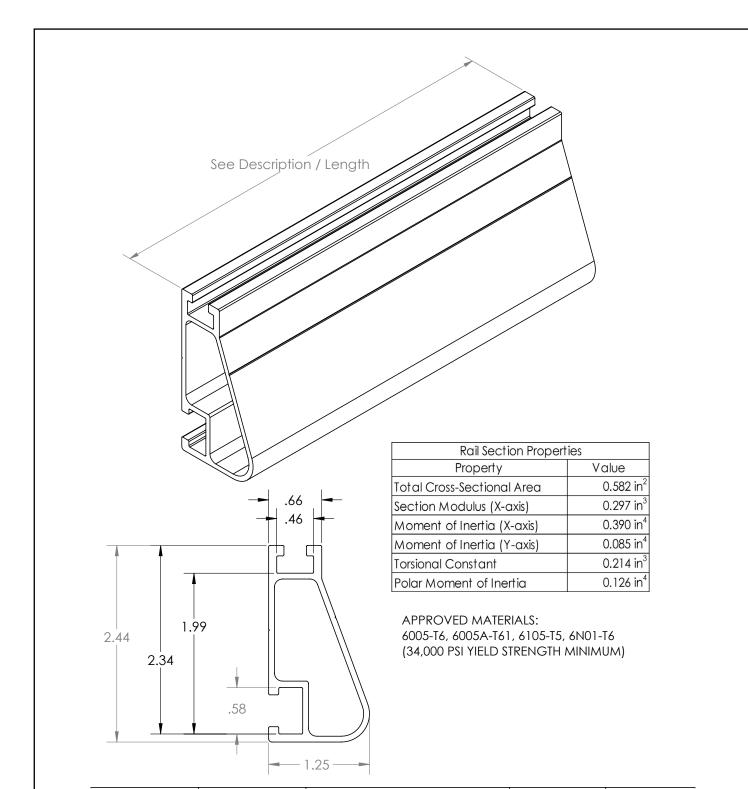
(UFO)

JOB NO. 3.1 SR
ISSUE DATE DEC 2018
SHEET NO. IR 7.0
SHEET SIZE 24X36

Scale: 6"=1'-0"



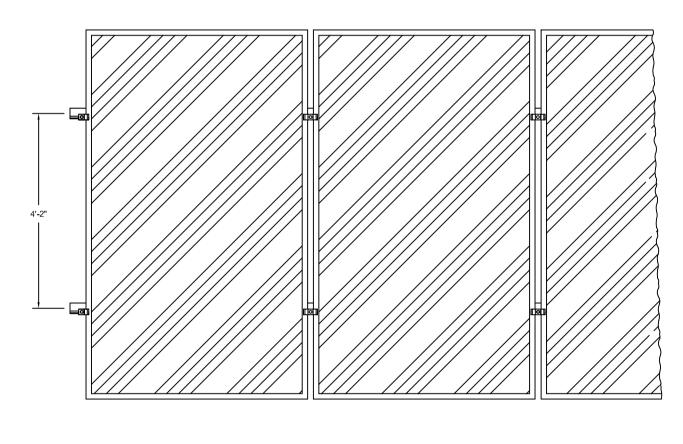
XR100 Rail



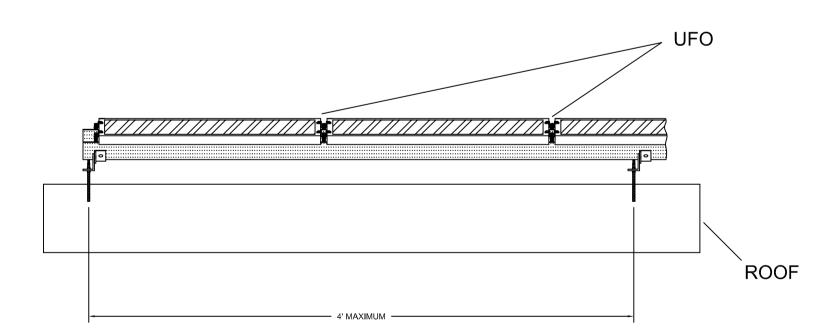
Clear Part Number	Black Part Number	Description / Length	Material	Weight
XR-100-132A	XR-100-132B	XR100, Rail 132" (11 Feet)	(000 Sories	7.50 lbs.
XR-100-168A	XR-100-168B	XR100, Rail 168" (14 Feet)	6000-Series	9.55 lbs.
XR-100-204A	XR-100-204B	XR100, Rail 204" (17 Feet)	Aluminum	11.60 lbs.

ROOF ATTACHMENT DETAILS:

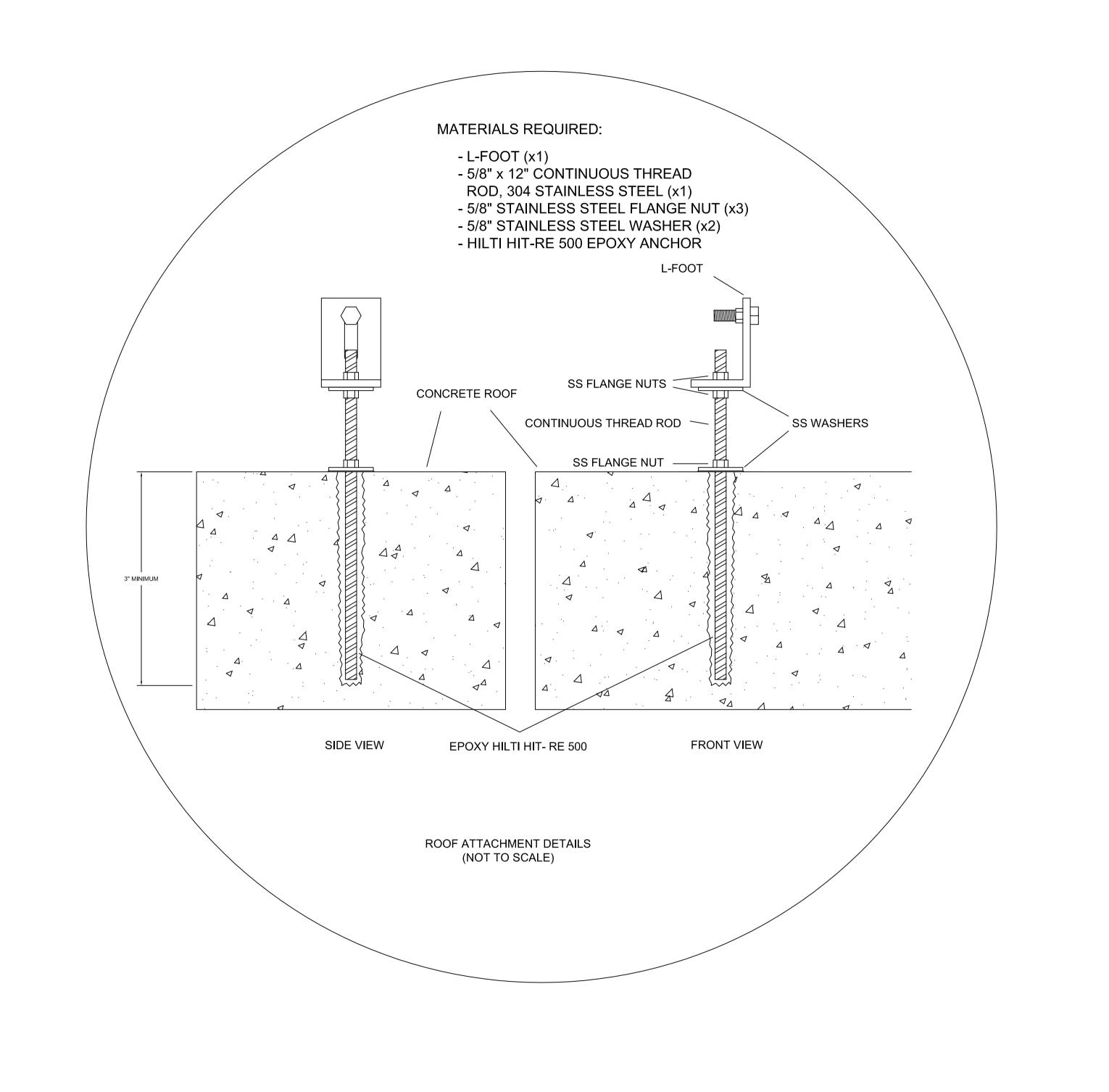
- 1. DO NOT EXCEED 3" DIFFERENCE BETWEEN ENDS OF ASSEMBLY (MIN. 6", MAX 9").
- 2. PV MODULES TILT ANGLE APPROXIMATELY 3°.
- 3. MODULES MUST BE CENTERED SYMMETRICALLY ON THE RAILS (±2").
- 4. DISTANCE BETWEEN ROOF SURFACE AND BOTTOM OF PV PANEL MUST NOT EXCEED 12".
- 5. SECURE RAIL TO L-FOOT USING 3/8" X 3/4" SS HEX BOLT AND 3/8" FLANGE NUT ACCORDING TO RACKS MANUFACTURER SPECIFICATIONS.
- 6. 3/8" SEPARATION BETWEEN MODULES FOR UFO INSTALLATION.
- 7. AT LEAST 3" SPACE AT RAIL ENDS FOR STOPPER INSTALLATION.
- 8. INSTALL UFO BOLTS TO 80 IN-LBS OF TORQUE.
- 9. USE SILVER GRADE LOCTITE ANTI-SEIZE TO PREVENT GALLING AND TO PROVIDE UNIFORMITY IN CLAMP LOAD.
- 10. REFER TO IRONRIDGE DESIGN AND INSTALLATION MANUAL FOR UFO INSTALLATION DETAILS.
- 11. INSTALL ACCORDING TO HILTI HIT-RE 500 INSTALLATION INSTRUCTIONS.
- 12. DESIGN CERTIFIED BY LICENSED STRUCTURAL ENGINEER.



TOP VIEW



FRONT VIEW



1	04/01/24	SITE PLAN AND SYSTEM LAYOUT	CMM
No.	DATE	DESCRIPTION	BY

SOLAR ROOTS, LLC

CLIENT: TYPICAL INSTALLATION ADDRESS: 2024-01-001

DWG :	SOLAR ROOTS	MAR/24
REVISED :	CMM	04/01/24
APPROVED :	CMM	04/01/24
SCALE	NONE	FT

TITLE :	
PHOTOVOLTAIC SYSTEM	
ROOF ATTACHMENT DETAILS	
DRAWING NO.	REV.
2024-01-001	1



LIMITED WARRANTY STATEMENT PHOTOVOLTAIC MODULE PRODUCTS BIKU&BIHIKU SERIES

For the photovoltaic solar module products of the following module types delivered under the sales contract or purchase order signed on and after August. 1st, 2023, CSI Solar Co., Ltd. (hereinafter referred to as "CSI Solar") will provide warranty in accordance with this <LIMITED WARRANTY STATEMENT PHOTOVOLTAIC MODULE PRODUCTS BIKU&BIHIKU SERIES> (hereinafter referred to as "Limited Warranty Statement").

This Limited Warranty Statement applies only to the following module types ("Products") of CSI Solar: CS3K-XXXPB-AG, CS3U-XXXPB-AG, CS3W-XXXMB-AG, CS3Y-XXXMB-AG, CS3Y-XXXMB-AG, CS3Y-XXXMB-AG, CS3Y-XXXMB-AG, CS7N-XXXMB-AG, CS7L-XXXMB-AG, "XXX" in the aforementioned module type denotes the rated output of the module (Pmax), for example "CS3K-300PB-AG".

This Limited Warranty Statement does not apply to Products sold to and installed in Australia, New Zealand, and P.R. China.

TWELVE (12) YEAR LIMITED PRODUCT WARRANTY

Subject to the limitations & exclusions contained herein, CSI Solar warrants to the original buyer (the "Buyer") of the Products listed above that, for twelve (12) years after the Warranty Start Date, the Products shall be free from defects in materials and workmanship which have an adverse effect on Products functionality under normal application, installation, use, and service conditions as specified in CSI Solar's standard product documentation such as the installation manual and its annexes.

Claims under this warranty will only be accepted if the Buyer can prove that the malfunctioning or non-conformity of the Products results exclusively from defects in materials and/or workmanship under normal application, installation, use and service conditions specified in CSI Solar's standard product documentation. This Limited Product Warranty does not warrant a specific power output of the Products, which shall be exclusively covered under the Limited Performance Warranty elaborated below.

TWENTY-FIVE (25) YEAR LIMITED PRODUCT WARRANTY

For the specified products listed below and only when they are installed on the residential rooftops in below specified regions, the limited product warranty period is 25 years. All the limitations and exclusions and other considerations included in this Limited Warranty Statement still apply.

For US/CANADA:

_

THIRTY (30) YEAR LIMITED PERFORMANCE WARRANTY

CSI Solar warrants that for a period of thirty years from the Warranty Start Date, the Products will maintain a level of performance as set forth below:

Actual power output of the Products when illuminated on the front side at Standard Testing Conditions:

www.csisolar.com



- During the first year, CSI Solar warrants the actual power output of the Products will be no less than 98% of the labeled power output.
- From year 2 to year 30, the actual annual power decline will be no more than 0.45%; by the end of year 30, the actual power output will be no less than 84.95% of the labeled power output.

Actual power output of the Products when illuminated on the rear side at Standard Testing Conditions:

 CSI Solar warrants the actual power output of the Products at Standard Testing Conditions will be no less than the power bifaciality of the respective product, as specified in the applicable datasheet, multiplied by the warranted "actual power output of the module when illuminated on the front side at Standard Testing Condition" as defined in the paragraph above.

The actual power output of the Products shall be determined for verification using Standard Testing Conditions only. Testing equipment uncertainty shall be taken into account and applied to all actual power output measurements.

WARRANTY START DATE

The foregoing "LIMITED PRODUCT WARRANTY" and "LIMITED PERFORMANCE WARRANTY" are respectively and jointly referred to as "limited warranty" or "warranty". The Warranty Start Date shall be the day after the completion of the first installation of the Products or 90 days after the delivery (Incoterms of 2020) of the Products to the Buyer, whichever date is earlier.

The warranty period is calculated based on calendar years. For example, the first year of the warranty period is from the Warranty Start Date to the 365th day, and so on.

EXCEPTIONS

The limited warranties set forth herein **DO NOT** apply to any Products: 1) for which CSI Solar has not received all or part of the due payments from the Buyer; 2) unable to provide the purchase proofs, Products information and other information or materials that can prove the claim is valid; 3) which have been subject to negligence in transportation, handling, storage or use; 4) which have been repaired without CSI Solar's authorization or in any way tampered with; 5) which have been subject to extraordinary hot, salt or chemical exposure; 6) which have been subject to improper installation, application, alteration or unauthorized service according to the local laws and regulations or CSI Solar's standard product documentation, or improper system design which caused constant shading or external stress to the Products; 7) which have been subject to power failure or surges, flood, fire, direct or indirect lightning strikes, , accidental breakage, vandalism, explosions, acts of war, or other events outside CSI Solar's control; 8) which have been moved from its original installation location; 9) third party components that are connected with the Products or the components of the construction on which the Products are mounted have defects; or 10) installed on mobile units (except photovoltaic tracking system), such as vehicles, ships or offshore-structures.

In addition, the limited warranties do not apply to any deterioration in the appearance of the Products (including, without limitation, any scratches, stains, rust, discoloration, or mold) or any other changes to the Products in appearance stemming from the normal wear and tear over time of product materials. Also, no warranty claim may be made if the product label, type or serial number of the applicable Products has been altered, removed or made illegible.



REMEDIES

In respect of the Twelve (12) Year Limited Product Warranty, if CSI Solar verifies in its reasonable judgment that the Products fail to conform to the terms of the Limited Product Warranty set forth herein, CSI Solar, at its option, will provide one of the following remedies: 1) repair the Products; 2) replace the Products with new products whose labeled power wattages equal to or exceed the Warranted Wattages of replaced Products (the Warranted Wattages is defined as the labeled power wattages of the Products minus the permissible accumulated degradation); or 3) provide a refund of the fair market value of the Products assessed based on the Warranted Wattages at the time of claim.

In respect of the Thirty (30) Year Limited Performance Warranty, if CSI Solar verifies in its reasonable judgment that the Products, when illuminated on the front side, fail to conform to the terms of the Limited Performance Warranty set forth herein, CSI Solar, at its option, will provide one of the following remedies: 1) repair the Products; 2) replace the Products with new products whose labeled power wattages equal to or exceed the Warranted Wattages of replaced Products; 3) provide additional Products to make up the wattage difference between the actual measured power output wattages at the time of claim and the Warranted Wattages; or 4) provide a refund of the fair market value of the wattage difference between the actual measured power output wattages at the time of claim and the Warranted Wattages. If CSI Solar verifies in its reasonable judgment that the Products, when illuminated on the rear side, fail to conform to the terms of the Limited Performance Warranty set forth herein, CSI Solar, at its option, will provide one of the following remedies: 1) repair the Products; 2) replace the Products with new products whose labeled power wattages equal to or exceed the Warranted Wattages of replaced Products; 3) provide additional Products to make up 10% of the wattage difference between the actual measured power output wattages at the time of claim and the Warranted Wattages; or 4) provide a refund of the fair market value of 10% of the wattage difference between the actual measured power output wattages at the time of claim and the Warranted Wattages.

All remedies under this limited warranty statement shall be calculated based upon the Warranted Wattages of the Products at the time of first reporting of the warranty claim.

CSI Solar will not accept any return of Products without CSI Solar's prior authorization. Once accepted, CSI Solar will cover reasonable transportation costs (except for insurance, any taxes, duties, demurrages, or any other costs and expenses related to custom clearance or Buyer's failure to cooperate) for shipping the Products under a claim back from the Buyer to a designated location of CSI Solar, and for shipping the additional, repaired or replacement Products to the original installation location. If CSI Solar opts for repair as the remedy, CSI Solar shall cover reasonable material and labor costs related to the repair. In any event, the costs and expenses for the removal, installation, and/or reinstallation of the Products, including fees, levies, taxes or other financial duties due in relation to any applicable electronic waste disposal regulation, shall remain with the Buyer, unless otherwise agreed to by CSI Solar in a signed writing. CSI Solar will not pay any cost of any fees, levies, taxes or other financial duties imposed on the remedies implemented by CSI Solar or imposed on the Products subject to such remedies, that are due to regulatory, government or judicial decisions not existing at the time of purchase of the affected Products.

Any repair or replacement of the affected Products shall not increase the applicable warranty period. The warranty period for replaced or repaired Products is the remainder of the warranty for the affected Products. CSI Solar reserves the right to deliver a similar product (of similar size, color, shape, and/or power output) in replacement of the affected Products if production of the affected Products is discontinued or such product is otherwise unavailable. Unless instructed by CSI Solar otherwise, Buyer shall dispose of Products in accordance with all local applicable regulations on electronic waste treatment and disposal at its own cost. Products having been replaced shall not be sold, reworked or reused in any way, unless expressly authorized by CSI Solar.

EXCEPT AS OTHERWISE PROVIDED BY APPLICABLE LAW, THE FOREGOING REMEDIES STATE CSI SOLAR'S SOLE AND EXCLUSIVE OBLIGATION AND THE BUYER'S SOLE AND EXCLUSIVE REMEDY FOR A BREACH OF THE FOREGOING LIMITED WARRANTIES.



CLAIM PROCESS

If the Buyer believes that it has a justified claim covered by the limited warranties set forth above, then the Buyer shall submit such claim in writing without undue delay, with supporting information including but not limited to the claimed quantity, serial numbers, purchasing invoices and proofs, to CSI Solar within the applicable warranty period specified above to the following address, or such future address as CSI Solar may provide from time to time:

Asia Pacific CSI Solar Co., Ltd.

Customer Service Department

199 Lushan Road, Suzhou New District Jiangsu

China, 215129

Tel: +86 512 66908088

E-mail: service.cn@csisolar.com

Americas

Canadian Solar (USA) Inc. **Customer Service Department**

1350 Treat Blvd. Suite 500, Walnut Creek, CA 94598

Tel: +1 855 315 8915

E-mail: service.ca@csisolar.com

LATAM

Canadian Solar Brazil **Customer Service Department** 999 Roque Petroni Junior Avenue, 4th floor, Vila Gertrudes, São Paulo 04707-910 Tel: +55 11 4637-2276 or 0800 878 3587

E-mail: service.latam@csisolar.com

Europe, Middle East & Africa Canadian Solar EMEA GmbH **Customer Service Department**

Radlkoferstraße 2, 81373 Munich, Germany

Tel: +49 89 5199689 0

E-mail: service.emea@csisolar.com

South Korea

Canadian Solar Korea Ltd.

#906 Dongwoo Building, 328 Teheran ro Gangnam-gu

Seoul, Korea Tel: +82 2 539 7541

E-mail: service.kr@csisolar.com

Upon receipt of such written claim, CSI Solar may seek further verification of the Buyer's claim of a breach of one of the foregoing limited warranties. If it is necessary to send the Products to a third-party testing institute for verification, the testing institute shall be ISO/IEC 17025:2017 accredited and mutually agreed in advance.

WARRANTY ASSIGNMENT

This Limited Warranty is transferrable to a party taking legal title to the Products, provided that the Products remain installed in their original installation location.

DISPUTE RESOLUTION

In case of any dispute related to warranty claims, such dispute shall be referred to and finally resolved pursuant to the governing law clauses and dispute resolution procedures under the purchase agreement between the Buyer and CSI Solar.

FORCE MAJEURE

Force majeure refers to unforeseeable, unavoidable and insurmountable objective conditions, including but not limited to war, riot, strike, epidemic situation, quarantine, traffic control and other social events; Natural disasters such as earthquake, fire, flood, snowstorm, hurricane, thunder and lightning, natural disaster, etc.; Or due to the



lack of appropriate or sufficient labor force, shortage of raw materials or inability in production capacity, technology or output; Or delay caused by national laws, regulations, administrative rules or orders, and any unforeseen events beyond the control of CSI Solar.

Due to the occurrence or continuation of force majeure, CSI Solar may be unable to perform or may have delays in performing its obligations under this limited warranty statement. In this case, CSI Solar's obligations to perform will be wholly or partly excused according to the relevant applicable laws or contracts with the Buyer. However, CSI Solar shall timely inform the Buyer of the occurrence of force majeure and negotiate with the Buyer to take necessary measures to minimize the impact of force majeure.

NOT INDEPENDENT WARRANTIES

The Buyer has the right to pursue claims under each of the warranties set forth above; provided that if claims arise under multiple limited warranties from a single defect, then if CSI Solar remedies that defect as set forth above, CSI Solar shall be deemed to have resolved all applicable warranty claims arising from that defect.

DISCLAIMERS

THE LIMITED WARRANTIES SET FORTH HEREIN ARE IN LIEU OF AND EXCLUDE ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE OR APPLICATION, AND ALL OTHER OBLIGATIONS ON THE PART OF CSI SOLAR UNLESS SUCH OTHER WARRANTIES AND OBLIGATIONS ARE AGREED TO IN WRITING BY CSI SOLAR. SOME JURISDICTIONS LIMIT OR DO NOT PERMIT DISCLAIMERS OF WARRANTY, SO THIS PROVISION MAY NOT APPLY TO THE BUYER IN SUCH JURISDICTIONS.

LIMITATION OF LIABILITY

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, CSI SOLAR HEREBY DISCLAIMS, AND SHALL HAVE NO RESPONSIBILITY OR LIABILITY WHATSOEVER FOR, DAMAGE OR INJURY TO PERSONS OR PROPERTY OR FOR OTHER LOSS OR INJURY RESULTING FROM ANY CAUSE WHATSOEVER ARISING OUT OF OR RELATED TO ANY OF ITS PRODUCTS OR THEIR USE. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, UNDER NO CIRCUMSTANCES SHALL CSI SOLAR BE LIABLE TO THE BUYER, OR TO ANY THIRD PARTY CLAIMING THROUGH OR UNDER THE BUYER, FOR ANY LOST PROFITS, LOSS OF USE, OR EQUIPMENT DOWNTIME, OR FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY KIND, HOWSOEVER ARISING, RELATED TO THE PRODUCTS, EVEN IF CSI SOLAR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, CSI SOLAR'S AGGREGATE LIABILITY, IF ANY, IN DAMAGES OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID TO CSI SOLAR BY THE BUYER FOR THE PRODUCT IN THE CASE OF A WARRANTY CLAIM.

THE BUYER ACKNOWLEDGES THAT THE FOREGOING LIMITATIONS OF LIABILITY ARE AN ESSENTIAL ELEMENT OF THE AGREEMENT BETWEEN THE PARTIES AND THAT IN THE ABSENCE OF SUCH LIMITATIONS THE PURCHASE PRICE OF THE PRODUCTS WOULD BE SUBSTANTIALLY DIFFERENT. SOME JURISDICTIONS LIMIT OR DO NOT PERMIT DISCLAIMERS OF LIABILITY, SO THIS PROVISION MAY NOT APPLY TO THE BUYER IN SUCH JURISDICTIONS. SOME JURISDICTIONS DO NOT ALLOW LIMITATIONS ON THE EXCLUSION OF DAMAGES SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO THE BUYER IN SUCH JURISDICTIONS.

YOU MAY HAVE SPECIFIC LEGAL RIGHTS OUTSIDE THIS WARRANTY, AND YOU MAY ALSO HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE OR COUNTRY TO COUNTRY. THIS LIMITED WARRANTY DOES NOT AFFECT ANY ADDITIONAL RIGHTS YOU HAVE UNDER LAWS IN YOUR JURISDICTION GOVERNING THE SALE OF CONSUMER GOODS.



SOME STATES OR COUNTRIES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE LIMITATIONS OR EXCLUSIONS IN THIS LIMITED WARRANTY STATEMENT MAY NOT APPLY TO YOU IN THOSE AREAS.

NOTE

In the event of any inconsistency among different language versions of this warranty statement, the English version shall prevail.

The installation and handling of PV Products requires professional skills and should only be performed by qualified professionals. Please read the safety and installation instructions before using the Products.



Enphase Energy, Inc. Limited Warranty – United States, United States Territories and Canada

This Limited Warranty is effective for Covered Products (defined below) that are activated on or after October 1, 2023, *unless* a newer limited warranty has been posted which applies to your Covered Product's date of activation. Always check https://enphase.com/warranty/us for the correct limited warranty governing your Covered Product.

1. Limited Warranty. Subject to the terms of this Limited Warranty, Enphase Energy, Inc. ("Enphase") warrants to the Covered Owner (defined below) that the product(s) listed below and installed for use at the original end user location (the "Original Location") (each a "Covered Product") will be free from defects in workmanship and materials for the applicable limited warranty period set forth below (each, a "Limited Warranty Period"), provided that the Original Location is located within the following territories:

United States, United States territories (including Puerto Rico, Northern Mariana Islands, U.S. Virgin Islands, American Samoa, and Guam), and Canada

This Limited Warranty is valid only (a) when the Covered Products are sold to the Covered Owner by Enphase itself or by an Enphase authorized reseller and (b) to the extent permitted by the applicable laws of the territories mentioned above.

Covered Product			Limited Warranty Period
IQ8 Microinverters IQ8MC-72-M-US IQ8AC-72-M-US IQ8HC-72-M-US IQ8-60-2-US IQ8-60-M-US IQ8-97-72-E-US	IQ8PLUS-72-2-US IQ8PLUS-72-M-US IQ8M-72-2-US IQ8M-72-M-US IQ8A-72-2-US IQ8H-3P-72-E-US	IQ8A-72-M-US IQ8H-240-72-2-US IQ8H-240-72-M-US IQ8H-208-72-2-US IQ8H-208-72-M-US IQ8X-80-M-US	25 years from the Activation Date.
IQ7 Microinverters IQ7-60-2-US IQ7-60-M-US IQ7-60-E-US IQ7PLUS-72-2-US	IQ7PLUS-72-M-US IQ7PLUS-72-E-US IQ7A-72-2-US IQ7A-72-M-US	IQ7X-96-2-US IQ7X-96-ACM-US IQ7X-96-ACM-US-NM IQ7PLUS-72-ACM-US IQ7PLUS-72-ACM-US-NM	25 years from the Activation Date
Q System Controller 3/3G with SKUs: SC200D111C240US01 SC200G111C240US01 Q System Controller 2 with SKUs: EP200G101-M240US01 EP200G-SC2-RSD-KIT			10 years from the Activation Date.
IQ Load Controller with SKU: EP-NA-LK02-040			5 years from the Activation Date
IQ Gateway with SKUs: ENV-IQ-AM1-240 ENV2-IQ-AM1-240 ENV-IQ-AM3-3P ENV2-IQC2-AM3-3P IQ Combiner 3/3C with SKUs: X-IQ-AM1-240-3C X-IQ-AM1-240-3 IQ Combiner 3-ES/3C-ES with SKUs: X-IQ-AM1-240-3C-ES X-IQ-AM1-240-3C-ES	IQ Combiner 4/4C with SKUs:		5 years from the Activation Date.
Current Transformers with SKUs: CT-200-SPLIT CT-200-CLAMP	CT-200-SOLID CT-400-SOLID	CT-600-SPLIT	5 years from the Activation Date.
Communications Kit: COMMS-KIT-01 COMMS-CELLMODEM-M1-06	COMMS-KIT-02		5 years from the Activation Date.
Range Extender: COMMS-24-EXT-01 Mobile Connect:	CELLMODEM-M1-06-AT-05		5 years from the Activation Date.
CELLMODEM-M1 CELLMODEM-M1-06-SP-05	CELLMODEM-03		5 years from the Activation Date

For purposes of this Limited Warranty, "**Activation Date**" means the earlier of (i) the date the Covered Product is registered with Enphase, or (ii) the date the Covered Product is activated at the Original Location via the Enphase's Installer Portal. A Covered Product is considered "activated" when the solar system has received "permission to operate" by authorities having jurisdiction.

2. **Registration**. Subject to Section 3, this Limited Warranty is also conditioned on the Covered Owner registering the Covered Product within forty-five (45) days from the date of first installation (the "**Registration**") by either (a) completing and returning the registration card (found at the end of this Limited Warranty) to the address set forth in this Section 2; (b) registering on-line at www.enphase.com/register-my-product; or (c) registering through the Enphase Installer Platform or the Enphase® application when an IQ Gateway product is purchased and installed as part of the PV solar system.

Return Registration Card to:

Enphase Energy, Inc.
Attn: Product Registration NA Customer Service
1819 S. Cobalt Point Way
Meridian, ID 83642
United States of America

- 3. **REGISTRATION EXCEPTION**. IF THE COVERED OWNER IS A RESIDENT OF CALIFORNIA, CONNECTICUT, OR ANY OTHER STATE OR PROVINCE THAT FORBIDS THE RETURN OF A REGISTRATION CARD AS A CONDITION PRECEDENT TO ANY WARRANTY COVERAGE OFFERED UNDER THIS LIMITED WARRANTY, THEN THE REGISTRATION REQUIREMENTS DESCRIBED IN SECTION 2 ABOVE SHALL NOT APPLY.
- 4. Covered Owner. For the purposes of this Limited Warranty, the "Covered Owner" shall mean the person or entity that purchases a Covered Product from Enphase or an Enphase-authorized reseller and installs (or has installed) such Covered Product at the Original Location. In addition, Covered Owner shall include subsequent transferees (each, a "Transferee") as long as (a) the Covered Product remains at the Original Location, (b) the Transferee submits to Enphase a completed "Change of Ownership Form," which Enphase may modify from time to time in its sole discretion (c) the Transferee pays the applicable transfer fee ("Transfer Fee") set forth in the Change of Ownership Form within 30 days from the date of transfer from the Covered Owner to the Transferee, and (d) subject to Section 3, the Transferee complies with the Registration requirement in Section 2. The submission of a Change of Ownership Form is required in order for the Transferee to receive continued Limited Warranty coverage on the transferred Covered Product. The Transfer Fee is subject to reasonable adjustment from time to time (as determined at Enphase's discretion). The Change of Ownership Form and payment instructions for the Transfer Fee are available at https://enphase.com/en-us/support/how-to-transfer-ownership.
- 5. **Continuous Connectivity**. The Covered Products should be continuously connected to the internet during the warranty period, except where interrupted by causes outside of the Covered Owner's reasonable control. This will help ensure that potential defects in the Product can be diagnosed remotely and that the Product can receive over-the-air firmware updates.
- 6. How to Obtain Warranty Service.
 - a. To obtain warranty service for a Covered Product, the Covered Owner must comply with the Return Merchandise Authorization (RMA) Procedure available at https://enphase.com/en-us/support/return-merchandise-authorization-procedure. Unless Enphase specifically instructs the Covered Owner otherwise, the Covered Owner must return the allegedly defective Covered Product to Enphase in the original packaging or equivalent. If the allegedly defective Covered Product is not received by Enphase within 60 days of Enphase providing an RMA number to Covered Owner, pursuant to the RMA Procedure, Enphase will invoice the Covered Owner, and the Covered Owner will pay, the then-current list price for such new product or product part. We recommend that Covered Owners use a tracking service for their protection. The RMA Procedure allows Covered Owners to generate a prepaid mailing label for the return.
 - b. If a Covered Owner returns a Covered Product to Enphase (i) without an RMA from Enphase or (ii) without all parts included in the original package, Enphase retains the right to either (1) refuse delivery of such return; or (2) charge a restocking fee equal to the higher of fifteen (15) per cent of the original Covered Owner's purchase price of the Covered Product or the retail value of the missing parts.

- c. By returning a Covered Product, Covered Owner hereby acknowledges that ownership of the Covered Product is transferred to Enphase upon Enphase's receipt of the Covered Product. If the claim is justified based on this Limited Warranty, Enphase will bear the cost of shipping the repaired or replacement Covered Product to
- d. Covered Owner (or to the installer authorized by Covered Owner to replace the Covered Product) at the Original Location. Any Covered Product returned to Enphase that Enphase determines is not covered under this Limited Warranty, or that is returned to Enphase without a valid RMA, may be rejected, and returned at the Covered Owner's cost (subject to prepayment), or kept for 30 days for pick-up by the Covered Owner, and then disposed of in Enphase's sole discretion without further liability or obligation to Covered Owner.
- e. Once a returned Covered Product is received and inspected, Enphase will notify Covered Owner (or the installer authorized by Covered Owner to replace the Covered Product) that Enphase has received the returned Covered Product.

7. Remedies.

- a. During the applicable Warranty Period, if Enphase confirms the existence of a defect that is covered by the Limited Warranty, Enphase will, at Enphase's option, either (i) repair or replace the Covered Product free of charge, or (ii) refund the Covered Owner the actual purchase price for the Covered Product less reasonable depreciation based on use at the time the Covered Owner notifies Enphase of the defect. Enphase will not elect to issue a refund unless (1) Enphase is unable to provide a replacement and repair is not commercially practicable or cannot be timely made, or (2) Covered Owner is willing to accept such a refund. In the event of a defect, to the extent permitted by law, these are the Covered Owner's sole and exclusive remedies.
- b. If Enphase repairs or replaces the Covered Product pursuant to this Limited Warranty, (i) Enphase will, at its option, use new and/or reconditioned parts or products of the Covered Product's original or improved design, and (ii) the Limited Warranty will continue to apply to the repaired or replacement product for the remainder of the original Limited Warranty Period or ninety (90) days from the date Covered Owner receives the repaired or replacement product, whichever is later.
- c. If Enphase issues a refund (rather providing a repaired or replacement Covered Product), such refund will be processed and paid within 2 weeks of Enphase's receipt of the Covered Product.

8. Limited Warranty Limitations and Exclusions.

- a. This Limited Warranty does not include any cost of labor related to (i) un-installing Covered Product; (ii) reinstalling a repaired or replacement product, or (iii) the removal, installation or troubleshooting of the Covered Owner's electrical systems.
- b. The Limited Warranty does not cover, and Enphase will not be responsible for any delays, lost or damage or any other damage to any Covered Product caused by a freight carrier.
- c. This Limited Warranty does not apply to, and Enphase will not be responsible for, any defect in or damage to any Covered Products: (i) that have been misused, neglected, tampered with, altered, or otherwise damaged, either internally or externally; (ii) that have been improperly installed, operated, handled or used, including use under conditions for which the product was not designed, use in an unsuitable environment, or use in a manner contrary to the Enphase User Manual or applicable laws or regulations; (iii) that have been subjected to fire, water, generalized corrosion, biological infestations, acts of nature, or input voltage that creates operating conditions beyond the applicable maximum or minimum limits listed in the applicable Covered Product Data Sheet (as published online at www.enphase.com), including high input voltage from generators or lightning strikes; (iv) that have been subjected to damage caused by third party components not provided by Enphase and used with the Covered Products or any damage to the Covered Products caused by service performed by anyone who is not a representative of Enphase; (v) if the original identification markings (including trademark or serial number) of such products have been defaced, altered, or removed (other than by fading through regular wear and tear); (vi) if the Grid Profile (utility approved operating parameters) of the Covered Product has been altered, and such alteration causes the product to malfunction, fail, or fail to optimally perform; or (vii) if the Covered Product is not using the most up-to-date software or firmware version made available by Enphase and the defect or damage could have been avoided by using such firmware or software version.
- d. The Limited Warranty does not cover cosmetic, technical or design defects, or shortcomings which do not

materially influence or affect energy production or degrade form, fit, or function of the Covered Products, or any defects or parts requiring replacement due to ordinary wear and tear, corrosion, rust or stains, scratches, dents on the casing or paintwork of the Covered Product. The Limited Warranty does not cover costs related to the removal, installation or troubleshooting of the Covered Owner's electrical systems.

- e. The Limited Warranty does not apply to, and the term "Covered Product" shall not include, any third-party products that may be installed with the Covered Products at the Original Location.
- f. For the avoidance of doubt, software programs installed in the Covered Products and the recovery and reinstallation of such software programs and data are not covered under this Limited Warranty. Enphase does not warrant that the operations of the Covered Product will be uninterrupted or error-free. No Enphase employee or authorized reseller is authorized to make any modification, extension, or addition to this Limited Warranty. If any term of this Limited Warranty is held to be illegal or unenforceable, the legality or enforceability of the remaining terms shall not be affected or impaired.
- 9. **Assignment.** Enphase expressly reserves the right to novate or assign its rights and obligations under this Limited Warranty to a third party with the demonstrated expertise and requisite resources needed to effectively discharge the obligations hereunder.
- 10. Disclaimer of Warranties. THIS LIMITED WARRANTY IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY ENPHASE AND, EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ALL OTHER WARRANTIES AND CONDITIONS, WHETHER EXPRESS OR IMPLIED, STATUTORY, OR OTHERWISE, ARISING BY LAW, COURSE OF DEALING, COURSE OF PERFORMANCE USAGE OF TRADE, OR OTHERWISE (INCLUDING WARRANTIES AND CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, OR WARRANTIES AS TO THE ACCURACY, SUFFICIENCY OR SUITABILITY OF ANY TECHNICAL OR OTHER INFORMATION PROVIDED IN MANUALS OR OTHER DOCUMENTATION) SHALL BE LIMITED IN DURATION TO THE DURATION OF THIS LIMITED WARRANTY.

THE GRANT OF THIS LIMITED WARRANTY BY ENPHASE IS CONDITIONED UPON AGREEMENT BY THE COVERED OWNER TO THE TERMS, CONDITIONS AND REQUIREMENTS HEREIN. THE LAWS OF CERTAIN JURISDICTIONS DO NOT ALLOW FOR THE EXCLUSIONS ON THE DURATION OF AN IMPLIED WARRANTY OR FOR EXCLUSIONS OR LIMITATIONS ON LEGAL WARRANTIES. WHERE SUCH LAWS APPLY TO THE COVERED OWNER, SOME OR ALL OF THE EXCLUSIONS OR LIMITATION MAY NOT APPLY TO COVERED OWNER, AND SUCH COVERED OWNER MAY HAVE ADDITIONAL RIGHTS. THIS LIMITED WARRANTY GIVES COVERED OWNER SPECIFIC LEGAL RIGHTS, AND COVERED OWNER MAY ALSO HAVE OTHER RIGHTS THAT VARY FROM JURISDICTION TO JURISDICTION.

11. Limitation of Liability. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, IN NO EVENT WILL ENPHASE BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSSES, COSTS OR EXPENSES HOWEVER ARISING, WHETHER IN CONTRACT OR TORT, INCLUDING WITHOUT LIMITATION ANY ECONOMIC LOSSES OF ANY KIND, ANY LOSS OR DAMAGE TO PROPERTY, OR ANY PERSONAL INJURY.

SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO COVERED OWNER AND COVERED OWNER MAY HAVE ADDITIONAL RIGHTS.

12. **Governing law.** This Limited Warranty shall be governed by the laws of the State of California, USA, without giving effect to any conflict of laws principles that may require the application of the law of another jurisdiction.

13. Arbitration.

- a. Please read the following arbitration agreement in this Section ("Arbitration Agreement") carefully. It requires Covered Owner ("you") to arbitrate disputes with ENPHASE and limits the manner in which you can seek relief from Enphase ("us"). THE LAWS OF CERTAIN JURISDICTIONS DO NOT PERMIT THE USE OF MANDATORY ARBITRATION CLAUSES. WHERE SUCH LAWS APPLY TO THE COVERED OWNER, THIS ARBITRATION CLAUSE MAY NOT APPLY.
- b. **Applicability of Arbitration Agreement.** You agree that any dispute or claim relating in any way to your access or use of the Covered Products, or to any aspect of your relationship with Enphase, will be resolved by binding arbitration, rather than in court, except that (i) you may assert claims in small claims court if your

claims qualify; and (ii) you or Enphase may seek equitable relief in court for infringement or other misuse of intellectual property rights (such as trademarks, trade dress, domain names, trade secrets, copyrights, and patents).

- c. Arbitration Rules and Forum. For any dispute with Enphase in connection with this Limited Warranty, Covered Owner agrees to first contact Enphase at the email address identified below and attempt to resolve the dispute with us informally. If the dispute has not been resolved after 60 days, both parties agree to resolve such dispute through binding arbitration under the Optional Expedited Arbitration Procedures then in effect for the Judicial Arbitration and Mediation Services ("JAMS"). JAMS may be contacted at www.jamsadr.com. The existence, content and result of the arbitration shall be held in confidence by all participants. The arbitration will be conducted by a single arbitrator selected by agreement of the parties or, failing such agreement, appointed in accordance with the JAMS rules. The arbitration shall be conducted in English and in Santa Clara County, California. If JAMS is not available to arbitrate, the parties will select an alternative arbitral forum. If the arbitrator finds that Covered Owner cannot afford to pay JAMS's filing, administrative, hearing and/or other fees and cannot obtain a waiver from JAMS, Enphase will pay them for Covered Owner. In addition, Enphase will reimburse all such JAMS's filing, administrative, hearing and/or other fees for claims totaling less than \$10,000 unless the arbitrator determines the claims are frivolous. Any judgment on the award rendered by the arbitrator may be entered in any court of competent jurisdiction. The arbitrator shall have exclusive authority to determine the scope and enforceability of this Arbitration Agreement, and (b) resolve any dispute related to the interpretation, applicability, enforceability or formation of this Arbitration Agreement including, but not limited to any claim that all or any part of this Arbitration Agreement is void or voidable. The arbitration will decide the rights and liabilities, if any, of the parties. The arbitration proceeding will not be consolidated with any other matters or joined with any other cases or parties. The arbitrator shall have the authority to grant motions dispositive of all or part of any claim. The arbitrator shall have the authority to award monetary damages and to grant any non-monetary remedy or relief available to an individual under applicable law, the arbitral forum's rules, and the Limited Warranty. The arbitrator shall issue a written award and statement of decision describing the essential findings and conclusions on which the award is based, including the calculation of any damages awarded. The arbitrator has the same authority to award relief on an individual basis that a judge in a court of law would have. The award of the arbitrator is final and binding upon the parties.
- d. Waiver of Jury Trial. YOU AND ENPHASE HEREBY WAIVE ANY CONSTITUTIONAL AND STATUTORY RIGHTS TO SUE IN COURT AND HAVE A TRIAL IN FRONT OF A JUDGE OR A JURY. You and ENPHASE are instead electing that all claims and disputes shall be resolved by arbitration under this Arbitration Agreement, except as specified in sections above. An arbitrator can award on an individual basis the same damages and relief as a court and must follow this Agreement as a court would. However, there is no judge or jury in arbitration, and court review of an arbitration award is subject to very limited review.
- e. Waiver of Class or Other Non-Individualized Relief. ALL CLAIMS AND DISPUTES WITHIN THE SCOPE OF THIS ARBITRATION AGREEMENT MUST BE ARBITRATED ON AN INDIVIDUAL BASIS AND NOT ON A CLASS OR COLLECTIVE BASIS, ONLY INDIVIDUAL RELIEF IS AVAILABLE, AND CLAIMS OF MORE THAN ONE COVERED OWNER CANNOT BE ARBITRATED OR CONSOLIDATED WITH THOSE OF ANY OTHER COVERED OWNER. If a decision is issued stating that applicable law precludes enforcement of any of this subsection's limitations as to a given claim for relief, then such claim must be severed from the arbitration and brought into the State or Federal Courts located in San Francisco, California. All other claims shall be arbitrated.
- f. **30-Day Right to Opt Out**. You have the right to opt out of the provisions of this Arbitration Agreement by sending written notice of your decision to opt out to Enphase Energy, Inc., 47281 Bayside Parkway, Fremont, California, 94538, attention: General Counsel, within 30 days after first becoming subject to this Arbitration Agreement. You may also opt-out of the provisions of this Arbitration Agreement by sending written notice of your decision to the following email address: legal@enphaseenergy.com. Your notice must include your name and address, and an unequivocal statement that you want to opt out of this Arbitration Agreement, all other parts of this Agreement will continue to apply to you. Opting out of this Arbitration Agreement has no effect on any other arbitration agreements that you may currently have, or may enter in the future, with us.
- g. **Severability.** Except as provided above, if any part or parts of this Arbitration Agreement are found under the law to be invalid or unenforceable, then such specific part or parts shall be of no force and effect and shall

be severed and the remainder of the Arbitration Agreement shall continue in full force and effect.

h. **Survival of Agreement.** This Arbitration Agreement will survive the termination of your relationship with Enphase.

Customer Support:

United States, US Territories and Canada https://support.enphase.com/s/contact-us (877) 797-4743

Puerto Rico https://www4.enphase.com/es-lac/contact-support-es-lac +1 (800) 821-1487

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Product Registration Form



Failure to complete and return this Product Registration Form does not diminish your warranty rights.

Please return this form to:

Enphase Energy, Inc. Attn: Product Registration NA Customer Service 1819 S. Cobalt Point Way Meridian, ID 83642 United States of America

(or, you may register on-line at https://enphase.com/en-us/product-registration-en-us)

First Name_	Last Name
E-mail	
Phone Number (Area Code)	
Contact Address	
Street Address:	
Street Address (line 2)	
State/Province Zip Code	
Address of installation: same as Contact Address?	Yes / No
(If, "Yes", Enphase will use Contact Address as Address of	f Installation)
Address of Installation	
Street Address:	
Street Address (line 2)	
Installer Information	
Installer Name	
E 3	
Product Information	
Microinverter SKU (e.g.: IQ7-60-2-US)	
Serial Numbers of Units installed	
Purchased from	
Purchase Date (MM/DD/YY)	
Installation Date (MM/DD/YY)	
Permitted to Operate Date (MM/DD/YY)	

☐ I agree to receive critical product information about the registered products at the email and/or contact provided above.



The provider of this Limited Warranty is Enphase Energy, Inc., 47281 Bayside Parkway Fremont, CA 94538 United States ("Enphase").

1. Limited Warranty. This Limited Warranty is effective for Covered Products (defined below) that are activated on or after December 1, 2023, unless a newer limited warranty is subsequently posted which applies to your Covered Product's date of activation. Always check https://enphase.com/warranty for the correct limited warranty governing your Covered Product. Subject to the terms of this Limited Warranty, Enphase warrants to the Covered Owner (defined below) that the products listed in the table below and installed for use at the original end user location (the "Original Location") (each a "Covered Product"), will be free from defects in workmanship and materials ("Workmanship Warranty") for the applicable limited warranty period set forth below (each, a "Limited Warranty Period"), provided that the Original Location is located within the following territories (the "Territory"):

The United States and Puerto Rico (all other United States territories are excluded) and Canada.

This Limited Warranty is valid only (a) when the Covered Products are sold by Enphase itself or by an Enphase-authorized reseller and (b) to the extent permitted by the applicable laws of the Territory mentioned above.

<u>Products</u>	Limited Warranty Period
Enphase IQ Battery 5P ("IQ Battery Product") with SKU: IQBATTERY-5P-1P-NA	The Limited Warranty Period begins on the Activation Date (defined below) and ends on the earlier of (a) 15 years from the Activation Date or (b) 6,000 discharged cycles.
IQ Combiner 5/5C with SKUs:	5 years from the Activation Date
IQ System Controller 3/3G with SKUs: SC200D111C240US01 SC200G111C240US01 System Shutdown Switch with SKU: EP200G-NA-02-RSD	10 years from the Activation Date (excluding System Shutdown Switch, which has a Limited Warranty Period of 5 years from the Activation Date)

IQ Load Controller with SKU: EP-NA-LK02-040	5 years from the Activation Date
Mobile Connect with SKUs: CELLMODEM-M1 CELLMODEM-M1-06-SP-05 CELLMODEM-M1-06-AT-05	5 years from the Activation Date
Communications Kit COMMS-KIT-02	5 years from the Activation Date

- 2. Activation Date. As used in this Limited Warranty, "Activation Date" means the following:
 - a. For Covered Products that are IQ Battery Products (each a "Covered IQ Battery Product") only: The earlier of (i) the "Energize by" date indicated on the IQ Battery Product packaging or (ii) the date the IQ Battery Product is activated at the Original Location via the Enphase Installer Portal and the Covered Owner has received "permission to operate" by the authorities having jurisdiction.
 - b. <u>For all other Covered Products</u>: The date the Covered Product is activated at the Original Location via the Enphase Installer Portal and the Covered Owner has received "permission to operate" by the authorities having jurisdiction.
- 3. Additional Warranties for Covered IQ Battery Products. During the Limited Warranty Period, the Covered IQ Battery Product will maintain the ability to store and discharge an energy capacity of at least sixty percent (60%) of the Covered IQ Battery Product nameplate rating when installed and used in accordance with the Quick Install Guide and the Product data sheet (the "Product Documentation"). The Product Documentation can be found at https://enphase.com/installers/resources/documentation.
- 4. Registration. Subject to Section 5 (Registration Exclusions), this Limited Warranty is also conditioned on the Covered Owner registering the Covered Product within forty-five (45) days from the date of first installation (the "Registration") by either (a) completing and returning the registration card (found at the end of this Limited Warranty) to the address set forth in this Section; (b) registering on-line at www.enphase.com/register-my-product; or (c) registering through the Enphase App.

Return Registration Card to:

Enphase Energy, Inc. Attn: Product Registration NA Customer Service 1819 S. Cobalt Point Way Meridian, ID 83642 United States of America

- 5. **Registration Exclusions**. IF THE COVERED OWNER IS A RESIDENT OF CALIFORNIA, CONNECTICUT, OR ANY OTHER STATE THAT FORBIDS THE RETURN OF A REGISTRATION CARD AS A CONDITION PRECEDENT TO WARRANTY COVERAGE, THEN THE REGISTRATION REQUIREMENTS DESCRIBED IN SECTION 4 ABOVE SHALL NOT APPLY.
- 6. **Continuous Connectivity**. The Covered Products should be continuously connected to the internet during the applicable Warranty Period, except when interrupted by causes outside of the Covered Owner's reasonable control. This will help ensure that potential defects in the Covered Product can be diagnosed remotely and that the Covered Product can receive over-the-air firmware updates.
- 7. **Transferee**. For the purposes of this Limited Warranty, the "**Covered Owner**" shall mean the person or entity that purchases and installs (or has installed) the Covered Product from Enphase or an Enphase-authorized reseller at the Original Location. In addition, Covered Owner shall include subsequent transferees (each, a "**Transferee**") as long as (a) the Covered Product remains at the Original Location, (b) the Transferee submits to Enphase a "Change of Ownership Form," (c) the Transferee pays the applicable transfer fee ("**Transfer Fee**") set forth in the Change of Ownership Form within thirty (30) days from the date of transfer to the Transferee, and (d) if applicable, the Transferee complies with the Registration requirement in Section 4. The submission of a Change of Ownership Form is required for continued Limited Warranty coverage. The Transfer Fee is subject to reasonable adjustment

from time to time (as determined at Enphase's discretion). The Change of Ownership Form and payment instructions for the Transfer Fee are available at https://enphase.com/en-us/support/how-to-transfer-ownership.

8. How to Obtain Warranty Service.

- a. To obtain warranty service for a Covered Product, the Covered Owner must comply with the Return Merchandise Authorization (RMA) Procedure available at https://enphase.com/en-us/support/return-merchandise-authorization-procedure. Unless Enphase specifically instructs the Covered Owner otherwise, the Covered Owner must return the allegedly defective Covered Product to Enphase in the original packaging or equivalent. If the allegedly defective Covered Product is not received by Enphase within sixty (60) days of Enphase providing an RMA number to Covered Owner, pursuant to the RMA Procedure, Enphase will invoice the Covered Owner, and the Covered Owner will pay, the then-current list price for such new Covered Product or replacement product. We recommend that Covered Owners use a tracking service for their protection. The RMA Procedure allows Covered Owners to generate a prepaid mailing label for the return.
- b. If a Covered Owner returns a Covered Product to Enphase (i) without an RMA from Enphase or (ii) without all parts included in the original package, Enphase retains the right to either (A) refuse delivery of such return; or (B) charge a restocking fee equal to the higher of fifteen percent (15%) of the original Covered Owner's purchase price of the Covered Product or the retail value of the missing parts. We recommend that Covered Owners use a tracking service for their protection.
- c. By returning a Covered Product, Covered Owner hereby acknowledges that ownership of the Covered Product is transferred to Enphase upon Enphase's receipt of the Covered Product. If the returned product is covered under this Limited Warranty, Enphase will bear the cost of shipping the repaired or replacement product to the Covered Owner (or to the installer authorized by Covered Owner to replace the Covered Product) at the Original Location.
 - Any product returned to Enphase that Enphase determines is not covered under this Limited Warranty, or that is returned to Enphase without a valid RMA, may be rejected, and returned at the Covered Owner's cost (subject to prepayment), or kept for thirty (30) days for pick-up by the Covered Owner, and then disposed of in Enphase's sole discretion without further liability or obligation to Covered Owner.
- d. Once a returned product is received and inspected, Enphase will notify Covered Owner (or the installer authorized by Covered Owner to replace the Covered Product) that Enphase has received the returned product.

9. Remedies.

- a. During the applicable Limited Warranty Period, if Enphase confirms the existence of a defect that is covered by the Workmanship Warranty, Enphase will, at Enphase's option, either (i) repair or replace the Covered Product free of charge, or (ii) refund the Covered Owner the actual purchase price for the Covered Product less reasonable depreciation based on use at the time the Covered Owner notifies Enphase of the defect. Enphase will not elect to issue a refund unless (A) Enphase is unable to provide a replacement and repair is not commercially practicable or cannot be timely made, or (B) Covered Owner is willing to accept such a refund. In the event of a defect, to the extent permitted by law, these are the Covered Owner's sole and exclusive remedies.
- b. During the applicable Limited Warranty Period, if Enphase establishes the existence of a defect that is covered by the Limited Capacity Retention Warranty, Enphase will, at Enphase's option, either (i) repair or replace the Covered IQ Battery Product free of charge, (ii) refund the Covered Owner the actual purchase price for the IQ Battery Covered Product less reasonable depreciation based on use at the time the Covered Owner notifies Enphase of the defect. Enphase will not elect to issue a refund or a credit unless (A) Enphase is unable to provide a replacement and repair is not commercially practicable or cannot be timely made, or (B Covered Owner is willing to accept such a refund.
- c. If Enphase repairs or replaces the Covered Product, (i) Enphase will, at its option, use new and/or reconditioned parts or products of original or improved design, and (ii) the Limited Warranty will continue to apply to the repaired or replacement product for the remainder of the original Limited Warranty Period or ninety (90) days from the date Covered Owner receives the repaired or replacement product, whichever is later.
- d. If Enphase issues a refund or a credit, as applicable (rather than providing a repaired or replacement Covered Product), such refund or credit, as applicable, will be processed and paid within four (4) weeks of Enphase's receipt of the Covered Product.

10. Limited Warranty Limitations and Exclusions.

- a. This Limited Warranty does not include any cost of labor or other costs related to (i) un-installing Covered Product; (ii) re-installing a repaired or replacement product, or (iii) the removal, installation or troubleshooting of the Covered Owner's electrical systems.
- b. The Limited Warranty does not cover, and Enphase will not be responsible for, shipping damage or any other damage caused by mishandling of products by the freight carrier.
- c. This Limited Warranty does not apply to, and Enphase will not be responsible for, any defect in or damage to any products:
 - i. that have been misused, abused, neglected, tampered with, altered, or otherwise damaged, either internally or externally;
 - ii. that have been improperly installed, operated, handled or used, including use under conditions for which the product was not designed, installed or used in an unsuitable environment, or used in a manner contrary to the Product Documentation, or applicable laws or regulations;
 - iii. that have been subjected to fire, water, generalized corrosion, biological infestations, acts of nature, or input voltage that creates operating conditions beyond the maximum or minimum limits listed in the applicable Product Documentation, including high input voltage from generators or lightning strikes;
 - iv. that have been subjected to damage caused by third party components not provided by Enphase and used with the Covered Products or any damage to the Covered Products caused by service performed by anyone who is not a representative of Enphase:
 - v. if the original identification markings (including trademark or serial number) of such products have been defaced, altered, or removed (other than by fading through regular wear and tear);
 - vi. if the Grid Profile (utility approved operating parameters) of the Covered Product has been altered, and such alteration causes the product to malfunction, fail, or fail to optimally perform; or
 - vii. if the Covered Product is not using the most up-to-date firmware made available by Enphase and the applicable defect could have been avoided if such firmware were being used
- d. This Limited Warranty does not apply to, and the term "Covered Product" shall not include any third-party products that may be installed with the Covered Products at the Original Location.
- e. The Limited Warranty does not cover cosmetic, technical or design defects, or shortcomings which do not materially influence or affect energy storage or degrade form, fit, or function of the Covered Products; noise or vibrations that are not excessive or uncharacteristic and do not impact the Covered Product's Performance; or any defects or parts requiring replacement due to ordinary wear and tear, corrosion, rust or stains, scratches, dents on the casing or paintwork of the Covered Product. In addition, the Limited Warranty does not apply to, and the term "Covered Product" shall not include any third-party products that may be installed with the Covered Products at the Original Location.
- f. For the avoidance of doubt, software programs installed in the Covered Products and the recovery and reinstallation of such software programs and data are not covered under this Limited Warranty. Enphase does not warrant that the operations of the Covered Product will be uninterrupted or error-free. No Enphase employee or authorized reseller is authorized to make any modification, extension, or addition to this Limited Warranty. If any term of this Limited Warranty is held to be illegal or unenforceable, the legality or enforceability of the remaining terms shall not be affected or impaired.
- g. Covered Products are not intended for use as a primary or backup power source for life-support systems, other medical equipment, or any other use where product failure could lead to injury, loss of life, or catastrophic property damage. Enphase disclaims any and all liability arising out of any such use of your Covered Products. Further, Enphase reserves the right to refuse to provide support in connection with any such use and disclaims any and all liability arising out of Enphase's provision of, or refusal to provide, support for your Covered Product in such circumstances.
- 11. Assignment. Enphase expressly reserves the right to novate or assign its rights and obligations under this Limited Warranty to a third party with the demonstrated expertise and requisite resources needed to effectively discharge the obligations hereunder.
- 12. Disclaimer of Warranties. THIS LIMITED WARRANTY IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY ENPHASE AND, EXCEPT TO THE EXTENT PROHBITED BY APPLICABLE LAW, ALL IMPLIED WARRANTIES AND CONDITIONS (INCLUDING WARRANTIES AND CONDITIONS OF MERCHANTABILITY, FITNESS FOR A

PARTICULAR PURPOSE, NON-INFRINGEMENT, OR WARRANTIES AS TO THE ACCURACY, SUFFICIENCY OR SUITABILITY OF ANY TECHNICAL OR OTHER INFORMATION PROVIDED IN MANUALS OR OTHER DOCUMENTATION) SHALL BE LIMITED IN DURATION TO THE DURATION OF THIS LIMITED WARRANTY.

THE GRANT OF THIS LIMITED WARRANTY BY ENPHASE IS CONDITIONED UPON AGREEMENT BY THE COVERED OWNER TO THE TERMS, CONDITIONS AND REQUIREMENTS HEREIN. SOME STATES DO NOT ALLOW LIMITATIONS ON THE DURATION OF AN IMPLIED WARRANTY, SO THE ABOVE LIMITATION MAY NOT APPLY TO THE COVERED OWNER. THIS LIMITED WARRANTY GIVES THE COVERED OWNER SPECIFIC LEGAL RIGHTS, AND THE COVERED OWNER MAY ALSO HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE.

- 13. Limitation of Liability. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, IN NO EVENT WILL ENPHASE BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSSES, COSTS OR EXPENSES HOWEVER ARISING, WHETHER IN CONTRACT OR TORT, INCLUDING WITHOUT LIMITATION ANY ECONOMIC LOSSES OF ANY KIND, ANY LOSS OR DAMAGE TO PROPERTY, OR ANY PERSONAL INJURY. SOME JURISDISCTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO COVERED OWNER.
- **14. Governing Law.** This Limited Warranty shall be governed by the laws of the State of California, USA, without giving effect to any conflict of laws principles that may require the application of the law of another jurisdiction.

15. Arbitration.

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- b. **Applicability of Arbitration Agreement.** You agree that any dispute or claim relating in any way to your access or use of the Covered Products, or to any aspect of your relationship with Enphase, will be resolved by binding arbitration, rather than in court, except that (i) you may assert claims in small claims court if your claims qualify; and (ii) you or Enphase may seek equitable relief in court for infringement or other misuse of intellectual property rights (such as trademarks, trade dress, domain names, trade secrets, copyrights, and patents).
- c. Arbitration Rules and Forum. For any dispute with Enphase in connection with this Limited Warranty, Covered Owner agrees to first contact Enphase at the email address identified below and attempt to resolve the dispute with us informally. If the dispute has not been resolved after sixty (60) days, both parties agree to resolve such dispute through binding arbitration under the Optional Expedited Arbitration Procedures then in effect for the Judicial Arbitration and Mediation Services ("JAMS"). JAMS may be contacted at www.jamsadr.com. The existence, content and result of the arbitration shall be held in confidence by all participants. The arbitration will be conducted by a single arbitrator selected by agreement of the parties or. failing such agreement, appointed in accordance with the JAMS rules. The arbitration shall be conducted in English and in Santa Clara County, California. If JAMS is not available to arbitrate, the parties will select an alternative arbitral forum. If the arbitrator finds that Covered Owner cannot afford to pay JAMS's filing. administrative, hearing and/or other fees and cannot obtain a waiver from JAMS, Enphase will pay them for Covered Owner. In addition, Enphase will reimburse all such JAMS's filing, administrative, hearing and/or other fees for claims totaling less than \$10,000 unless the arbitrator determines the claims are frivolous. Any judgment on the award rendered by the arbitrator may be entered in any court of competent jurisdiction. The arbitrator shall have exclusive authority to (i) determine the scope and enforceability of this Arbitration Agreement, and (ii) resolve any dispute related to the interpretation, applicability, enforceability, or formation of this Arbitration Agreement including, but not limited to any claim that all or any part of this Arbitration Agreement is void or voidable. The arbitration will decide the rights and liabilities, if any, of the parties. The arbitration proceeding will not be consolidated with any other matters or joined with any other cases or parties. The arbitrator shall have the authority to grant motions dispositive of all or part of any claim. The arbitrator shall have the authority to award monetary damages and to grant any non-monetary remedy or relief available to an individual under applicable law, the arbitral forum's rules, and the Limited Warranty. The arbitrator shall issue a written award and statement of decision describing the essential findings and conclusions on which the award is based, including the calculation of any damages awarded. The arbitrator has the same authority to award relief on an individual basis that a judge in a court of law would have. The award of the arbitrator is final and binding upon the parties.

- d. Waiver of Jury Trial. YOU AND ENPHASE HEREBY WAIVE ANY CONSTITUTIONAL AND STATUTORY RIGHTS TO SUE IN COURT AND HAVE A TRIAL IN FRONT OF A JUDGE OR A JURY. You and ENPHASE are instead electing that all claims and disputes shall be resolved by arbitration under this Arbitration Agreement, except as specified in sections above. An arbitrator can award on an individual basis the same damages and relief as a court and must follow this Agreement as a court would. However, there is no judge or jury in arbitration, and court review of an arbitration award is subject to very limited review.
- e. Waiver of Class or Other Non-Individualized Relief. ALL CLAIMS AND DISPUTES WITHIN THE SCOPE OF THIS ARBITRATION AGREEMENT MUST BE ARBITRATED ON AN INDIVIDUAL BASIS AND NOT ON A CLASS OR COLLECTIVE BASIS, ONLY INDIVIDUAL RELIEF IS AVAILABLE, AND CLAIMS OF MORE THAN ONE COVERED OWNER CANNOT BE ARBITRATED OR CONSOLIDATED WITH THOSE OF ANY OTHER COVERED OWNER. If a decision is issued stating that applicable law precludes enforcement of any of this subsection's limitations as to a given claim for relief, then such claim must be severed from the arbitration and brought into the State or Federal Courts located in San Francisco, California. All other claims shall be arbitrated.
- f. **30-Day Right to Opt Out**. You have the right to opt out of the provisions of this Arbitration Agreement by sending written notice of your decision to opt out to Enphase Energy, Inc., 47281 Bayside Parkway, Fremont, California, 94538, attention: General Counsel, within thirty (30) days after first becoming subject to this Arbitration Agreement. You may also opt-out of the provisions of this Arbitration Agreement by sending written notice of your decision to the following email address: legal@enphaseenergy.com. Your notice must include your name and address, and an unequivocal statement that you want to opt out of this Arbitration Agreement. If you opt out of this Arbitration Agreement, all other parts of this Agreement will continue to apply to you. Opting out of this Arbitration Agreement has no effect on any other arbitration agreements that you may currently have, or may enter in the future, with us.
- g. **Severability.** Except as provided above, if any part or parts of this Arbitration Agreement are found under the law to be invalid or unenforceable, then such specific part or parts shall be of no force and effect and shall be severed and the remainder of the Arbitration Agreement shall continue in full force and effect.
- h. **Survival of Agreement.** This Arbitration Agreement will survive the termination of your relationship with Enphase.

16. Customer Support Contact Information.

Phone number: (877) 797-4743

Email: https://support.enphase.com/s/contact-us

Web Page: https://support.enphase.com/s/

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Product Registration Form



Yes / No

Failure to complete and return this Product Registration Form does not diminish your warranty rights.

Please return this form to:

Enphase Energy, Inc.

Attn: Product Registration NA Customer Service

1819 S. Cobalt Point Way Meridian, ID 83642 United States of America

(or, you may register on-line at https://enphase.com/en-us/product-registration-en-us) First Name Last Name E-mail Phone Number (Area Code) **Contact Address** Street Address: Street Address (line 2) City__ ____Zip Code __ State/Province Yes / No (If, "Yes", Enphase will use Contact Address of installation: same as Contact Address? Address as Address of Installation) **Address of Installation** Street Address: Street Address (line 2) City_ State/Province _____Zip Code ____ Installer Information Installer Name Installer Contact Info E-mail Phone Number (Area Code) **Product Information** Product SKU (e.g.: IQ7-60-2-US) Number of Units Installed _____ Serial Numbers of Units installed __ Purchased from Purchase Date (MM/DD/YY) Installation Date (MM/DD/YY) _____ Permitted to Operate Date (MM/DD/YY) ☐ I agree to receive critical product information about the registered products at the email and/or contact provided

above. Do you want us to send you product announcements and special offers?



Caution: Photovoltaic system performance predictions calculated by PVWatts[®] include many inherent assumptions and uncertainties and do not reflect variations between PV technologies nor site-specific characteristics except as represented by $\mathsf{PVWatts}^{\circledR}$ inputs. For example, PV modules with better performance are not differentiated within PVWatts $^{(\!R\!)}$ from lesser performing modules. Both NREL and private companies provide more sophisticated PV modeling tools (such as the System Advisor Model at //sam.nrel.gov) that allow for more precise and complex modeling of PV systems.

The expected range is based on 30 years of actual weather data at the given location and is intended to provide an indication of the variation you might see. For more information, please refer to this NREL report: The Error Report.

Disclaimer: The PVWatts[®] Model ("Model") Disclaimer: The PVWattS* Mode (Moder) is provided by the National Renewable Energy Laboratory ("NREL"), which is operated by the Alliance for Sustainable Energy, LLC ("Alliance") for the U.S. Department of Energy ("DoE") and may be used for any purpose whatsoever.

The names DOE/NREL/ALLIANCE shall not be used in any representation, advertising, publicity or other manner whatsoever to endorse or promote any entity that adopts or uses the Model. DOE/NREL/ALLIANCE shall not provide any support, consulting, training or assistance of any kind with regard to the use of the Model or any updates, revisions or new versions of the Model.

YOU AGREE INDEMNIEY YOU AGREE TO INDEMNIFY
DOE/NREL/ALLIANCE, AND ITS AFFILIATES,
OFFICERS, AGENTS, AND EMPLOYEES
AGAINST ANY CLAIM OR DEMAND,
INCLUDING REASONABLE ATTORNEYS'
FEES, RELATED TO YOUR USE, RELIANCE,
OR ADOPTION OF THE MODEL FOR ANY
PURPOSE WHATSOEVER. THE MODEL IS PROVIDED BY DOE/NREL/ALLIANCE 'AS IS' PROVIDED BY DOE/NREL/ALLIANCE 'AS IS'
AND ANY EXPRESS OR IMPLIED
WARRANTIES, INCLUDING BUT NOT
LIMITED TO THE IMPLIED WARRANTIES OF
MERCHANTABILITY AND FITNESS FOR A
PARTICULAR PURPOSE ARE EXPRESSLY
DISCLAIMED. IN NO EVENT SHALL
DOE/NREL/ALLIANCE BE LIABLE FOR AND
SPECIAL INDIPECT OF CONSEQUENTIAL SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER. INCLUDING BUT NOT LIMITED TO CLAIMS ASSOCIATED WITH THE LOSS OF DATA OR PROFITS, WHICH MAY RESULT FROM ANY ACTION IN CONTRACT, NEGLIGENCE OR OTHER TORTIOUS CLAIM THAT ARISES OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE MODEL.

The energy output range is based on analysis of 30 years of historical weather data, and is intended to provide an indication of the possible interannual variability in generation for a Fixed (open rack) PV system at this location.

RESULTS	96,2	211 kWh/Year
Month	Solar Radiation (kWh/m²/day)	AC Energy (kWh)
January	4.89	7,111
February	5.73	7,537
March	6.38	9,186
April	6.12	8,428
May	5.91	8,468
June	6.29	8,741
July	6.34	9,108
August	6.17	8,794
September	5.70	7,852
October	5.32	7,575
November	4.69	6,583
December	4.66	6,829
Annual	5.68	96,212
Location and Station Identificati	on	
Requested Location	18.390953, -66.035356	
Weather Data Source	Lat, Lng: 18.41, -66.02	1.7 mi
Latitude	18.41° N	
Longitude	66.02° W	
PV System Specifications		
DC System Size	61.585 kW	
Module Type	Standard	
Array Type	Fixed (open rack)	
System Losses	14.08%	
A T:14	30	

C System Size 61.585 kW				
Module Type	Standard			
Array Type	Fixed (open rack)			
System Losses	14.08%			
Array Tilt	3°			
Array Azimuth	180°			
DC to AC Size Ratio	1.2			
Inverter Efficiency	96%			
Ground Coverage Ratio	0.4			
Albedo	From weather file			
Bifacial	No (0)			
Monthly Irradiance Loss	Jan Feb Mar Apr May June 0% 0% 0% 0% 0% July Aug Sept Oct Nov Dec 0% 0% 0% 0% 0%			

Performance Metrics	
DC Capacity Factor	17.8%

No. Boleto:

No. Contrato:





Consolidated Mall C-34 Caguas, PR 00726

MARTES 24 SEPTIEMBRE 2024

DEL CARMEN SENIOR LIVING / MARIA R DE JESUS MORALES

1265 C 15 EXT SAN AGUSTIN

Lat,Long: 18.39132 / -66.035119

(787) 710-6073, KATHE.LUCCIA@GMAIL.COM

Consultor Energético: LINDA ARCE, (787) 687-0104 ext 13

OBLETIO DE PUERTO PICO DACO CA-16082-CN

Cotización Sistema Fotovoltaico con Baterías Enphase Energy System con IQBATTERY-5P-1P-NA

Estimado cliente:

SAN JUAN PR 00901

Agradecemos su interés en cotizar con nosotros bajo el Programa de Incentivo de Apoyo Energético 2.0 que está diseñado para respaldar a las pequeñas y medianas empresas (PyMEs) elegibles en la implementación de inversiones relacionadas con energía renovable. Solar Roots, empresa de origen puertorriqueño, tiene una sólida trayectoria de más de 10 años en la industria de energía renovable en Puerto Rico, sin querellas en el DACO.

Su consumo histórico de energía anual es de: 242 kWh

Para reducir este consumo y tener energía durante interrupciones en el servicio le ofrecemos la siguiente solución:

SISTEMA FOTOVOLTAICO

- __ Módulos Bifaciales de 535W Canadian Solar modelo CS6W-535MB-AG. Es líder global con 23 certificaciones a nivel mundial (www.canadiansolar.com). Capacidad Total: 60.455 kWDC.
- Microinversores de 384W marca Enphase modelo IQ8H-240-72-2-US. Mayor producción por placa maximizando la generación de energía (www.enphase.com). Capacidad Total: 43.392 kWAC.
- Sistema Monitoreo IQ Gateway: mide la producción solar y el consumo. Permite ver producción y detectar fallas por cada equipo de generación de energía.
- 1 Rapid Shutdown Initiation Device (RSID) requerido por AEE/LUMA.
- Sistema de anclajes IronRidge: disenó certificado por Ingeniero Estructural para resisitir vientos de huracán categoría 5 (>180 mph). (www.ironridge.com). **Área Requerida: 3390 P/C.**
- Instalación básica de 50' desde el inversor hasta el punto de interconexión. No incluye servicios de instalación de estructuras suplementarias, relocalización de equipos en el techo, reparación de tratamiento de impermeabilización, interruptores de transferencia, reparaciones eléctricas ni instalación de circuitos nuevos.

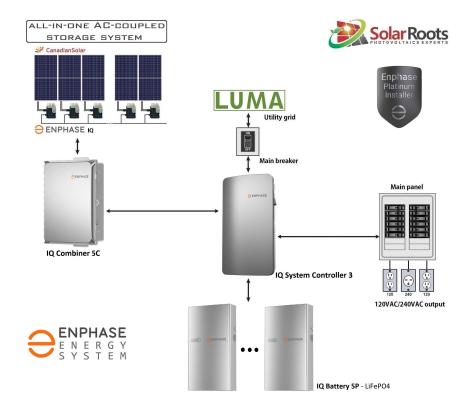
SISTEMA DE BATERÍAS

2

Inversor/Cargador/Batería de litio ferroso (LFP) integrada marca Enphase Energy System modelo IQ Battery 5P con salida 120/240V, un IQ System Controller 3, paneles de distribución y protecciones de sobrecorriente AC, monitoreo remoto de energía almacenada y consumo a través del Enphase APP. Capacidad Total: 7.68 kW-AC [15.36 kW Peak] con 10.0 kWh @ 100% DOD en energía.

Mientras menos cargas se transfieran al sistema de baterías durante una interrupción en el servicio eléctrico, más eficiente será su uso y el del inversor. Requiere reducir las protecciones de sobrecorrientes de los circuitos a un máximo de 20A por cada batería. Las cargas conectadas y encendidas por el sistema de resguardo no deben exceder la capacidad de salida de este.

Incluye materiales eléctricos en cumplimiento con el Código Eléctrico Nacional (NEC), diseño de planos por un Ingeniero Electricista, instalación, certificaciones, trámites de permisos y medición neta ante OGPe y AEE/LUMA.



GARANTÍAS

30	años en los módulos PV Canadian Solar	10 / 15	años en IQ Sys Controller 3 / batería IQ 5P
25	años en los microinversores Enphase	1	año de mantenimiento preventivo y labor
5	años en desperfectos de instalación	5	años en IQ Gateway

Garantías según manufactureros. Solar Roots no será responsable de daños causados al sistema por desastres naturales, robo, fuego o vandalismo. Alteraciones o abuso del sistema conllevará la cancelación de las garantías.

CONSUMO DE ENERGÍA FAMILIAR

86,976 Consumo anual d	e energía según factura	87,840 Producción de energía anual del PV
Costo detallado PVS	Costo detallado BSS	
\$127,000	\$13,995	
PRECIO (PVS + BSS)	INCENTIVO (requier	e aprobación según las Guías o las regulaciones del Programa)
\$140,995	\$50,000	

ACEPTACION DEL CLIENTE

Firme la línea debajo y envíe por correo electrónico a servicio@solarrootspr.com si acepta la cotización ofrecida. Una vez aceptada, le enviaremos el contrato de servicio para su firma.

model cliente

Firma del consultor energético

27/09/2024

Fecha

25 septiembre 2024

Fecha



Appendix 4: EPA's Published Summary of Nonattainment Areas Population Exposure Report & Status of Puerto Rico Designated Areas EPA's Published Summary of Nonattainment Areas Population Exposure Report & Status of Puerto Rico Designated Areas



You are here: EPA Home > Green Book > Summary Nonattainment Area Population Exposure Report

Summary Nonattainment Area Population Exposure Report

Data is current as of June 30, 2025

Ordered by state(s)

The NO_2 nonattainment area became a maintenance area on September 22, 1998. All Carbon Monoxide areas were redesignated to maintenance areas as of September 27, 2010. The 8-hour Ozone (1997) standard was revoked on April 6, 2015 and the 1-hour Ozone (1979) standard was revoked on June 15, 2005.

Download National Dataset: dbf | xls | Data dictionary (PDF)

State(s)	General Area Name			2010) Population	on in 1000)s (area	count)			
State(s)	(see note)	8-Hour Ozone (2015)	8-Hour Ozone (2008)	PM-2.5 (2012)	PM-2.5 (2006)	PM-2.5 (1997)	PM-10 (1987)	SO ₂ (2010)	SO ₂ (1971)	Lead (2008)	Lead (1978)
AK	Fairbanks				87(1)						
AZ	Douglas/Paul Spur (Cochise County)						17(1)				
AZ	Hayden/Miami						26(2)	20(2)	5(1)	5(1)	
AZ	Nogales						30(1)	(-)	- (-)		
AZ	Phoenix-Mesa	3,945(1)	3,850(1)				3,853(1)				
AZ	Rillito (Pima County)						1(1)				
AZ	West Pinal				52(1)		283(1)				
AZ	Yuma	87(1)					101(1)				
CA	Amador and Calaveras Cos (Central Mountain Cos)	84(2)	46(1)				, ,				
CA	Chico	220(1)	220(1)								
CA	Imperial County	175(1)	175(1)	154(1)	154(1)						
CA	Los Angeles- South Coast Air Basin	15,704(3)	15,723(3)	15,716(1)	15,716(1)	15,716(1)				9,437(1)	
CA	Mariposa and Tuolumne Cos (Southern Mountain Cos)	74(2)	18(1)								
CA	Mono County						0(1)				
CA	Nevada County (Western Part)	82(1)	82(1)				` .				
CA	Owens Valley						7(1)				
	Plumas County			6(1)							
CA	Sacramento Metro	2,240(1)	2,241(1)		2,206(1)						
CA	San Diego	3,077(1)	3,095(1)								
CA	San Francisco- Bay Area	6,969(1)	6,973(1)		6,971(1)						

State(s)	General			2010	Populati	on in 1000)s (area	count)			
, ,	Area Name (see note)	8-Hour Ozone (2015)	8-Hour Ozone (2008)	PM-2.5 (2012)	PM-2.5 (2006)	PM-2.5 (1997)	PM-10 (1987)		SO ₂ (1971)	Lead (2008)	Lead (1978)
CA	San Joaquin Valley	3,937(2)	3,938(2)	3,842(1)	3,842(1)	3,842(1)	126(1)				
	San Luis Obispo	1(1)	2(1)								
	Searles Valley Southeast						4(1)				
CA	Desert Modified AQMA	1,292(2)	1,294(2)				495(2)				
CA	Tuscan Buttes	0(1)	0(1)								
CA	Ventura County	821(1)	823(1)								
CA	Yuba City	0(1)									
	Denver- Boulder- Greeley-Ft. Collins- Loveland	3,331(1)	3,330(1)								
СТ	Greater Connecticut	1,629(1)	1,629(1)								
DC- MD- VA	Washington	5,136(1)									
GU	Piti-Cabras							6(1)	1(1)		
	Tanguisson Power Plant								1(1)		
	Muscatine County							30(1)			
	Pocatello						1(1)				
WI	Chicago- Joliet-Napier	9,075(1)									
IN	Fort Wayne- Huntington- Auburn							21(1)			
	Salina									0(1)	
KY	Henderson- Webster Counties							7(1)			
	Louisville	876(1)									
TΛ	Evangeline Parish							0(1)			
LA	New Orleans							36(1)			
MA-	Boston- Worcester- Manchester		17(1)								
	Baltimore	2,663(1)	2,663(1)					990(1)			
МІ	Allegan County	47(1)	<i>y</i> (-)					(-)			
	Benton Harbor	157(1)									
МІ	Detroit-Ann Arbor	, ,						306(2)			
MI	Muskegon	147(1)									
	Minneapolis- St. Paul									9(1)	

State(s)	General			2010	Populati	on in 1000	Os (area	count)			
State(s)	Area Name (see note)	8-Hour Ozone (2015)	8-Hour Ozone (2008)	PM-2.5 (2012)	PM-2.5 (2006)	PM-2.5 (1997)	PM-10 (1987)	SO ₂ (2010)	SO ₂ (1971)	Lead (2008)	Lead (1978)
MO	Iron, Dent, and Reynolds Counties									0(1)	
MO	New Madrid County							0(1)			
MO-IL	St. Louis Billings/Laurel	2,488(1)							7(1)	5(1)	3(1)
MT	Lame Deer						1(1)		,(1)		
МТ	Polson (Lake County)						4(1)				
МТ	Ronan (Lake County)						3(1)				
NV	Las Vegas	1,892(1)									
NY	Jamestown		135(1)								
NY	St. Lawrence County		Ì					12(1)			
NY-NJ- CT	New York-N. New Jersey- Long Island	20,217(1)	20,217(1)								
ОН	Canton- Massillon									6(1)	
ОН	Cleveland- Akron-Elyria	2,780(1)									
	Klamath Falls				47(1)						
PA	Clearfield and Indiana Counties							93(1)			
PA	Lancaster		519(1)								
DΛ	Pittsburgh- New Castle		2,356(1)	1,223(1)	21(1)	21(1)		20(2)	5(1)	18(1)	
	Reading		411(1)							49(2)	
PA	Warren County							18(1)			
PA-NJ	Allentown- Bethlehem- Easton		712(1)								
PA-NJ- DE-	Philadelphia- Wilmington-	7,437(1)	7,634(2)								
	Atlantic City									22(1)	
PR PR	Arecibo Guayama- Salinas							23(1)		32(1)	
PR	San Juan							275(1)			
TN	Johnson City- Kingsport-							15(1)			
TX	Bristol Dallas-Fort	6,202(1)	6,280(1)								
	Worth Fairfield		, ()					4(1)			
TX	Fairneid Houston-Sugar Land-Baytown	5,773(1)	5,892(1)					7(1)			
	Howard County							0(1)			

Stato(s)	General			2010	Populati	on in 1000)s (area	count)			
State(s)	Area Name (see note)	8-Hour Ozone (2015)	8-Hour Ozone (2008)	PM-2.5 (2012)	PM-2.5 (2006)	PM-2.5 (1997)		SO ₂ (2010)	SO ₂ (1971)	Lead (2008)	Lead (1978)
1 1 X	Hutchinson County							15(1)			
	Mount Pleasant							0(1)			
1 I X	Navarro County							2(1)			
	San Antonio	1,715(1)									
TX	Tatum							2(1)			
	El Paso-Las Cruces	813(1)					652(2)				
	Provo	516(1)			518(1)						
	Salt Lake City	1,616(1)			1,665(1)				1,030(1)		
	Tooele County								58(1)		
	Uinta Basin	47(1)									
	Giles County							0(1)			
	Milwaukee- Racine	1,648(1)									
WI	Sheboygan	68(1)									
	Parkersburg- Marietta							4(1)			
	Upper Green River Basin		11(1)								
			20	010 Popul	ation in 1	000s (are:	a count)	by Pol	lutant		1
Total E	stimated 2010					,					
Nonatt	pulation in ainment Areas (1000's)	8-Hour Ozone (2015)	8-Hour Ozone (2008)	PM-2.5 (2012)	PM-2.5 (2006)	PM-2.5 (1997)		SO ₂ (2010)	SO ₂ (1971)	Lead (2008)	Lead (1978)
	s All Criteria ants: 121,102	114,981 (46)	90,288 (34)	20,942 (5)	31,280 (11)	19,579 (3)	5,605 (20)	1,900 (28)	1,106 (7)	9,561 (11)	3 (1)

The Summary Population Exposure Report is a summary of the population living in an area that is in nonattainment for at least one of the NAAQS.

Area Name:

The "State(s) Area Name" column contains a common or general name for the nonattainment areas on the row, but may not reflect the exact name of any area on the row. This column cannot be exact since the nonattainment area for one pollutant may not contain the same counties, cities, or states as the nonattainment area for another pollutant on the same row. The abbreviations listed in the "State(s)" column reflect all states identified in row. However, some states on a row may be nonattainment for some pollutants and not for others in the general area. A multi-state area with states that have not all been redesignated to maintenance is counted as a nonattainment area until all of the states in the area are redesignated, with the whole area population displayed.

Discover.	Connect.	Ask.
		Follow.

You are here: EPA Home > Green Book > National Area and County-Level Multi-Pollutant Information > Puerto Rico Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants

Puerto Rico Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants

Data is current as of June 30, 2025

Listed by County, NAAQS, Area. The 8-hour Ozone (1997) standard was revoked on April 6, 2015 and the 1-hour Ozone (1979) standard was revoked on June 15, 2005.

* The 1997 Primary Annual PM-2.5 NAAQS (level of 15 μg/m³) is revoked in attainment and maintenance areas for that NAAQS. For additional information see the PM-2.5 NAAQS SIP Requirements Final Rule, effective October 24, 2016. (81 FR 58009)

Change the State:	
PUERTO RICO V	GO

Important N	lotes		Download	oad National Da	ataset: dbf ɔ		ata dictiona	.ry (PDF)
County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Classification	Whole or/ Part County	Population (2010)	State/ County FIPS Codes
PUERTO 1	RICO	•						
Municipio		Arecibo, PR	11 12 13 14 15 16 17 18 192021 22232425	//		Part	32,185	72/013
Maniainia	Sulfur Dioxide (2010)	San Juan, PR	1819202122232425	//		Part	22,921	72/021
Catano Municipio	Sulfur Dioxide (2010)	San Juan, PR	1819202122232425	//		Whole	28,140	72/033
Guaynabo Municipio	PM-10 (1987)	Mun. of Guaynabo, PR	929394959697989900010203040506070809	02/11/2010	Moderate	Part	90,470	72/061
Municipio	(2010)	San Juan, PR	1819202122232425	//		Part	23,802	72/061
Salinas Municipio	Sulfur Dioxide (2010)	Guayama- Salinas, PR	1819202122232425	//		Part	23,401	72/123
San Juan Municipio	Sulfur Dioxide (2010)	San Juan, PR	1819202122232425	//		Part	147,963	72/127
Toa Baja Municipio	Sulfur Dioxide (2010)	San Juan, PR	1819202122232425	//		Part	52,441	72/137
Important N	lotes							

Discover. Connect. Ask.

Status of Puerto Rico Designated Areas

Puerto Rico Areas by NAAQS

NOTE: As of 03/12/2021, these reports are no longer being updated. For the latest information, see the SIP Status Tools.

Jump to Puerto Rico section for: <u>CO (1971) Lead (1978) Lead (2008) NO2 (1971) Ozone-1Hr (1979) Ozone-8Hr (1997) Ozone-8Hr (2008) Ozone-8Hr (2015) PM-10 (1987) PM-2.5 (1997) PM-2.5 (2006) PM-2.5 (2012) SO2 (1971) SO2 (2010)</u>

Puerto	Puerto Rico CO (1971) Areas Return to map												
No designated areas for this pollutant.													
Puerto Rico Lead (1978) Areas Return to map Top of page													
	nated areas												
Puerto	Rico Lea	d (2008)	Areas <u>F</u>	Return to I	<u>тар</u>	Top of page							
Click on the Area name to view SIP Require d Element s	Status	Designa tion Date	Classifica tion	2010 Populati on (state por tion)	Meet s NAA QS Basis	Design Value Annual (µg/m³) (entire are a)	Meets NAAQS	SIP Requirem ents Original/ Approved	Clean Air Determin ation Citation Effective Date Click to view FR notice	Redesign ation Request Date	Redesigna tion Citation Effective Date Click to view FR notice		
Arecib o	Nonattain ment	12/31/2 011		32,185	201 7- 201 9	0.18	No	6/6					
Puerto	Rico NO2	2 (1971)	Areas <u>I</u>	Return to	mapTo	p of page							
No desig	nated areas	for this pol	lutant.										
Puerto	Rico Ozo	ne-1Hr ((1979) Ar	eas <u>Re</u>	turn to	<i>тар</i> Тор о	f page						

No designated areas for this pollutant.

Puerto Rico Ozone-8Hr (1997) Areas Return to map Top of page

No designated areas for this pollutant.

Puerto Rico Ozone-8Hr (2008) Areas Return to map Top of page

No designated areas for this pollutant.

Puerto Rico Ozone-8Hr (2015) Areas Return to map Top of page

No designated areas for this pollutant.

Puerto Rico PM-10 (1987) Areas Return to map Top of page

Click on the Area name to view SIP Require d Element s Area		Designa tion Date	Classifica tion		Meet s NAA QS Basis	Average Estimate d Exceeda nces (est. exc.) (entire are a)	Meets NAAQS	SIP Requirem ents Original/ Approved	Click to view	Redesign ation Request Date	Redesigna tion Citation Effective Date Click to view FR notice
Guayn abo County	Maintena nce	11/15/1 990	Moderat e	90,470	201 7- 201 9		Insuffic ient Data	3/3		03/31/20 09	02/11/20 10 <u>75 FR</u> <u>1543</u>

Puerto Rico PM-2.5 (1997) Areas Return to map Top of page

No designated areas for this pollutant.

Puerto Rico PM-2.5 (2006) Areas Return to map Top of page

No designated areas for this pollutant.

Puerto Rico PM-2.5 (2012) Areas Return to map Top of page

No designated areas for this pollutant.

Puerto Rico SO2 (1971) Areas Return to map Top of page

No designated areas for this pollutant.

Puerto Rico SO2 (2010) Areas Return to map Top of page

Click on the Area name to view SIP Require d Element s	Status	Designa tion Date	Classifica tion	2010 Populati on (state por tion)	Meet s NAA QS Basis	3 Year 1-Hour Design Value (ppb) (entire are a)	Meets NAAQS	SIP Requirem ents Original/ Approved	Clean Air Determin ation Citation Effective Date Click to view FR notice	Redesign ation Request Date	Redesigna tion Citation Effective Date Click to view FR notice
Guaya ma- Salinas	Nonattain ment	04/09/2 018		23,401	201 7- 201 9		No Data	6/0			
<u>San</u> <u>Juan</u>	Nonattain ment	04/09/2 018		275,267	201 7- 201 9		No Data	6/0			

We have made our best effort to ensure that the data contained in these reports is accurate. We note that there may be brief delays in updating the reports as we receive new state submissions and we take rulemaking action on plans. In order to assist us in providing accurate information, we request that you contact us by clicking on the "Contact Us" link near the top of this page with any comments regarding or corrections to the posted information, including concerns about whether the entries reflect the most recent status.

Current and historical design value data can be found on the <u>EPA Air Quality Design Values website</u> and the <u>EPA Green Book</u> contains comprehensive nonattainment area, designation status, and historical information.

The level of the 1-hour NAAQS for sulfur dioxide is 75 parts per billion (ppb) calculated as the 3-year average of the 99th percentile of the annual distribution of daily maximum 1-hour average concentrations.



Appendix 5: RADON Memo to file and supporting documentations





Memorandum to File

Date: July 1, 2025

1

From: Patricia Carmenatty Santiago

Environmental Specialist

Behar Ybarra & Associates LLC

CDBG-DR Program

Electrical Power Reliability and Resilience Program (ER2)

Puerto Rico Department of Housing

Application Number: PR-ESP-00264

Project: DEL CARMEN SENIOR LIVING CORP

Re: Justification for the Infeasibility and Impracticability of Radon Testing

After reviewing Application Number PR-ESP-00264 under the Electrical Power Reliability and Resilience Program (ER2), administered by the Puerto Rico Department of Housing (**PRDOH**), to complete the property's contamination analysis in accordance with 24 C.F.R. § 50.3(i) and 24 C.F.R. § 58.5(i), we have determined that testing the property's radon levels is infeasible and impracticable.

Per the U.S. Department of Housing and Urban Development's (**HUD**) CPD Notice 23-103, the recommended best practices and alternative options for radon testing are infeasible and impracticable in this case due to the following reasons:

 As required by the CPD Notice 23-103, the scientific data reviewed in lieu of testing must consist of a minimum of ten documented test results over the previous ten years. If there are less than ten documented results over this period, it is understood that there is a lack of scientific data. The latest report

CDBG-DR Program
Electrical Power Reliability and Resilience Program (ER2)
Memorandum to File
Infeasibility and Impracticability of Radon Testing
Page 2 of 3

for radon testing in Puerto Rico was prepared in 1995 by the U.S. Department of the Interior in Cooperation with the U.S. Environmental Protection Agency. No other completed studies and reports on radon testing are available in Puerto Rico.

- There is no available science-based or state-generated information for Puerto Rico for the last ten years that can be used to determine whether the project site is in a high-risk area. The Department of Health and Human Services, Centers for Disease Control and Prevention (CDC), National Environmental Public Health Tracking, and Radon Testing map do not include Puerto Rico data.
- There are only two (2) licensed professionals in Puerto Rico who can conduct radon testing using the American National Standards Institute/American Association of Radon Scientists and Technologists (ANSI/AARST) testing standards, which makes it difficult, time-consuming, and highly expensive to coordinate and secure a site visit for the contamination evaluation.
- Do-it-yourself (DIY) radon test kits are known to be unreliable in assuring and controlling the quality of the test results; they are not readily available in Puerto Rico, and the cost and time required for purchasing and sending them for analysis are unreasonable when weighed against the results' reliability and the need for prompt results.
- Local authorities in Puerto Rico do not have the specialized radon monitoring equipment or trained staff needed to conduct the radon testing analysis and ensure proper quality control and quality assurance practices are adhered to.
 We also do not have a radiation laboratory certified for radon testing.
- Local authorities in Puerto Rico do not have the specialized radon monitoring equipment or trained staff needed to conduct the radon testing analysis and ensure proper quality control and quality assurance practices are adhered to.
 We also do not have a radiation laboratory certified for radon testing.

CDBG-DR Program
Electrical Power Reliability and Resilience Program (ER2)
Memorandum to File
Infeasibility and Impracticability of Radon Testing
Page 3 of 3

As part of the evaluation for this determination, PRDOH sent information requests to six (6) local agencies at the state and federal levels. We received responses from the following agencies:

- United States Geological Survey;
- Centers for Disease Control and Prevention;
- Puerto Rico Department of Health; and
- United States Environmental Protection Agency.

The agencies mentioned above confirmed the lack of scientific data on Radon testing for Puerto Rico and the technical difficulties that we face to comply with HUD's Radon testing requirement. For the above-mentioned reasons, Radon testing is infeasible and impracticable for this property, and no further consideration of Radon is needed for the environmental review.



August 20, 2024

Mrs. Carmen R. Guerrero Pérez Caribbean Environmental Protection Division City View Plaza II - Suite 7000 #48 Rd. 165 km 1.2 Guavnabo, PR 00968-8069

Vía email: guerrero.carmen@epa.gov

RE: Request for Information regarding available data on radon testing and levels within Puerto Rico

The Puerlo Rico Department of Housing (PRDOH) kindly requests your assistance in gathering data, information, or reports related to radon testing in Puerlo Rico, as this information is crucial for our compliance with the U.S. Department of Housing and Urban Development (HUD) Community Planning and Development (CPD) Notice CDP-23-103.

Community Planning and Development (CPD) Notice CDP-23-103. This Notice emphasizes the importance of radon testing and milligation in ensuring safe living environments, particularly in HUD-assited properties. PRDOH, as the grantee of the Community Development Block Grant for Disaster Recovery and Milligation (CDBG-DR/MII), is responsible for ensuring compliance with environmental requirements under CDBG-DR/MII programs. To fulfill our obligations under this Notice, we must compile comprehensive and up-to-date information on radon levels, testing practices, and any milligation efforts within the Islands of Puerto Rico. Rico.

Specifically, we are seeking for possible availability of the following information

 $\underline{Radon\ testing\ data} - Results\ from\ radon\ testing\ conducted\ within\ your\ agency's\ purview,\ including\ details\ on\ location,\ testing\ methods,\ and\ recorded\ radon\ levels.$

Barbosa Ave. #606, Building Juan C. Cordero Davila, Rio Piedras, PR 00918 | PO Box 21365 San Juan, PR 00928-1365 Tel. (787) 274-2527 | www.nivenda.pr.gov



August 20, 2024

Dr. Silvina Cancelos College of Engineering
University of Puerto Rico – Mayagüez Campus 259 Norte Blvd. Alfonso Valdés Cobián Mayagüez, Puerto Rico

Vía email: silvina.cancelos@upr.edu

RE: Request for Information regarding available data on radon testing and levels within Puerto Rico

The Puerto Rico Department of Housing (PRDOH) kindly requests your assistance in gathering data, information, or reports related to radon testing in Puerto Rico, as this information is crucial for our compliance with the U.S. Department of Housing and Urban Development (HUD) Community Planning and Development (CPD) Notice CDP-23-103.

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Specifically, we are seeking for possible availability of the following information:

Radon testing data – Results from radon testing conducted within your agency's purview, including details on location, testing methods, and recorded radon levels.

Barbosa Ave. #606 , Building Juan C. Cordeto Dávila, Río Piedras, PR 00918 | PO Box 21365 San Juan, PR 00928-1365 Tel. (767) 274-2527 | https://www.nienda.pr.gov

CDBG-DR/MIT Program
Request for Information in relation with HUD CPD-23-103 for Puerto Rico
Page 2 / 2

Reports and assessments – Any reports, studies, or assessments your agency has produced or commissioned that address radon testing or miligation.

<u>Policies and quidelines</u> – Information or any policy, guideline, or protocol your agency follows concerning radon testing, exposure limits, or mitigation.

<u>Historical data</u> – if available, historical data or trends in radon levels within the regions you monitor that may impact HUD-assisted housing.

This information is vital to ensure that our radon management strategies are practical and compliant with federal requirements, if some of this information may be sensitive or confidential, we are prepared to discuss any necessary agreements or protocols for sharing this data securely.

Please let us know if you require additional details or have any questions regarding this request. We would greatly appreciate your response by September 15, 2024, so we can incorporate this data into our ongoing compliance efforts.

Thank you in advance for your cooperation and support. We look forward to working together on this critical initiative.

llmn (rez Rodfiguez, Esq.

CDBG-DR/MIT Program
Request for Information in relation with HUD CPD-23-103 for Puerto Rico
Page 2 / 2

Reports and assessments – Any reports, studies, or assessments your agency has produced or commissioned that address radon testing or mitigation.

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Please let us know if you require additional details or have any questions regarding this request. We would greatly appreciate your response by September 15, 2024, so we can incorporate this data into our ongoing compliance efforts.

Thank you in advance for your cooperation and support. We look forward to working together on this critical initiative.

Sincerely.

My Rodríguez, Esq.

Dr. Carlos Marín, carlos,marin3@upr.edu



August 20, 2024

Dr. Jessica Irizarry Director Office of Island Affairs U.S. Centers for Disease Control and Prevention 1324 Cll Canada, San Juan, 00920 Guaynabo, PR 00968-8069

Via email: OIA@cdc.gov

RE: Request for Information regarding available data on radon testing and levels within Puerto Rico

The Puerto Rico Department of Housing (PRDOH) kindly requests your assistance in gathering data, information, or reports related to radon testing in Puerto Rico, as this information is crucial for our compliance with the U.S. Department of Housing and Urban Development (HUD) Community Planning and Development (CPD) Notice CDP-23-103.

This Notice emphasizes the importance of radon testing and mitigation in Inis Notice emphasizes the importance of radon testing and miligation in ensuring safe living environments, particularly in HUD-assisted properties. PRDOH, as the grantee of the Community Development Block Grant for Biosaster Recovery and Miligation (CDBG-DR/MIT), is responsible for ensuring compliance with environmental requirements under CDBG-DR/MIT programs. To fulfill our obligations under this Notice, we must compile comprehensive and up-to-date information on radon levels, testing practices, and any miligation efforts within the islands of Puerto Rico.

Specifically, we are seeking for possible availability of the following

 $\frac{Radon\ testing\ data}{Results} - Results\ from\ radon\ testing\ conducted\ within\ your\ agency's\ purview,\ including\ details\ on\ location,\ testing\ methods,\ and\ recorded\ radon\ levels.$

Barbosa Ave. #606 , Building Juan C. Cordero Dávila, Río Piedras, PR 00918 | PO Box 21365 San Juan, PR 00928-1365 Tel. (787) 274-2527 | www.vijenda.pr.gov



August 20, 2024

Mrs. Anais Rodriguez Secretary
Puerto Rico Department of Natural Resources Carretera 8838, km, 6.3, Sector El Cinco, Río Piedras San Juan, PR 00926

Via email: anais.rodriquez@drna.pr.gov

RE: Request for Information regarding available data on radon testing

The Puerto Rico Department of Housing (PRDOH) kindly requests your assistance in gathering data, information, or reports related to radon testing in Puerto Rico, as this information is crucial for our compliance with the U.S. Department of Housing and Urban Development (HUD) Community Planning and Development (CPD) Notice CDP-23-103.

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Specifically, we are seeking for possible availability of the following

Radon testing data – Results from radon testing conducted within your agency's purview, including details on location, testing methods, and recorded radon levels.

Reports and assessments – Any reports, studies, or assessments your agency has produced or commissioned that address radon testing or mitigation.

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CDBG-DR/MIT Program
Request for Information in relation with HUD CPD-23-103 for Puerto Ric
Page 2 /

agency has produced or commissioned that address radon testing or mitigation.

<u>Policies and guidelines</u> – Information or any policy, guideline, or protocol your agency follows concerning radon testing, exposure limits, or mitigation.

<u>Historical data</u> – if available, historical data or trends in radon levels within the regions you monitor that may impact HUD-assisted housing.

This information is vital to ensure that our radon management strategies are practical and compliant with federal requirements. If some of this information may be sensitive or confidential, we are prepared to discuss any necessary agreements or protocols for sharing this data securely.

Please let us know if you require additional details or have any questions regarding this request. We would greatly appreciate your response by September 15, 2024, so we can incorporate this data into our ongoing compliance efforts.

Thank you in advance for your cooperation and support. We look forward to working together on this critical initiative.

D. Rodríguez, Esq

CD8G-DR/MIT Pro Request for Information in relation with HUD CPD-23-103 for Puerli

<u>Policies and guidelines</u> – Information or any policy, guideline, or protocol your agency follows concerning radon testing, exposure limits, or mitigation.

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Please let us know if you require additional details or have any questions regarding this request. We would greatly appreciate your response by September 15, 2024, so we can incorporate this data into our ongoing compliance efforts.

Thank you in advance for your cooperation and support. We look forward to working together on this critical initiative.

William O. Rodríguez Rodríguez, Esq.

Secretary

Mr. Luis Márquez, <u>secretariaaire@drna.pr.gov</u> Eng. Amarilys Rosario, <u>aire@drna.pr.gov</u> Mrs. Elid Ortega, <u>eortega@drna.pr.gov</u>



August 20, 2024

Dr. Carlos R. Mellado López Secretary Puerto Rico Department of Health PO Box 70184 San Juan, PR 00936-8184

Vía email: drcarlos.mellado@salud.pr.gov

RE: Request for Information regarding available data on radon testing nd levels within Puerto Rico

The Puerto Rico Department of Housing (PRDOH) kindly requests your assistance in gathering data, information, or reports related to radon testing in Puerto Rico, as this information is crucial for our compliance with the U.S. Department of Housing and Urban Development (HUD) Community Planning and Development (CPD) Notice CDP-23-103.

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Specifically, we are seeking for possible availability of the following information

Radon Iestling data – Results from radon testing conducted within your agency's purview, including details on location, testing methods, and recorded radon levels.

Reports and assessments – Any reports, studies, or assessments your agency has produced or commissioned that address radon testing or

Barbosa Ave. #606, Building Juan C. Cordero Dávila, Río Piedras, PR 00918 | PO Box 21365 San Juan, PR 00928-1365 Tel. (787) 274-2527 | https://doi.org/10.1007/j.com/noses/21365 San Juan, PR 00928-1365



August 20, 2024

Mrs. Holly Weyers Regional Director, Southeast – Puerto Rico US Geological Survey 3916 Sunset Ridge Road Raleigh, NC 27607

Vía email: hsweyers@usgs.gov

RE: Request for Information regarding available data on radon testing and levels within Puerto Rico

The Puerto Rico Department of Housing (PRDOH) kindly requests your assistance in gathering data, information, or reports related to radon testing in Puerto Rico, as this information is crucial for our compliance with the U.S. Department of Housing and Urban Development (HUD) Community Planning and Development (CPD) Notice CDP-23-103.

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Specifically, we are seeking for possible availability of the following

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Reports and assessments - Any reports, studies, or assessments your agency has produced or commissioned that address radon testing or mitigation.

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CDBG-DR/MIT Program
Request for Information in relation with HUD CPD-23-103 for Puerto Roo

<u>Policies and guidelines</u> – Information or any policy, guideline, or protocol your agency follows concerning radon testing, exposure limits, or mitigation.

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This information is vital to ensure that our radon management strategies are practical and compliant with federal requirements. It some of this information may be sensitive or confidential, we are prepared to discuss any necessary agreements or protocols for sharing this data securely.

Please let us know if you require additional details or have any questions regarding this request. We would greatly appreciate your response by September 15, 2024, so we can incorporate this data into our ongoing compliance efforts.

Thank you in advance for your cooperation and support. We look forward to working together on this critical initiative.

Sincerely.

Ladriguez Rodriguez, Esq.

Mr. Raúl Hernández Doble, rhernandez2@salud.pr.gov

CDBG-DR/MIT Program
Request for Information in relation with HUD CPD-23-103 for Puerto Rico
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Thank you in advance for your cooperation and support. We look forward to working together on this critical initiative

Sincerely

Ariauez Rodriguez, Esq.

Mr. R. Randall Schumann, rschumann@usgs.gov

From: Charp, Paul (CDC/NCEH/DEHSP) <pac4@cdc.gov>

Sent: Tuesday, September 3, 2024 6:36 AM

To: Miranda, Sandra (CDC/PHIC/DPS); Irizarry, Jessica (CDC/PHIC/DPS); Rzeszotarski, Peter

(CDC/NCEH/DEHSP); Vinson, D. Aaron (CDC/NCEH/DEHSP)

Cc: Kostak, Liana (CDC/PHIC/DPS); Vazquez, Germaine (CDC/NCEH/DEHSP)

Subject: RE; REHi: Puerto Rico Request for Information- Randon testing and levels

Good morning, Sandra and others,

In response to the request from Mr. William Rodriguez of the Department of Housing, Government of Puerto Rico, I have reviewed all the available data within the CDC National Environmental Public Health Tracking Network system for data related to radon in Puerto Rico. In addition to the tracking data available on the internet, I also reached out to Mr. Aaron Vinson of the NCEH Tracking Branch.

I was not able to find any data in the CDC systems and this was confirmed by Mr. Vinson. We also reached out the US Environmental Protection Agency who indicated they had no radon data in their systems. Please relay this information to Mr. Rodríguez in your response to his requests

If you have any additional questions, please contact me.

Thank you and best regards,

Paul A. Charp, Ph.D., Fellow, HPS
Senior Health Physicist
Emerging Environmental Hazards and Health Effects Branch (EEHHEB)
Division of Environmental Health Science and Practice (DEHSP)
National Center for Environmental Health (NCEH)
Centers for Disease Control and Prevention (CDC)
pcharp@cdc.gov
770-488-0723 office
404.388.0614 Cell



From: Schumann, R. Randall <rschumann@usgs.gov>

Sent: Wednesday, August 21, 2024 4:39 PM

To: Melanie Medina Smaine <mmedina@vivienda.pr.gov>; Weyers, Holly S <hsweyers@usgs.gov> Cc: Elaine Dume Mejia <Edume@vivienda.pr.gov>; Luz S Colon Ortiz <Lcolon@vivienda.pr.gov>; Aldo A.

Rivera-Vazquez <aarivera@vivienda.pr.gov>

Subject: RE: Request for Information- Radon testing and levels

Dear Ms. Medina Smaine,

In the early 1990s the U.S. Geological Survey (USGS) conducted geologic assessments of radon potential for all 50 states and the territories of Guam and Puerto Rico, in collaboration with the U.S. EPA. I conducted the geologic radon potential assessment for Puerto Rico. The PDF file of the report is too large to attach to this message but it can be obtained at https://pubs.usgs.gov/of/1993/0292k/report.pdf. The USGS did not conduct indoor radon testing and we did not conduct field studies associated with this assessment; it was based on existing data. Mr. David Saldana of the Puerto Rico Department of Health kindly provided us with data for 610 homes that were tested for indoor radon by his agency between 1993 and 1995, which are summarized in the report. I am not aware of any other radon-related geologic studies conducted in the Commonwealth of Puerto Rico by the U.S. Geological Survey.

Best regards,

R. Randall Schumann
Scientist Emeritus
U.S. Geological Survey
Geociences and Environmental Change Science Center
Denver, Colorado, USA
rschumann@usgs.gov
https://www.usgs.gov/staff-profiles/r-randall-schumann

From: Raul Hernandez Doble <rhernandez2@salud.pr.gov>

Sent: Wednesday, August 21, 2024 2:13:31 PM

To: Melanie Medina Smaine <mmedina@vivienda.pr.gov>; Dr. Carlos Mellado <drcarlos.mellado@salud.pr.gov> Cc: Elaine Dume Mejia <Edume@vivienda.pr.gov>; Luz S Colon Ortiz <Lcolon@vivienda.pr.gov>; Aldo A. Rivera-Vazquez <aarivera@vivienda.pr.gov>; Mayra Toro Tirado <mtoro@salud.pr.gov>

Subject: RE: [EXTERNAL] Request for Information- Randon testing and levels

Good afternoon, Ms. Medina

I regret to inform that we do not have any recent information on radon testing, since we do not have a certified radiation laboratory certified for radon testing. There are companies that sell test kits available online that can be done and mailed to a testing laboratory. There are also lists of radon contractors and these companies that process radon testing cartridges with instructions, on the Environmental Protection Agency Indoor air Quality web page. The last radon study in Puerto Rico done by the PR Department of Health was done on the year 1993.

Raul Hernandez Doble
Director, Seccion Salud Radiologica
Division de Salud Ambiental
Secretaria Auxiliar para la Vigilancia y la Proteccion de la Salud Publica
rhernandez2@salud.gov.pr

Phone: (787)765-2929 ext. 3210

From: Reyes, Brenda < Reyes. Brenda@epa.gov>
Sent: Wednesday, September 18, 2024 11:48 AM

To: Cesar O Rodriguez Santos <cesarrodriguez@drna.pr.gov>; Maritza Rosa Olivares <maritzarosaolivares@drna.pr.gov>;

Silvina Cancelos Mancini <silvina.cancelos@upr.edu>; Melanie Medina Smaine <mmedina@vivienda.pr.gov>

Cc: Elaine Dume Mejia <Edume@vivienda.pr.gov>; Luz S Colon Ortiz <Lcolon@vivienda.pr.gov>; Aldo A. Rivera-Vazquez

<aarivera@vivienda.pr.gov>; Povetko, Oleg (he/him/his) <Povetko.Oleg@epa.gov>

Subject: RE: Request for Information- Randon testing and levels

Saludos.

La EPA esta trabajando una respuesta a su petición. Se sometió borrador a la directora y el subdirector para su aprobación y firma.

Brenda Reyes Tomassini
Public Affairs
U.S. EPA
Region 2
Caribbean Environmental Protection Division
(787) 977-5869/(787) 977-5865
Mobile: 202-834-1290

From: Silvina Cancelos Mancini < silvina.cancelos@upr.edu>

Sent: Friday, September 6, 2024 15:04

To: Melanie Medina Smaine < mmedina@vivienda.pr.gov >

Cc: Elaine Dume Mejia < Edume@vivienda.pr.gov >; Luz S Colon Ortiz < Lcolon@vivienda.pr.gov >; Aldo A. Rivera-Vazquez

<a href="mailto:Aarivera@vivie

<<u>Reyes.Brenda@epa.gov</u>>; Povetko, Oleg <<u>Povetko.Oleg@epa.gov</u>>

Subject: Re: Request for Information- Randon testing and levels

Estimada Melanie Medina

Quería dejarle saber que recibimos su correo el 21 de agosto al igual que el de Maritza Rosa el pasado 4 de septiembre. Ya las personas involucradas de EPA, junto conmigo y el Dr. Marín estamos al tanto del asunto y estamos trabajando para poder enviarles la información.

Atentamente

Silvina Cancelos Professor Associate Director Mechanical Engineering Department University of Puerto Rico - Mayaguez Call BOX 9000 Mayaguez PR 00680 Tel: 787-832-4040 ext 5956 email: silvina.cancelos@upr.edu





September 23, 2024

VIA EMAIL

William O. Rodríguez Rodríguez, Esq. Secretary
Puerto Rico Department of Housing
Barbosa Ave. 606 Building Juan C. Cordero
San Juan, PR 00917
Email: W.Rodriguez@vivienda.pr.gov

EPA Response to August 20, 2024 request for information of data on radon testing and levels in Puerto Rico

Dear Honorable Secretary Rodríguez Rodríguez

This communication is in response to your letter of August 20, 2024 addressed to the Puerto Rico Department of Natural and Environmental Resources (DNER) and referred to the U.S. Environmental Protection Agency (EPA) regarding available data on radon testing and levels within Puerto Rico

EPA's National Radon Action Plan 2021–2025 sets a goal for the nation to find, fix and prevent high indoor radon levels in 8 million buildings by 2025 and prevent 3,500 lung cancer deaths per year. Under this Plan, leaders from across multiple sectors are working together to plan, guide, and sustain nationwide action to prevent exposure to radon.

Due to the lack of data in Puerto Rico, EPA undertook an investigation in collaboration with the University of Puerto Rico-Mayaguez (UPRM) Campus, Departments of Civil Engineering and Surveying and Mechanical Engineering, to find out if radon presented a problem in Puerto Rico. Up until 2021, the only data we had for Puerto Rico was a 1993-1995 mail-in radon screening study referred to by the U.S. Geological Survey report (USGS, 1995) in which the USGS concluded that several areas of Puerto Rico have the geologic potential to generate indoor radon levels exceeding the EPA Action Level of 4 pC/L (piccouries per liter), perhaps locally reaching very high levels above 50 pC/L, if a house construction and

ventilation allow for soil-gas radon to enter and concentrate within the structure. ¹ According to the USGS report, most of these areas are located in the northwest part of the island. Please note that the actual 1993-1995 study documentation is not available to the EPA.

Typical radon testing technology used in mainland United States (charcoal canisters or electric-powered devices) are impractical in Puerto Rico because of high humidity and power outages. The recovery and rebuilding of communities following the aftermath of 2017 Hurricanes Irms and Maria presented an opportunity to develop radon prevention and mitigation strategies in 2019. Initially, EPA sampled indoor radon air in over 170 single-family residences in the municipalities of San Sebastian, Lares, Ciales, Arecibo, Morovis, Camuy, and Hatillo and later expanded the project to other municipalities such as Rincon, Aguada, Aguadalli, stabela, Questradillas, Barecloneta and Vega Baja. The quality assurance protocols were anchored in American National Standards institute/American Association of Radon Scientists and Technologists (ANSI/AARS) standards of practice (ANSI/AARS) 1939. The sampling was designed in two stages: scoping and confirmatory sampling. The scoping sampling was conducted using Corentium Home (CH) electronic monitors and E-Perm ystems. Locations measuring above the EPA Action Level of 4 pCI/L with CH were measured at the second stage of the sampling using RAD7 and Corentium Pro Continuous Radon Monitors (CRMs). Nationally certified and on sampling professionals led by one such professional from the UPRM conducted confirmatory sampling in the second stage. Also, during the study, the nationally certified radon mitigation professionals inspected several homes with elevated indoor radon levels. Typical radon testing technology used in mainland United States (charcoal canisters or electric-powered levels.

Mapping radon in Puerto Rico proved to be a complicated endeavor given the COVID-19 pandemic in wapping fault in Puter to Nico proved to de Econipactace enceasing general telesconding particular 2020. EPA and UPM continue to work on the project, however, results have not been finalized, and no scientific report has been published yet. Unfortunately, EPA cannot share preliminary data at this time because it contains privileged information. Nevertheless, preliminary data from the study does show homes with levels over 4 pCi/L (EPA Action Level) that might need mitigation to protect the health of their inhabitants.

Although many states have developed laws and regulations governing radon disclosure, certification, and mitigation, Puerto Rico lacks legislation or mandatory radon testing provisions for new construction, remodeling, selling or buying homes. Given this loophole and aiming to answer your request, the EPA can provide information on Best Management Practices for sampling indoor radon in Puerto Rico.

CITY VIEW PLAZA II BUILDING, 7TH FLOOR ROUTE 165 GUAYNABO, PR 00968

If you have any questions or need any additional information, please contact me at 787-977-5865 or guerrero.carmen@epa.gov or have your staff contact Reyes, Brenda at reyes.brenda@epa.gov or (787) 977-5869.

Sincerely,

CARMEN **GUERRERO** PEREZ

Digitally signed by CARMEN GUERRERO PEREZ Date: 2024.09.23 09:41:39 -04'00'

Carmen R. Guerrero Pérez Director

Roberto Mendez, Esq (Acting Secretary, PR Department of Natural and Env. Resources)

Melany Medina: mmedina@vivienda.pr.gov Elaine Dume Mejia: Edume@vivienda.pr.gov Luz S Colon Ortiz: Lcolon@vivienda.pr.gov
Aldo A. Rivera-Vazquez: aarivera@vivienda.pr.gov Cesar O. Rodriguez: cesarrodriguez@drna.pr.gov Marita Rosa Olivares: maritzarosaolivares@drna.pr.gov

¹ Reference: USGS. Geologic Radon Potential of Guam and Puerto Rico, Report 93-292-K, Washington, DC: USGS. Retrieved 9/11/2024, from https://pubs.usgs.gov/of/1993/0292k/report.pdf.



ECHO Reports



Facility Summary

ALBANO DRY CLEANER

1185 CALLE MAXIMO ALOMAR 65TH INF RIO PIEDRAS, SAN JUAN, PR 00929

FRS (Facility Registry Service) ID: 110001661434

EPA Region: 02 **Latitude:** 18.395556 **Longitude:** -66.038611

Locational Data Source: AIRS/AFS **Industries:** Personal and Laundry Services

Indian Country: N

Enforcement and Compliance Summary

Statute	CAA
Compliance Monitoring Activities (5 years)	-
Date of Last Compliance Monitoring Activity	-
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	-
Formal Enforcement Actions (5 years)	-
Penalties from Formal Enforcement Actions (5 years)	-
EPA Cases (5 years)	-
Penalties from EPA Cases (5 years)	-

Regulatory Information

Clean Air Act (CAA): Operating Minor (PR0000007212700099)

Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): No Information

Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Go To Enforcement/Compliance Details

Known Data Problems https://epa.gov/resources/echo-data/known-data-problems

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110001661434					N	18.395556	-66.038611
ICIS-Air	CAA	PR0000007212700099	Minor Emissions	Operating	CAAMACT, CAASIP		N	18.395556	-66.038611

Facility Address

System	Statute Identifier Facility Name		Facility Name	Facility Address	Facility County
FRS		110001661434	ALBANO DRY CLEANER	1185 CALLE MAXIMO ALOMAR 65TH INF RIO PIEDRAS, SAN JUAN, PR 00929	San Juan Municipio
ICIS-Air	CAA	PR0000007212700099	ALBANO DRY CLEANER	C MAXIMO ALOMAR 1185 65TH INF., RIO PIEDRAS, PR 00929	San Juan Municipio

Facility SIC (Standard Industrial Classification) Codes

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	SIC Code	SIC Description	System	Identifier	NAICS Code	NAICS Description
ICIS-Air	PR0000007212700099	7216	Drycleaning Plants, Except Rug	ICIS-Air	PR0000007212700099	812320	Drycleaning and Laundry Services (except Coin-Operated)

Facility Tribe Information

	Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)
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No data records returned

Enforcement and Compliance

Compliance Monitoring History

Statute Source ID System Activity Type Com	mpliance Monitoring Type Lead Agency	Date	Finding (if applicable)

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy

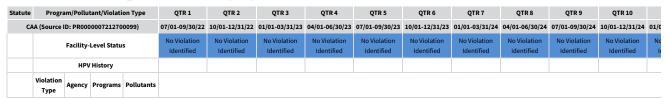
<https://www.epa.gov/compliance/compliance-monitoring-programs> activities or because they are not counted as inspections within EPA's Annual Results

https://www.epa.gov/enforcement/enforcement-data-and-results.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
CAA	PR0000007212700099	No	05/31/2025	0	05/30/2025

Three-Year Compliance History by Quarter



Informal Enforcement Actions Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Sta	ute Syst	tem Law Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary	WBD (Watershed Boundary Dataset)	State Water Body Name (ICIS	Beach Closures	Beach Closures	Pollutants Potentially	Watershed with ESA (Endangered
Dataset) HUC (RAD (Reach Address	Subwatershed Name (RAD (Reach Address	(Integrated Compliance	Within Last Year	Within Last Two	Related to Impairment	Species Act)-listed Aquatic
Database))	Database))	Information System))	Within Last real	Years	Retated to impairment	Species?

No data records returned

State Report Cycle Assessment Unit ID Assessment Unit ID Assessment Unit ID Assessment Unit Name Water Condition Cause Groups Impaired Drinking Water Use Ecological Use Fish Consumption Use Recreation Use Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant Within Nonattainment Status Area? Nonattainment Status Applicable Standard(s) Within Maintenance Status Area? Maintenance Status Applicable Standard(s)									
	No data accordance una d								
No data records returned									

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name
No data records returned

Community

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary https://epa.gov/help/reports/dfr-data-dictionary#demographic.

General Statistics (ACS (American Community Survey))	
Total Persons	28,707
Population Density	9,200/sq.mi.
Housing Units in Area	17,534
Percent People of Color	99%
Households in Area	12,567
Households on Public Assistance	337
Persons With Low Income	20,812
Percent With Low Income	74%
Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.395556
Center Longitude	-66.038611
Total Area	
Land Area	100%
Water Area	0%
Income Breakdown (ACS (American Community Survey	r)) - Households (%)
Less than \$15,000	4,729 (37.62%)
\$15,000 - \$25,000	1,948 (15.5%)
\$25,000 - \$50,000	3,472 (27.62%)
\$50,000 - \$75,000	1,163 (9.25%)
Greater than \$75,000	1,257 (10%)

Children 5 years and younger	984 (3%)
Minors 17 years and younger	4,786 (17%)
Adults 18 years and older	23,919 (83%)
Seniors 65 years and older	7,246 (25%)
Race Breakdown (ACS (American Community Survey)) - Persons (%)
White	12,808 (45%)
African-American	4,182 (15%)
Hispanic-Origin	28,198 (98%)
Asian	123 (0%)
Hawaiian/Pacific Islander	0 (0%)
American Indian	63 (0%)
Other/Multiracial	6,694 (23%)
Education Level (Persons 25 & older) (ACS (American Community St	urvey)) - Persons (%)
Less than 9th Grade	2,523 (12%)
9th through 12th Grade	1,311 (6.24%)
High School Diploma	4,355 (20.71%)
Some College/2-year	2,514 (11.96%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	7,425 (35.32%)



Facility Summary

WALGREENS 891

PR-3 AVE 65TH INF CORNER BARBOSA RIO PIEDRAS, SAN JUAN, PR 00924

FRS (Facility Registry Service) ID: 110004892395

EPA Region: 02 **Latitude:** 18.395009 **Longitude:** -66.042887

Locational Data Source: RCRAINFO

Industries: Health and Personal Care Retailers

Indian Country: N

Enforcement and Compliance Summary

Statute	RCRA
Compliance Monitoring Activities (5 years)	
Date of Last Compliance Monitoring Activity	
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	-
Formal Enforcement Actions (5 years)	
Penalties from Formal Enforcement Actions (5 years)	
EPA Cases (5 years)	
Penalties from EPA Cases (5 years)	

Regulatory Information

Clean Air Act (CAA): No Information
Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Active VSQG, (PRR000003202)

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

 $Known\,Data\,Problems\,<\,https://epa.gov/resources/echo-data/known-data-problems>$

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110004892395					N	18.395009	-66.042887
RCRAInfo	RCRA	PRR000003202	VSQG	Active (H)			N	18.395009	-66.042887

Facility Address

System	Statute	Statute Identifier Facility Name		Facility Address	Facility County		
FRS		110004892395	WALGREENS 891	PR-3 AVE 65TH INF CORNER BARBOSA RIO PIEDRAS, SAN JUAN, PR 00924	San Juan Municipio		
RCRAInfo	RCRA	PRR000003202	WALGREENS STORE 891	65 INFANTERIA CORNER BARBOSA, RIO PIEDRAS, PR 00924	San Juan Municipio		

Facility SIC (Standard Industrial Classification) Codes

Facility NAICS (North American Industry Classification System) Codes

System Identifier SIC Code SIC Description System Identifier NAICS Code NAICS Description

RCRAInfo PRR000003202 456110 Pharmacies and Drug Retailers

Facility Tribe Information

Reservation Name Tribe Name EPA Tribal ID Distance to Tribe (miles)

No data records returned

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

Statute Source ID System Activity Type Compliance Monitoring Type Lead Agency Date Finding (if applicable)

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy https://www.epa.gov/compliance/compliance-monitoring-programs activities or because they are not counted as inspections within EPA's Annual Results https://www.epa.gov/enforcement/enforcement-data-and-results.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRR000003202	No	08/09/2025	0	08/08/2025

Three-Year Compliance History by Quarter

Statute	Progra Pollut Violation	ant/	QTR 1	QTR 2	QTR 3	QTR4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12+
	RA (Source RR00000320		10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24	04/01-06/30/24	07/01-09/30/24	10/01-12/31/24	01/01-03/31/25	04/01-06/30/25	07/01-09/30/25
	Facility- Stat		No Violation Identified											
	Violation	Agency												

Informal Enforcement Actions

Last 5 Years

Statute System Source ID Type of Action Lead Agency Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) WBD (Watershed Boundary Dataset) State Water Body Name (ICIS Dataset) HUC (RAD (Reach Address Database))

State Water Body Name (ICIS Seach Closures Within Last Two System))

Beach Closures Within Last Two Within Last Two Years

Pollutants Potentially Related to Impairment Species Act)-listed Aquatic Species Act)-listed Aquatic Species?

State Report Cycle Assessment Unit ID Assessment Unit ID Assessment Unit Name Water Condition Cause Groups Impaired Drinking Water Use Ecological Use Fish Consumption Use Recreation Use Other Use

No data records returned

Air Quality Nonattainment Areas

	•			
Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)
		No data records retu	ırned	
		No data records reta	arried	

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land Total On-Site Releases Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

e-Manifest Hazardous Waste History (Public)

Hazardous Waste Shipped in Kilograms by Year (Through 10/5/2025)

Source ID	Waste Description	2022	2023	2024	2025
PRR000003202	Hazardous Waste	-	-		4
PRR000003202	Acute Hazardous Waste		-		0
PRR000003202	Pharmaceutical Hazardous Waste				0

"Pharmaceutical Hazardous Waste" refers to quantities managed under 40 CFR part 266 subpart P and thus excluded from the Hazardous and Acute Hazardous Waste quantities shown above.

Community

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

General Statistics (ACS (American Community Sur	vey))
Total Persons	24,991
Population Density	8,011/sq.mi.
Housing Units in Area	16,171
Percent People of Color	99%
Households in Area	11,183
Households on Public Assistance	310
Persons With Low Income	17,432
Percent With Low Income	72%
Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.395009
Center Longitude	-66.042887
Total Area	3.121 sq.mi.
Land Area	100%
Water Area	0%
Income Breakdown (ACS (American Community S	urvey)) - Households (%)
Less than \$15,000	4,094 (36.61%)
\$15,000 - \$25,000	1,760 (15.74%)

Age Breakdown (ACS (American Community Survey)) - Persons (%)				
Children 5 years and younger	756 (3%)			
Minors 17 years and younger	3,546 (14%)			
Adults 18 years and older	21,445 (86%)			
Seniors 65 years and older	6,659 (27%)			
Race Breakdown (ACS (American Community Survey)) - Persons (%)			
White	11,136 (45%)			
African-American	3,770 (15%)			
Hispanic-Origin	24,568 (98%)			
Asian	101 (0%)			
Hawaiian/Pacific Islander	0 (0%)			
American Indian	85 (0%)			
Other/Multiracial	5,488 (22%)			
Education Level (Persons 25 & older) (ACS (American Community S	urvey)) - Persons (%)			
Less than 9th Grade	2,331 (12.48%)			
9th through 12th Grade 1,222 (6.549				
High School Diploma	3,507 (18.77%)			
Some College/2-year	2,060 (11.03%)			
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	6,992 (37.43%)			



Facility Summary

BALCONES DE SAN JUAN WASTEWATER COLLECTION SYSTEM

404 CALLE DE DIEGO, BALCONES DE SAN JUAN, SAN JUAN, PR 00923

FRS (Facility Registry Service) ID: 110064515591

EPA Region: 02 Latitude: 18.39835 Longitude: -66.03769 Locational Data Source: FRS

Industries: -Indian Country: N

Enforcement and Compliance Summary

Statute	CWA
Compliance Monitoring Activities (5 years)	-
Date of Last Compliance Monitoring Activity	07/06/2015
Compliance Status	Not Applicable
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	-
Formal Enforcement Actions (5 years)	-
Penalties from Formal Enforcement Actions (5 years)	-
EPA Cases (5 years)	-
Penalties from EPA Cases (5 years)	-

Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): Non-Major, (PRP002000)

Resource Conservation and Recovery Act (RCRA): No Information

Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Go To Enforcement/Compliance Details

Known Data Problems https://epa.gov/resources/echo-data/known-data-problems

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110064515591					N	18.39835	-66.03769
ICIS-NPDES	CWA	PRP002000	Non-Major: Unpermitted Facility				N	18.39835	-66.03769

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110064515591	BALCONES DE SAN JUAN WASTEWATER COLLECTION SYSTEM	404 CALLE DE DIEGO, BALCONES DE SAN JUAN, SAN JUAN, PR 00923	
ICIS-NPDES	CWA	PRP002000	BALCONES DE SAN JUAN WASTEWATER COLLECTION SYSTEM	404 CALLE DE DIEGO, BALCONES DE SAN JUAN, SAN JUAN, PR 00923	

Facility SIC (Standard Industrial Classification) Codes

Facility NAICS (North American Industry Classification System) Codes

NAICS Description

No data records returned

No data records returned

Facility Industrial Effluent Guidelines

Facility Tribe Information

Effluent Guideline (40 CFR Part) Distance to Tribe (miles No data records returned No data records returned

Enforcement and Compliance

Compliance Monitoring History Last 5 Years

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy

- <https://www.epa.gov/compliance/compliance-monitoring-programs> activities or because they are not counted as inspections within EPA's Annual Results
- https://www.epa.gov/enforcement/enforcement-data-and-results.

Compliance Summary Data

St	atute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
	CWA	PRP002000	No	12/31/2024	0	05/30/2025

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11
cw	VA (Source ID: PRP002000)	01/01-03/31/22	04/01-06/30/22	07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24	04/01-06/30/24	07/01-09/30/24
	Facility-Level Status	Not Applicable										
	Quarterly Noncompliance Report History											

Informal Enforcement Actions

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Federal Penalty

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?
210100050501	Laguna San Jose, Laguna Torrecilla, Laguna de Pinones D Watersheds	-	No	No		Yes

Si	tate	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use
	PR	2024	PREE13A3	SAN JUAN BAY ESTUARY	Impaired - 303(d) Listed	MERCURY METALS (OTHER THAN MERCURY) NUTRIENTS OIL AND GREASE ORGANIC ENRICHMENT/OXYGEN DEPLETION PATHOGENS PH/ACIDITY/CAUSTIC CONDITIONS TEMPERATURE TURBIDITY		Not Supporting		Not Supporting	-

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)
		No data records retu	ırnad	

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land Total On-Site Releases Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

CWA (Clean Water Act) Discharge Monitoring Report (DMR) Pollutant Loadings

DMR and TRI Multi-Year Loading Report

NPDES ID

Description

No data records returned

Community

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary https://epa.gov/help/reports/dfr-data-dictionary#demographic.

General Statistics (ACS (American Community Survey))
Total Persons	30,159
Population Density	9,696/sq.mi.
Housing Units in Area	18,228
Percent People of Color	99%
Households in Area	13,201
Households on Public Assistance	366
Persons With Low Income	22,345
Percent With Low Income	75%
Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.39835
Center Longitude	-66.03769
Total Area	-
Land Area	100%
Water Area	0%
Income Breakdown (ACS (American Community Surve	y)) - Households (%)
Less than \$15,000	5,269 (39.91%)
\$15,000 - \$25,000	2,115 (16.02%)
\$25,000 - \$50,000	3,470 (26.29%)
\$50,000 - \$75,000	1,181 (8.95%)

Children 5 years and younger	967 (3%)
Minors 17 years and younger	5,231 (17%)
Adults 18 years and older	24,935 (83%)
Seniors 65 years and older	7,295 (24%)
Race Breakdown (ACS (American Community Survey)) - Persons (%)	
White	12,873 (43%)
African-American	4,785 (16%)
Hispanic-Origin	29,661 (98%)
Asian	95 (0%)
Hawaiian/Pacific Islander	0 (0%)
American Indian	57 (0%)
Other/Multiracial	7,557 (25%)
Education Level (Persons 25 & older) (ACS (American Community St	urvey)) - Persons (%)
Less than 9th Grade	2,719 (12.48%)
9th through 12th Grade	1,362 (6.25%)
High School Diploma	4,654 (21.35%)
Some College/2-year	2,572 (11.8%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	7,403 (33.97%)



Facility Summary

CROWLEY TOWING & TRANSPORTATION CO

PIER 10 STOP 3.5 FERNANDEZ, SAN JUAN, PR 00926

FRS (Facility Registry Service) ID: 110007806785

EPA Region: 02 Latitude: 18.392257 Longitude: -66.038106 Locational Data Source: FRS

Industries: --Indian Country: N

Enforcement and Compliance Summary

Statute	RCRA
Compliance Monitoring Activities (5 years)	-
Date of Last Compliance Monitoring Activity	03/21/1996
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	-
Formal Enforcement Actions (5 years)	-
Penalties from Formal Enforcement Actions (5 years)	-
EPA Cases (5 years)	-
Penalties from EPA Cases (5 years)	-

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Toxic Releases (TRI): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Regulatory Information

Clean Air Act (CAA): No Information Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Inactive Other,

(PRD090522665)

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

Known Data Problems https://epa.gov/resources/echo-data/known-data-problems

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110007806785					N	18.392257	-66.038106
ICIS		38882					N	18.392257	-66.038106
RCRAInfo	RCRA	PRD090522665	Other	Inactive ()			N		

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110007806785	CROWLEY TOWING & TRANSPORTATION CO	PIER 10 STOP 3.5 FERNANDEZ, SAN JUAN, PR 00926	San Juan Municipio
ICIS		38882	CROWLEY TOWING & TRANSPORTATION CO	PIER 10 STOP 3.5 FERNANDEZ, SAN JUAN, PR 00905	San Juan Municipio
RCRAInfo	RCRA	PRD090522665	CROWLEY TOWING & TRANSPORTATION CO	PIER 10 STOP 3.5 FERNANDEZ, SAN JUAN, PR 00905	San Juan Municipio

Facility SIC (Standard Industrial Classification) Codes

Facility NAICS (North American Industry Classification System) Codes

System Identifier SIC Code SIC Description System Identifier NAICS Code NAICS Description

No data records returned

No data records returned

Facility Tribe Information

Reservation Name Tribe Name EPA Tribal ID Distance to Tribe (miles)

No data records returned

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

Statute Source ID System Activity Type Compliance Monitoring Type Lead Agency Date Finding (if applicable)

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy

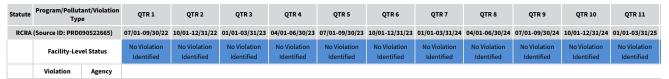
 $< https://www.epa.gov/compliance/compliance-monitoring-programs > activities \ or \ because \ they \ are \ not \ counted \ as \ inspections \ within \ EPA's \ Annual \ Results \ annual \ Results \ are \ not \ counted \ as \ inspections \ within \ EPA's \ Annual \ Results \ are \ not \ counted \ as \ inspections \ within \ EPA's \ Annual \ Results \ are \ not \ counted \ as \ inspections \ within \ EPA's \ Annual \ Results \ are \ not \ counted \ as \ inspections \ within \ EPA's \ Annual \ Results \ are \ not \ counted \ as \ inspections \ within \ EPA's \ Annual \ Results \ are \ not \ counted \ as \ inspections \ within \ EPA's \ Annual \ Results \ are \ not \ counted \ as \ inspections \ within \ EPA's \ Annual \ Results \ are \ not \ counted \ not \$

https://www.epa.gov/enforcement/enforcement-data-and-results.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)		Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRD090522665	No	05/31/2025	0	05/30/2025

Three-Year Compliance History by Quarter



Informal Enforcement Actions

Last 5 Years

Statute System Source ID Type of Action Lead Agency Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute System Law/ Section ID Action No. Agency Name Date Date Settlements/ Settlements/ Settlements/ Settlement/ Federal Penalty State/Local Penalty Penalty Amount SEP Composition Collected Value Action Cost

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) WBD (Watershed Boundary Dataset) State Water Body Name (ICIS Database)) WBD (Watershed Boundary Dataset) State Water Body Name (ICIS (Integrated Compliance Information System))

State Water Body Name (ICIS (Integrated Compliance Information System))

Beach Closures Within Last Two Years

Watershed Boundary Dataset (Integrated Compliance Information System))

Watershed with ESA (Endangered Species Act)-listed Aquatic Species?

No data records returned

State Report Cycle Assessment Unit ID Assessment Unit ID Assessment Unit ID Assessment Unit Name Water Condition Cause Groups Impaired Drinking Water Use Ecological Use Fish Consumption Use Recreation Use Other Use No data records returned

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)	
No data records returned					
		No data records rett	irned		

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land Total On-Site Releases Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name
No data records returned

Community

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary https://epa.gov/help/reports/dfr-data-dictionary#demographic.

C	
General Statistics (ACS (American Community Survey)	
Total Persons	28,702
Population Density	9,196/sq.mi.
Housing Units in Area	17,207
Percent People of Color	99%
Households in Area	12,489
Households on Public Assistance	323
Persons With Low Income	20,395
Percent With Low Income	72%
Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.392257
Center Longitude	-66.038106
Total Area	
Land Area	100%
Water Area	0%
Income Breakdown (ACS (American Community Surve	y)) - Households (%)
Less than \$15,000	4,297 (34.38%)
\$15,000 - \$25,000	1,980 (15.84%)
\$25,000 - \$50,000	3,585 (28.69%)
\$50,000 - \$75,000	1,226 (9.81%)
Greater than \$75,000	1,409 (11.27%)

Children 5 years and younger	1,085 (4%)		
Minors 17 years and younger	4,757 (17%)		
Adults 18 years and older	23,945 (83%)		
Seniors 65 years and older	7,479 (26%)		
Race Breakdown (ACS (American Community Survey)) - Persons (%)		
White	13,003 (45%)		
African-American	4,247 (15%)		
Hispanic-Origin	28,199 (98%)		
Asian	119 (0%)		
Hawaiian/Pacific Islander	0 (0%)		
American Indian	85 (0%)		
Other/Multiracial	6,283 (22%)		
Education Level (Persons 25 & older) (ACS (American Community S	urvey)) - Persons (%)		
Less than 9th Grade	2,458 (11.51%)		
9th through 12th Grade	1,275 (5.97%)		
High School Diploma	4,255 (19.93%)		
Some College/2-year	2,521 (11.81%)		
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	7,763 (36.35%)		



Facility Summary

DEPT OF ED - VILLA CAPRI SCHOOL

CALLE VERONA, RIO PIEDRAS, PR 00924

FRS (Facility Registry Service) ID: 110007816248

EPA Region: 02 Latitude: 18.39231 Longitude: -66.02747 Locational Data Source: FRS

Industries: --Indian Country: N

Enforcement and Compliance Summary

Statute	RCRA
Compliance Monitoring Activities (5 years)	-
Date of Last Compliance Monitoring Activity	-
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	-
Formal Enforcement Actions (5 years)	-
Penalties from Formal Enforcement Actions (5 years)	-
EPA Cases (5 years)	-
Penalties from EPA Cases (5 years)	-

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Toxic Releases (TRI): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Regulatory Information

Clean Air Act (CAA): No Information Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Inactive Other,

(PRR000000992)

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

Known Data Problems https://epa.gov/resources/echo-data/known-data-problems

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110007816248					N	18.39231	-66.02747
RCRAInfo	RCRA	PRR000000992	Other	Inactive ()			N		

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110007816248	DEPT OF ED - VILLA CAPRI SCHOOL	CALLE VERONA, RIO PIEDRAS, PR 00924	San Juan Municipio
RCRAInfo	RCRA	PRR000000992	DEPT OF ED - VILLA CAPRI SCHOOL	KM 0.3 S 65TH AVE CALLE VERONA, RIO PIEDRAS, PR 00925	San Juan Municipio

Facility SIC (Standard Industrial Classification) Codes

Facility NAICS (North American Industry Classification System) Codes

System Identifier SIC Code SIC Description System Identifier NAICS Code NAICS Description

No data records returned

No data records returned

Facility Tribe Information

Reservation Name Tribe Name EPA Tribal ID Distance to Tribe (miles)

No data records returned

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

Statute Source ID System Activity Type Compliance Monitoring Type Lead Agency Date Finding (if applicable)

No data records returned

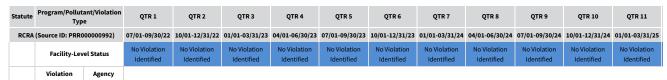
Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy

- https://www.epa.gov/compliance/complia
- https://www.epa.gov/enforcement/enforcement-data-and-results.

Compliance Summary Data

Statut	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRR000000992	No	05/31/2025	0	05/30/2025

Three-Year Compliance History by Quarter



Informal Enforcement Actions

Last 5 Years

Statute System Source ID Type of Action Lead Agency Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute System System System System Section ID Action No. Agency Name Date State Action Date Settlements/ Section State System S

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) WBD (Watershed Boundary Dataset) State Water Body Name (ICIS (Integrated Compliance Database)) State Water Body Name (ICIS (Integrated Compliance Information System)) Beach Closures Within Last Two Years Pollutants Potentially Related to Impairment Species Act)-listed Aquatic Species?

No data records returned

State Report Cycle Assessment Unit ID Assessment Unit ID Assessment Unit Name Water Condition Cause Groups Impaired Drinking Water Use Ecological Use Fish Consumption Use Recreation Use Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant Within Nonattainment Status Area? Nonattainment Status Applicable Standard(s) Within Maintenance Status Area? Maintenance Status Applicable Standard(s)

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land No. Site Releases Total Off-Site Transfers No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

Community

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary https://epa.gov/help/reports/dfr-data-dictionary#demographic.

General Statistics (ACS (American Community Survey))
Total Persons	31,741
Population Density	10,170/sq.mi.
Housing Units in Area	17,682
Percent People of Color	99%
Households in Area	14,056
Households on Public Assistance	413
Persons With Low Income	22,236
Percent With Low Income	71%
Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.39231
Center Longitude	-66.02747
Total Area	
Land Area	100%
Water Area	0%
Income Breakdown (ACS (American Community Surve	y)) - Households (%)
Less than \$15,000	5,279 (37.55%)
\$15,000 - \$25,000	2,014 (14.33%)
\$25,000 - \$50,000	3,645 (25.93%)
\$50,000 - \$75,000	1,487 (10.58%)
Greater than \$75,000	1,634 (11.62%)

Children 5 years and younger	1,099 (3%)		
Minors 17 years and younger	5,325 (17%)		
Adults 18 years and older	26,411 (83%)		
Seniors 65 years and older	8,287 (26%)		
Race Breakdown (ACS (American Community Survey)) - Persons (%			
White	14,872 (47%)		
African-American	5,212 (16%)		
Hispanic-Origin	31,276 (99%)		
Asian	119 (0%)		
Hawaiian/Pacific Islander	0 (0%)		
American Indian	71 (0%)		
Other/Multiracial	6,772 (21%)		
Education Level (Persons 25 & older) (ACS (American Community St	ırvey)) - Persons (%)		
Less than 9th Grade	2,267 (9.68%)		
9th through 12th Grade	1,254 (5.36%)		
High School Diploma	5,280 (22.55%)		
Some College/2-year	2,910 (12.43%)		
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	8,737 (37.31%)		



Facility Summary

JARDINES DEL PARAÍSO MODERNIZATION

PARK GARDENS AVE., SAN JUAN, PR 00926

FRS (Facility Registry Service) ID: 110070067203

EPA Region: 02 **Latitude: 18.388** Longitude: -66.034

Locational Data Source: NPDES

Industries: --Indian Country: N

Enforcement and Compliance Summary

Statute	CWA
Compliance Monitoring Activities (5 years)	-
Date of Last Compliance Monitoring Activity	
Compliance Status	Terminated Permit
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	
Formal Enforcement Actions (5 years)	
Penalties from Formal Enforcement Actions (5 years)	-
EPA Cases (5 years)	-
Penalties from EPA Cases (5 years)	

Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): Non-Major, Permit Terminated; Compliance Tracking Off Greenhouse Gas Emissions (eGGRT): No Information

Resource Conservation and Recovery Act (RCRA): No Information

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

Known Data Problems https://epa.gov/resources/echo-data/known-data-problems

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110070067203					N	18.388	-66.034
ICIS-NPDES	CWA	PRR10000I	Non-Major: General Permit Covered Facility	Terminated; Compliance Tracking Off	Construction Stormwater	02/15/2022	N	18.388	-66.034

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110070067203	JARDINES DEL PARAÍSO MODERNIZATION	PARK GARDENS AVE., SAN JUAN, PR 00926	San Juan Municipio
ICIS-NPDES	CWA	PRR10000I	JARDINES DEL PARAÍSO MODERNIZATION	PARK GARDENS AVE., SAN JUAN, PR 00926	

Facility SIC (Standard Industrial Classification) Codes

Facility NAICS (North American Industry Classification System) Codes

NAICS Description

No data records returned

No data records returned

Facility Industrial Effluent Guidelines

Facility Tribe Information

Effluent Guideline (40 CFR Part) Distance to Tribe (miles) No data records returned No data records returned

Enforcement and Compliance

Compliance Monitoring History Last 5 Years

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy

- <https://www.epa.gov/compliance/compliance-monitoring-programs> activities or because they are not counted as inspections within EPA's Annual Results
- https://www.epa.gov/enforcement/enforcement-data-and-results.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
CWA	PRR10000I	No	12/31/2024	0	05/30/2025

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	е ятр	QTR 10	QTR 11
CW	A (Source ID: PRR10000I)	01/01-03/31/22	04/01-06/30/22	07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24	04/01-06/30/24	07/01-09/30/24
	Facility-Level Status	Terminated Permit										
	Quarterly Noncompliance Report History											

Informal Enforcement Actions

Last 5 Years

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute	System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?
210100050501	Laguna San Jose, Laguna Torrecilla, Laguna de Pinones D Watersheds	SAN JUAN BAY ESTUARY	No	No		Yes

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use
PR	2024	PREE13A3	SAN JUAN BAY ESTUARY	Impaired - 303(d) Listed	MERCURY METALS (OTHER THAN MERCURY) NUTRIENTS OIL AND GREASE ORGANIC ENRICHMENT/OXYGEN DEPLETION PATHOGENS PH/ACIDITY/CAUSTIC CONDITIONS TEMPERATURE TURBIDITY		Not Supporting		Not Supporting	

Air Quality Nonattainment Areas

	-			
Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)
		No data records retu	ırned	

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land Total On-Site Releases Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

CWA (Clean Water Act) Discharge Monitoring Report (DMR) Pollutant Loadings

DMR and TRI Multi-Year Loading Report

NPDES ID

No data records returned

Community

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary https://epa.gov/help/reports/dfr-data-dictionary#demographic.

General Statistics (ACS (American Community Survey))	
Total Persons	29,365
Population Density	9,410/sq.mi.
Housing Units in Area	16,359
Percent People of Color	99%
Households in Area	12,769
Households on Public Assistance	346
Persons With Low Income	19,119
Percent With Low Income	66%
Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.388
Center Longitude	-66.034
Total Area	
Land Area	100%
Water Area	0%
Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than \$15,000	3,866 (30.27%)
\$15,000 - \$25,000	2,014 (15.77%)
\$25,000 - \$50,000	3,532 (27.65%)

1 559 (12 21%)

Children 5 years and younger	1,049 (4%)
Minors 17 years and younger	4,583 (16%)
Adults 18 years and older	24,781 (84%)
Seniors 65 years and older	7,765 (26%)
Race Breakdown (ACS (American Community Survey)) - Persons (%)
White	13,952 (48%)
African-American	4,172 (14%)
Hispanic-Origin	28,898 (98%)
Asian	116 (0%)
Hawaiian/Pacific Islander	0 (0%)
American Indian	117 (0%)
Other/Multiracial	5,940 (20%)
Education Level (Persons 25 & older) (ACS (American Community So	urvey)) - Persons (%)
Less than 9th Grade	1,907 (8.64%)
9th through 12th Grade	1,039 (4.71%)
High School Diploma	4,558 (20.64%)
Some College/2-year	2,559 (11.59%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	9,120 (41.3%)

\$50,000 - \$75,000

Greater than \$75,000 1,801 (14.1%))



Facility Summary

KERCADO AUTO REPAIR

DE DIEGO AVE 1072, RIO PIEDRAS, PR 00919

FRS (Facility Registry Service) ID: 110009437127

EPA Region: 02 **Latitude:** 18.398391 **Longitude:** -66.038089

Locational Data Source: RCRAINFO

Industries: -Indian Country: N

Enforcement and Compliance Summary

Statute	RCRA
Compliance Monitoring Activities (5 years)	-
Date of Last Compliance Monitoring Activity	08/06/1996
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	-
Formal Enforcement Actions (5 years)	-
Penalties from Formal Enforcement Actions (5 years)	-
EPA Cases (5 years)	-
Penalties from EPA Cases (5 years)	-

Regulatory Information

Clean Air Act (CAA): No Information
Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Inactive Other,

(PRO007001258)

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

Known Data Problems https://epa.gov/resources/echo-data/known-data-problems

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110009437127					N	18.398391	-66.038089
RCRAInfo	RCRA	PRO007001258	Other	Inactive ()			N	18.398391	-66.038089

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Facility Address

System	Statute	Identifier	Facility Name Facility Address		Facility County	
FRS		110009437127	KERCADO AUTO REPAIR	DE DIEGO AVE 1072, RIO PIEDRAS, PR 00919	San Juan Municipio	
RCRAInfo	RCRA	PRO007001258	KERCADO AUTO REPAIR	DE DIEGO AVE 1072, RIO PIEDRAS, PR 00919	San Juan Municipio	

Facility SIC (Standard Industrial Classification) Codes

Facility NAICS (North American Industry Classification System) Codes

System Identifier SIC Code SIC Description System Identifier NAICS Code NAICS Description

No data records returned

No data records returned

Facility Tribe Information

Reservation Name Tribe Name EPA Tribal ID Distance to Tribe (miles)

No data records returned

Enforcement and Compliance

Compliance Monitoring History

ast 5 Years

Statute Source ID System Activity Type Compliance Monitoring Type Lead Agency Date Finding (if applicable)

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy

https://www.epa.gov/compliance/complia

https://www.epa.gov/enforcement/enforcement-data-and-results.

Compliance Summary Data

Statute	Source ID	ID Current SNC (Significant Noncompliance)/HPV (High Priority Violation)		Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRO007001258	No	05/31/2025	0	05/30/2025

Three-Year Compliance History by Quarter



Informal Enforcement Actions

Last 5 Years

Statute System Source ID Type of Action Lead Agency Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute System Law/ Source Type of Section ID Action No. Agency Name Date State Action Date Settlements/ Settlements/ Settlement/ Assessed State/Local Penalty Assessed State/Local Penalty Assessed Collected Value Action Cost

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) WBD (Watershed Boundary Dataset) State Water Body Name (ICIS (Integrated Compliance Database)) State Water Body Name (ICIS (Integrated Compliance Information System))

State Water Body Name (ICIS (Integrated Compliance Information System))

Beach Closures Within Last Two Years

Pollutants Potentially Related to Impairment Species Act)-listed Aquatic Species?

No data records returned

State Report Cycle Assessment Unit ID Assessment Unit ID Assessment Unit Name Water Condition Cause Groups Impaired Drinking Water Use Ecological Use Fish Consumption Use Recreation Use Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant Within Nonattainment Status Area? Nonattainment Status Applicable Standard(s) Within Maintenance Status Area? Maintenance Status Applicable Standard(s)

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land Total On-Site Releases Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

Community

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary https://epa.gov/help/reports/dfr-data-dictionary#demographic.

General Statistics (ACS (American Community Survey))		
Total Persons	29,993	
Population Density	9,641/sq.mi.	
Housing Units in Area	18,212	
Percent People of Color	99%	
Households in Area	13,146	
Households on Public Assistance	365	
Persons With Low Income	22,163	
Percent With Low Income	75%	
Geography		
Radius of Selected Area	1 mi.	
Center Latitude	18.398391	
Center Longitude	-66.038089	
Total Area		
Land Area	100%	
Water Area	0%	
Income Breakdown (ACS (American Community Survey)) - House	eholds (%)	
Less than \$15,000	5,265 (40.05%)	
000 - \$25,000 2,089 (15.89%)		
\$25,000 - \$50,000	3,450 (26.24%)	
\$50,000 - \$75,000	1,177 (8.95%)	
Greater than \$75,000	1,165 (8.86%)	

Children 5 years and younger	954 (3%)		
Minors 17 years and younger	5,151 (17%)		
Adults 18 years and older	24,844 (83%)		
Seniors 65 years and older	7,274 (24%)		
Race Breakdown (ACS (American Community Survey)) - Persons (%)		
White 12,807 (43%)			
African-American 4,705 (16%)			
Hispanic-Origin	29,498 (98%)		
Asian	91 (0%)		
Hawaiian/Pacific Islander	0 (0%)		
American Indian	57 (0%)		
Other/Multiracial	7,516 (25%)		
Education Level (Persons 25 & older) (ACS (American Community S	urvey)) - Persons (%)		
Less than 9th Grade 2,702 (
9th through 12th Grade	1,370 (6.32%)		
High School Diploma	4,633 (21.37%)		
Some College/2-year 2,54			
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	7,401 (34.13%)		



Facility Summary

LOS PRIMOS NISSAN

AVE 65 INFANTERIA KM 5.6, RIO PIEDRAS, PR 00925

FRS (Facility Registry Service) ID: 110014440426

EPA Region: 02 Latitude: 18.394766 Longitude: -66.03787

Locational Data Source: RCRAINFO
Industries: Motor Vehicle and Parts Dealers

Indian Country: N

Enforcement and Compliance Summary

Statute	RCRA
Compliance Monitoring Activities (5 years)	
Date of Last Compliance Monitoring Activity	
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	
Formal Enforcement Actions (5 years)	
Penalties from Formal Enforcement Actions (5 years)	
EPA Cases (5 years)	
Penalties from EPA Cases (5 years)	-

Regulatory Information

Clean Air Act (CAA): No Information
Clean Water Act (CWA): No Information

 $\textbf{Resource Conservation and Recovery Act (RCRA):} \quad \text{Active VSQG}, (\text{PRR}000015990)$

Safe Drinking Water Act (SDWA): No Information

rate brinking water Act (35 WA). No imornia

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Go To Enforcement/Compliance Details Known Data Problems <a href="https://epa.gov/upa.

 $Known\, Data\, Problems\, < https://epa.gov/resources/echo-data/known-data-problems>$

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110014440426					N	18.394766	-66.03787
RCRAInfo	RCRA	PRR000015990	VSOG	Active (H)			N	18.394766	-66.03787

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110014440426	LOS PRIMOS NISSAN	AVE 65 INFANTERIA KM 5.6, RIO PIEDRAS, PR 00925	San Juan Municipio
RCRAInfo	RCRA	PRR000015990	LOS PRIMOS NISSAN	S NISSAN AVE 65 INFANTERIA KM 5.6, RIO PIEDRAS, PR 00925 San Ju	

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy https://www.epa.gov/compliance/ compliance-monitoring-programs> activities or because they are not counted as inspections within EPA's Annual Results https://www.epa.gov/enforcement/enforcement-data-results https://www.epa.gov/enforcement/enforcement-data-results https://www.epa.gov/enforcement/enforcement-data-results https://www.epa.gov/enforcement/enforcement-data-results https://www.epa.gov/enforcement/enforcement-data-results https://www.epa.gov/enforcement/enforcement-data-results <a href="https://www.epa.gov/enforcement/enf

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRR000015990	No	08/09/2025	0	08/08/2025

Three-Year Compliance History by Quarter

Statute	Progra Polluta Violation	nt/	QTR1	QTR 2	QTR 3	QTR4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12+
	RCRA (Source ID: PRR000015990)		10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24	04/01-06/30/24	07/01-09/30/24	10/01-12/31/24	01/01-03/31/25	04/01-06/30/25	07/01-09/30/25
	Facility-Level Status		No Violation Identified											
	Violation	Agency												

Informal Enforcement Actions Last 5 Years

Type of Action **Lead Agency**

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions | Last 5 Years

Statute System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address	State Water Body Name (ICIS (Integrated Compliance Information	Beach Closures Within Last Year	Beach Closures Within Last Two	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic
Database))	Database))	System))	Within Last fear	Years	Retated to impairment	Species?

No data records returned

Assessed Waters From Latest State Submission (ATTAINS)

State Report Cycle Assessment Unit ID Assessment Unit ID Assessment Unit Name Water Condition Cause Groups Impaired Drinking Water Use Ecological Use Fish Consumption Use Recreation Use Other Use

No data records returned

Air Quality Nonattainment Areas

ment Status Applicable Standard(s) Within Maintenance Status Area? No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land Total On-Site Releases Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name No data records returned This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

General Statistics (ACS (American Community Survey))						
Total Persons	28,855					
Population Density	9,245/sq.mi.					
Housing Units in Area	17,374					
Percent People of Color	99%					
Households in Area	12,543					
Households on Public Assistance	323					
Persons With Low Income	20,942					
Percent With Low Income	74%					

Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.394766
Center Longitude	-66.03787
Total Area	3.121 sq.mi.
Land Area	100%
Water Area	0%

Income Breakdown (ACS (American Community Survey)) - Households (%)						
Less than \$15,000	4,630 (36.91%)					
\$15,000 - \$25,000	1,952 (15.56%)					
\$25,000 - \$50,000	3,498 (27.88%)					
\$50,000 - \$75,000	1,179 (9.4%)					
Greater than \$75,000	1,286 (10.25%)					

Age Breakdown (ACS (American Community Survey)) - Persons (%)					
Children 5 years and younger	1,020 (4%)				
Minors 17 years and younger	4,901 (17%)				
Adults 18 years and older	23,953 (83%)				
Seniors 65 years and older	7,281 (25%)				

Race Breakdown (ACS (American Community Survey)) - Persons (%)						
White	12,983 (45%)					
African-American	4,259 (15%)					
Hispanic-Origin	28,353 (98%)					
Asian	121 (0%)					
Hawaiian/Pacific Islander	0 (0%)					
American Indian	66 (0%)					
Other/Multiracial	6,604 (23%)					

Education Level (Persons 25 & older) (ACS (American Community Survey))	Persons (%)
Less than 9th Grade	2,518 (11.92%)
9th through 12th Grade	1,286 (6.09%)
High School Diploma	4,356 (20.63%)
Some College/2-year	2,560 (12.12%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	7,448 (35.27%)



Facility Summary

LUMA - RIO PIEDRAS TECHNICAL OPERATIONS OFFICE

CALLE JOSE DE DIEGO EQUINA, RIO PIEDRAS, PR 00921

FRS (Facility Registry Service) ID: 110043555462

EPA Region: 02 Latitude: 18.397683 Longitude: -66.031385

Locational Data Source: RCRAINFO

Industries: Utilities **Indian Country:** N

Enforcement and Compliance Summary

Statute	RCRA
Compliance Monitoring Activities (5 years)	-
Date of Last Compliance Monitoring Activity	07/20/2016
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	-
Formal Enforcement Actions (5 years)	-
Penalties from Formal Enforcement Actions (5 years)	-
EPA Cases (5 years)	-
Penalties from EPA Cases (5 years)	-

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Toxic Releases (TRI): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Regulatory Information

Clean Air Act (CAA): No Information
Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Inactive Other,

(PRR000023655)

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

Known Data Problems https://epa.gov/resources/echo-data/known-data-problems

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110043555462					N	18.397683	-66.031385
RCRAInfo	RCRA	PRR000023655	Other	Inactive ()			N	18.397683	-66.031385

Facility Address

System	Statute Identifier		Facility Name	Facility Address	Facility County	
FRS		110043555462 LUMA - RIO PIEDRAS TECHNICAL OPERATIONS OFFICE		CALLE JOSE DE DIEGO EQUINA, RIO PIEDRAS, PR 00921	San Juan Municipio	
RCRAInfo	RCRAInfo RCRA PRR000023655 LUMA - RIO PIED		LUMA - RIO PIEDRAS TECHNICAL OPERATIONS OFFICE	CALLE JOSE DE DIEGO EQUINA, RIO PIEDRAS, PR 00921	San Juan Municipio	

Facility SIC (Standard Industrial Classification) Codes

Facility NAICS (North American Industry Classification System) Codes

SIC Description No data records returned

PRR000023655 RCRAInfo 22111 Electric Power Generation

Facility Tribe Information

Tribe Name EPA Tribal ID Distance to Tribe (miles)

No data records returned

Enforcement and Compliance

RCRA (Hazardous Waste (Resource Conservation and Recovery Act) Compliance Pipeline (Compliance Monitoring → Violations → Enforcement Actions) (10 Years)

This table shows how violations relate to compliance monitoring (CM) activities and enforcement. Currently available for CAA and RCRA only. Full CM history available below.

No data records returned

There are no relationships to display in the RCRA Compliance Pipeline table for this facility. Scroll down to view compliance monitoring history.

Compliance Monitoring History Last 5 Years

Finding (if applicable)

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy

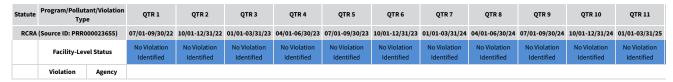
<https://www.epa.gov/compliance/compliance-monitoring-programs> activities or because they are not counted as inspections within EPA's Annual Results

https://www.epa.gov/enforcement/enforcement-data-and-results>.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRR000023655	No	05/31/2025	0	05/30/2025

Three-Year Compliance History by Quarter



Informal Enforcement Actions

Last 5 Years

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Last 5 Years

Formal Enforcement Actions

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?
--	---	---	------------------------------------	--	---	---

No data records returned

Assessed Waters From Latest State Submission (ATTAINS)

State Report Cycle Assessment Unit ID Assessment Unit ID Assessment Unit Name Water Condition Cause Groups Impaired Drinking Water Use Ecological Use Fish Consumption Use Recreation Use Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)					
No data records returned									

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in **Pounds per Year at Site**

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land Total On-Site Releases Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name					
No data records returned					

Community

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary https://epa.gov/help/reports/dfr-data-dictionary#demographic.

General Statistics (ACS (American Community Survey))		Age Breakdown (ACS (American Community Survey)) - Persons (%)	
Total Persons	33,045	Children 5 years and younger	1,168 (4%)
Population Density	10,726/sq.mi.	Minors 17 years and younger	5,970 (18%)
Housing Units in Area	18,797	Adults 18 years and older	27,075 (82%)
Percent People of Color	99%	Seniors 65 years and older	7,778 (24%)
Households in Area	14,322		
Households on Public Assistance	428	Race Breakdown (ACS (American Community Survey)) - Persons (%)	
Persons With Low Income	24,590	White	14,482 (44%)
Percent With Low Income	75%	African-American	5,458 (17%)
refeelit with Eow meonic	1370	Hispanic-Origin	32,536 (98%)
Geography		Asian	128 (0%)
Radius of Selected Area	1 mi.	Hawaiian/Pacific Islander	0 (0%)
Center Latitude	18.397683	American Indian	76 (0%)
Center Longitude	-66.031385	Other/Multiracial	8,326 (25%)
Total Area			
and Area	99%	Education Level (Persons 25 & older) (ACS (American Community Su	•
Nater Area	1%	Less than 9th Grade	2,855 (12
		9th through 12th Grade	1,365 (5
Income Breakdown (ACS (American Community Survey)	- Households (%)	High School Diploma	5,476 (2
Less than \$15,000	5,739 (40.09%)	Some College/2-year	2,895 (1:
\$15,000 - \$25,000	2,243 (15.67%)	B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	7,885 (3:
\$25,000 - \$50,000	3,678 (25.69%)		
\$50,000 - \$75,000	1,390 (9,71%)		

2.855 (12.08%) 1.365 (5.78%) 5,476 (23,17%) 2.895 (12.25%) 7.885 (33.36%)



Facility Summary

SHELL CO PR LTD SS 0655 SABANA LLANA

DE DIEGO AVE & TRUJILLO ALTO, RIO PIEDRAS, PR 00924

FRS (Facility Registry Service) ID: 110007818754

EPA Region: 02 Latitude: 18.397628 Longitude: -66.031253 Locational Data Source: FRS

Industries: -Indian Country: N

Enforcement and Compliance Summary

Statute	RCRA
Compliance Monitoring Activities (5 years)	-
Date of Last Compliance Monitoring Activity	-
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	-
Formal Enforcement Actions (5 years)	-
Penalties from Formal Enforcement Actions (5 years)	-
EPA Cases (5 years)	-
Penalties from EPA Cases (5 years)	-

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Toxic Releases (TRI): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Regulatory Information

Clean Air Act (CAA): No Information
Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Inactive Other,

(PRR000005223)

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

Known Data Problems https://epa.gov/resources/echo-data/known-data-problems

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110007818754					N	18.397628	-66.031253
RCRAInfo	RCRA	PRR000005223	Other	Inactive ()			N		

Facility Address

System	Statute Identifier		Facility Name	Facility Address	Facility County	
FRS		110007818754	SHELL CO PR LTD SS 0655 SABANA LLANA	DE DIEGO AVE & TRUJILLO ALTO, RIO PIEDRAS, PR 00924	San Juan Municipio	
RCRAInfo	RCRA	PRR000005223	SHELL CO PR LTD SS 0655 SABANA LLANA	DE DIEGO AVE & TRUJILLO ALTO, RIO PIEDRAS, PR 00924	San Juan Municipio	

Facility SIC (Standard Industrial Classification) Codes

Facility NAICS (North American Industry Classification System) Codes

System Identifier SIC Code SIC Description System Identifier NAICS Code NAICS Description

No data records returned

No data records returned

Facility Tribe Information

Reservation Name Tribe Name EPA Tribal ID Distance to Tribe (miles)

No data records returned

Enforcement and Compliance

Compliance Monitoring History

Last 5 Year

Statute Source ID System Activity Type Compliance Monitoring Type Lead Agency Date Finding (if applicable)

No data records returned

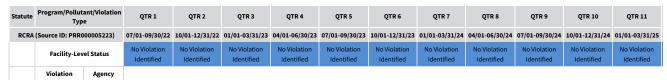
Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy

- https://www.epa.gov/compliance/compliance/compliance-monitoring-programs activities or because they are not counted as inspections within EPA's Annual Results
- https://www.epa.gov/enforcement/enforcement-data-and-results.

Compliance Summary Data

Statu	e Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCR	PRR000005223	No	05/31/2025	0	05/30/2025

Three-Year Compliance History by Quarter



Informal Enforcement Actions

Last 5 Years

Statute System Source ID Type of Action Lead Agency Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute System System System System Section ID Action No. Agency Name Date State Action Date Settlements/ Section State System S

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) WBD (Watershed Boundary Dataset) State Water Body Name (ICIS (Integrated Compliance Database)) State Water Body Name (ICIS (Integrated Compliance Information System))

State Water Body Name (ICIS (Integrated Compliance Information System))

Beach Closures Within Last Two Years

Pollutants Potentially Related to Impairment Species Act)-listed Aquatic Species?

No data records returned

Assessed Waters From Latest State Submission (ATTAINS)

State Report Cycle Assessment Unit ID Assessment Unit ID Assessment Unit Name Water Condition Cause Groups Impaired Drinking Water Use Ecological Use Fish Consumption Use Recreation Use Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant Within Nonattainment Status Area? Nonattainment Status Applicable Standard(s) Within Maintenance Status Area? Maintenance Status Applicable Standard(s)

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land No. Site Releases Total Off-Site Transfers No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

Community

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary https://epa.gov/help/reports/dfr-data-dictionary#demographic.

General Statistics (ACS (American Community Survey))	
Total Persons	33,063
Population Density	10,731/sq.mi.
Housing Units in Area	18,790
Percent People of Color	99%
Households in Area	14,333
Households on Public Assistance	429
Persons With Low Income	24,592
Percent With Low Income	75%
Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.397628
Center Longitude	-66.031253
Total Area	
Land Area	99%
Water Area	1%
Income Breakdown (ACS (American Community Survey	r)) - Households (%)
Less than \$15,000	5,742 (40.06%)
\$15,000 - \$25,000	2,243 (15.65%)
\$25,000 - \$50,000	3,681 (25.68%)
\$50,000 - \$75,000	1,398 (9.75%)
Greater than \$75,000	1,271 (8.87%)

Children 5 years and younger	1,168 (4%)
Minors 17 years and younger	5,975 (18%)
Adults 18 years and older	27,093 (82%)
Seniors 65 years and older	7,799 (24%)
Race Breakdown (ACS (American Community Survey)) - Persons (%)
White	14,513 (44%)
African-American	5,461 (17%)
Hispanic-Origin	32,553 (98%)
Asian	127 (0%)
Hawaiian/Pacific Islander	0 (0%)
American Indian	76 (0%)
Other/Multiracial	8,316 (25%)
Education Level (Persons 25 & older) (ACS (American Community S	urvey)) - Persons (%)
Less than 9th Grade	2,856 (12.07%)
9th through 12th Grade	1,365 (5.77%)
High School Diploma	5,483 (23.18%)
Some College/2-year	2,902 (12.27%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	7,895 (33.37%)



Facility Summary

THE CHURCH OF CHRIST OF LATTER-DAY SAINTS - NEW TEMPLE AND MEETINGHOUSE

RONDA STREET, INTERSECTION WITH PR-181, SAN JUAN, PR 00926

FRS (Facility Registry Service) ID: 110070528694

EPA Region: 02 Latitude: 18.3856 Longitude: -66.0298

Locational Data Source: NPDES

Industries: -Indian Country: N

Enforcement and Compliance Summary

Statute	CWA
Compliance Monitoring Activities (5 years)	-
Date of Last Compliance Monitoring Activity	-
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	-
Formal Enforcement Actions (5 years)	-
Penalties from Formal Enforcement Actions (5 years)	-
EPA Cases (5 years)	-
Penalties from EPA Cases (5 years)	-

Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): Non-Major, Permit Expired (PRR10006Y), Non-Major,

Permit Effective (PRR10006P)

Resource Conservation and Recovery Act (RCRA): No Information

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

Known Data Problems https://epa.gov/resources/echo-data/known-data-problems

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110070528694					N	18.3856	-66.0298
ICIS-NPDES	CWA	PRR10006Y	Non-Major: General Permit Covered Facility	Expired	Construction Stormwater	02/15/2022	N	18.3856	-66.0298
ICIS-NPDES	CWA	PRR10006P	Non-Major: General Permit Covered Facility	Effective	Construction Stormwater	02/16/2027	N	18.3856	-66.0298

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110070528694	THE CHURCH OF CHRIST OF LATTER-DAY SAINTS - NEW TEMPLE AND MEETINGHOUSE	RONDA STREET, INTERSECTION WITH PR-181, SAN JUAN, PR 00926	San Juan Municipio
ICIS-NPDES	CWA	PRR10006Y	THE CHURCH OF CHRIST OF LATTER-DAY SAINTS - NEW TEMPLE AND MEETINGHOUSE	RONDA STREET, INTERSECTION WITH PR-181, SAN JUAN, PR 00926	
ICIS-NPDES	CWA	PRR10006P	THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS - NEW TEMPLE AND MEETINGHOUSE	RONDA STREET, INTERSECTION WITH PR-181, SAN JUAN, PR 00926	

Facility SIC (Standard Industrial Classification) Codes

Facility NAICS (North American Industry Classification System) Codes

No data records returned

No data records returned

Facility Industrial Effluent Guidelines

Facility Tribe Information

Identifier	Effluent Guideline (40 CFR Part)	Effluent Guideline Description	Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)
	No data records ret	urned		No data	records returned	l

Enforcement and Compliance

Compliance Monitoring History

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy

<https://www.epa.gov/compliance/compliance-monitoring-programs> activities or because they are not counted as inspections within EPA's Annual Results

https://www.epa.gov/enforcement/enforcement-data-and-results.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
CWA	PRR10006Y	No	12/31/2024	0	05/30/2025
CWA	PRR10006P	No	12/31/2024	0	05/30/2025

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	е ятр	QTR 10	QTR 11
cw	A (Source ID: PRR10006Y)	01/01-03/31/22	04/01-06/30/22	07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24	04/01-06/30/24	07/01-09/30/24
	Facility-Level Status	No Violation Identified										
	Quarterly Noncompliance Report History											
CW	A (Source ID: PRR10006P)	01/01-03/31/22	04/01-06/30/22	07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24	04/01-06/30/24	07/01-09/30/24
	Facility-Level Status	No Violation Identified										
	Quarterly Noncompliance Report History											

Informal Enforcement Actions

Last 5 Years

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions | Last 5 Years

Statute	System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?
210100050501	Laguna San Jose, Laguna Torrecilla, Laguna de Pinones D Watersheds	SABANA CREEK	No	No		Yes

Assessed Waters From Latest State Submission (ATTAINS)

s	tate	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use	
	PR	2024	PREE13A3	SAN JUAN BAY ESTUARY	Impaired - 303(d) Listed	MERCURY METALS (OTHER THAN MERCURY) NUTRIENTS OIL AND GREASE ORGANIC ENRICHMENT/OXYGEN DEPLETION PATHOGENS PH/ACIDITY/CAUSTIC CONDITIONS TEMPERATURE TURBIDITY		Not Supporting		Not Supporting		

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)			
	No data and advantage						
No data records returned							

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land Total On-Site Releases Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

CWA (Clean Water Act) Discharge Monitoring Report (DMR) Pollutant Loadings

DMR and TRI Multi-Year Loading Report

NPDES ID	Description		
No data records returned			
no data records retarried			

Community

Center Longitude

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary https://epa.gov/help/reports/dfr-data-dictionary#demographic.

-66.0298

General Statistics (ACS (American Community Survey))	
Total Persons	28,471
Population Density	9,130/sq.mi.
Housing Units in Area	15,269
Percent People of Color	99%
Households in Area	12,319
Households on Public Assistance	310
Persons With Low Income	17,345
Percent With Low Income	61%
Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.3856

Age Breakdown (ACS (American Community Survey)) - Persons (%)				
Children 5 years and younger	969 (3%)			
Minors 17 years and younger	4,428 (16%)			
Adults 18 years and older	24,044 (84%)			
Seniors 65 years and older	7,626 (27%)			
Race Breakdown (ACS (American Community Survey))	- Persons (%)			
White	14,386 (51%)			
African-American	4,018 (14%)			
Hispanic-Origin	28,034 (98%)			
Asian	112 (0%)			
Hawaiian/Pacific Islander	0 (0%)			
American Indian	115 (0%)			
Other/Multiracial	5,002 (18%)			



Facility Summary

CARIBBEAN PETROLEUM LP SS GULF 005

PR-3 KM 5.1 AVE 65TH INF, RIO PIEDRAS, PR 00981

FRS (Facility Registry Service) ID: 110009437742

EPA Region: 02 Latitude: 18.395076 Longitude: -66.044362 Locational Data Source: FRS

Industries: -Indian Country: N

Enforcement and Compliance Summary

Statute	RCRA
Compliance Monitoring Activities (5 years)	
Date of Last Compliance Monitoring Activity	
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	
Formal Enforcement Actions (5 years)	-
Penalties from Formal Enforcement Actions (5 years)	
EPA Cases (5 years)	
Penalties from EPA Cases (5 years)	

Regulatory Information

Other Regulatory Reports

 Clean Air Act (CAA): No Information
 Air Emissions Inventory (EIS): No Information

 Clean Water Act (CWA): No Information
 Greenhouse Gas Emissions (eGGRT): No Information

Resource Conservation and Recovery Act (RCRA): Inactive Other, (PRR000008573) Toxic Releases (TRI): No Information

Safe Drinking Water Act (SDWA): No Information Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Go To Enforcement/Compliance Details

Known Data Problems https://epa.gov/resources/echo-data/known-data-problems

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110009437742					N	18.395076	-66.044362
RCRAInfo	RCRA	PRR000008573	Other	Inactive ()			N	18.395076	-66.044362

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110009437742	CARIBBEAN PETROLEUM LP SS GULF 005	PR-3 KM 5.1 AVE 65TH INF, RIO PIEDRAS, PR 00981	San Juan Municipio
RCRAInfo	RCRA	PRR000008573	CARIBBEAN PETROLEUM LP SS GULF 005	CARR 3 KM 5.1 AVE 65TH INF, RIO PIEDRAS, PR 00981	San Juan Municipio

No data records returned

 $Entries in italics are not included in ECHO's Compliance \textit{Monitoring Activity counts because they are not compliance monitoring strategy} < \texttt{https://www.epa.gov/compliance/strategy} < \texttt{https://www$ compliance-monitoring-programs> activities or because they are not counted as inspections within EPA's Annual Results https://www.epa.gov/enforcement/enforcement-data-results https://www.epa.gov/enforcement/enforcement-data-results https://www.epa.gov/enforcement/enforcement-data-results https://www.epa.gov/enforcement/enforcement-data-results https://www.epa.gov/enforcement/enforcement-data-results https://www.epa.gov/enforcement/enforcement-data-results https://www.epa.gov/enforcement/enfor and-results>.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRR000008573	No	08/09/2025	0	08/08/2025

Three-Year Compliance History by Quarter

Statute	Program/ Pollutant/ Violation Type	QTR1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12+
	RA (Source ID: R000008573)	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24	04/01-06/30/24	07/01-09/30/24	10/01-12/31/24	01/01-03/31/25	04/01-06/30/25	07/01-09/30/25
	Facility-Level Status	No Violation Identified											
	Violation Agency												

Informal Enforcement Actions

Last 5 Years

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions | Last 5 Years

Issued/ Filed **Federal Penalty** State/ Local Penalty

No data records returned

Environmental Conditions

Watersheds

Dataset) HUC (RAD (Reach Address Subwatershed Name (RAD (Reach Address (Integrated Compliance Information System)) Within Last Two Species Act)-listed Aquation Within Last Year Related to Impairmen

No data records returned

Assessed Waters From Latest State Submission (ATTAINS)

State Report Cycle Assessment Unit ID Assessment Unit ID Assessment Unit ID Assessment Unit Name Water Condition Cause Groups Impaired Drinking Water Use Ecological Use Fish Consumption Use Recreation Use Other Use

No data records returned

Air Quality Nonattainment Areas

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

No data records returned

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

General Statistics (ACS (American Community Survey))	General Statistics (ACS (American Community Survey))				
Total Persons	23,448				
Population Density	7,519/sq.mi.				
Housing Units in Area	15,354				
Percent People of Color	99%				
Households in Area	10,501				
Households on Public Assistance	281				
Persons With Low Income	16,060				
Percent With Low Income	71%				

Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.395076
Center Longitude	-66.044362
Total Area	3.121 sq.mi.
Land Area	100%
Water Area	0%

Income Breakdown (ACS (American Community Survey)) - Households (%)			
Less than \$15,000	3,865 (36.82%)		
\$15,000 - \$25,000	1,645 (15.67%)		
\$25,000 - \$50,000	2,915 (27.77%)		
\$50,000 - \$75,000	928 (8.84%)		
Greater than \$75,000	1,144 (10.9%)		

Age Breakdown (ACS (American Community Survey)) - Persons (%)	
Children 5 years and younger	643 (3%)
Minors 17 years and younger	3,066 (13%)
Adults 18 years and older	20,380 (87%)
Seniors 65 years and older	6,360 (27%)

Race Breakdown (ACS (American Community Survey)) - Persons (%)					
White	10,321 (44%)				
African-American	3,594 (15%)				
Hispanic-Origin	23,067 (98%)				
Asian	83 (0%)				
Hawaiian/Pacific Islander	0 (0%)				
American Indian	98 (0%)				
Other/Multiracial	5,167 (22%)				

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	2,257 (12.81%)
9th through 12th Grade	1,151 (6.53%)
High School Diploma	3,257 (18.49%)
Some College/2-year	1,853 (10.52%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	6,648 (37.74%)



Facility Summary

HOSPITAL SAN FRANCISCO

371 AVENIDA DE DIEGO, SAN JUAN, PR 00907

FRS (Facility Registry Service) ID: 110004889915

EPA Region: 02 Latitude: 18.399081 Longitude: -66.038969 Locational Data Source: FRS

Industries: -Indian Country: N

Enforcement and Compliance Summary

Statute	RCRA
Compliance Monitoring Activities (5 years)	
Date of Last Compliance Monitoring Activity	03/19/2008
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	
Formal Enforcement Actions (5 years)	
Penalties from Formal Enforcement Actions (5 years)	
EPA Cases (5 years)	
Penalties from EPA Cases (5 years)	-

Regulatory Information

Other Regulatory Reports

 Clean Air Act (CAA): No Information
 Air Emissions Inventory (EIS): No Information

 Clean Water Act (CWA): No Information
 Greenhouse Gas Emissions (eGGRT): No Information

Resource Conservation and Recovery Act (RCRA): Inactive Other, (PRD987376019) Toxic Releases (TRI): No Information

Safe Drinking Water Act (SDWA): No Information Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Go To Enforcement/Compliance Details

Known Data Problems https://epa.gov/resources/echo-data/known-data-problems

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110004889915					N	18.399081	-66.038969
RCRAInfo	RCRA	PRD987376019	Other	Inactive ()			N	18.398578	-66.039671

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110004889915	HOSPITAL SAN FRANCISCO	371 AVENIDA DE DIEGO, SAN JUAN, PR 00907	San Juan Municipio
RCRAInfo	RCRA	PRD987376019	HOSPITAL SAN FRANCISCO	AVENIDA DE DIEGO #371, RIO PIEDRAS, PR 00923	San Juan Municipio

No data records returned

 $Entries in italics are not included in ECHO's Compliance \textit{Monitoring Activity counts because they are not compliance monitoring strategy} < \texttt{https://www.epa.gov/compliance/strategy} < \texttt{https://www$ compliance-monitoring-programs> activities or because they are not counted as inspections within EPA's Annual Results https://www.epa.gov/enforcement/enforcement-data-results https://www.epa.gov/enforcement/enforcement-data-results https://www.epa.gov/enforcement/enforcement-data-results https://www.epa.gov/enforcement/enforcement-data-results https://www.epa.gov/enforcement/enforcement-data-results https://www.epa.gov/enforcement/enforcement-data-results https://www.epa.gov/enforcement/enfor and-results>.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRD987376019	No	08/09/2025	0	08/08/2025

Three-Year Compliance History by Quarter

Statute	Program/ Pollutant/ Violation Type	QTR1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12+
	RA (Source ID: RD987376019)	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24	04/01-06/30/24	07/01-09/30/24	10/01-12/31/24	01/01-03/31/25	04/01-06/30/25	07/01-09/30/25
	Facility-Level Status	No Violation Identified											
	Violation Agency												

Informal Enforcement Actions

Last 5 Years

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions | Last 5 Years

Issued/ Filed **Federal Penalty** State/ Local Penalty

No data records returned

Environmental Conditions

Watersheds

Dataset) HUC (RAD (Reach Address Subwatershed Name (RAD (Reach Address (Integrated Compliance Information System)) Within Last Two Species Act)-listed Aquation Within Last Year Related to Impairmen

No data records returned

Assessed Waters From Latest State Submission (ATTAINS)

State Report Cycle Assessment Unit ID Assessment Unit ID Assessment Unit ID Assessment Unit Name Water Condition Cause Groups Impaired Drinking Water Use Ecological Use Fish Consumption Use Recreation Use Other Use

No data records returned

Air Quality Nonattainment Areas

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

No data records returned

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

General Statistics (ACS (American Community Survey))	
Total Persons	29,869
Population Density	9,603/sq.mi.
Housing Units in Area	18,259
Percent People of Color	99%
Households in Area	13,120
Households on Public Assistance	371
Persons With Low Income	21,929
Percent With Low Income	76%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.399081
Center Longitude	-66.038969
Total Area	3.121 sq.mi.
Land Area	100%
Water Area	0%

Income Breakdown (ACS (American Community Surv	rey)) - Households (%)
Less than \$15,000	5,346 (40.74%)
\$15,000 - \$25,000	2,071 (15.78%)
\$25,000 - \$50,000	3,393 (25.86%)
\$50,000 - \$75,000	1,161 (8.85%)
Greater than \$75,000	1,151 (8.77%)

Age Breakdown (ACS (American Community Survey)) - Persons (%)					
Children 5 years and younger	920 (3%)				
Minors 17 years and younger	4,987 (17%)				
Adults 18 years and older	24,879 (83%)				
Seniors 65 years and older	7,277 (24%)				

Race Breakdown (ACS (American Community Survey)) - Persons (%)				
White	12,597 (42%)			
African-American	4,659 (16%)			
Hispanic-Origin	29,381 (98%)			
Asian	72 (0%)			
Hawaiian/Pacific Islander	3 (0%)			
American Indian	58 (0%)			
Other/Multiracial	7,608 (25%)			

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)					
Less than 9th Grade	2,701 (12.52%)				
9th through 12th Grade	1,393 (6.46%)				
High School Diploma	4,645 (21.54%)				
Some College/2-year	2,477 (11.48%)				
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	7,389 (34.26%)				



Facility Summary

PRASA - SJ1A SAGRADO CORAZON FACILITY

SAN JOSE ST VILLA PALMERAS, SAN JUAN, PR 00925

FRS (Facility Registry Service) ID: 110007822785

EPA Region: 02 Latitude: 18.39562 Longitude: -66.04411 Locational Data Source: FRS

Industries: -Indian Country: N

Enforcement and Compliance Summary

Statute	RCRA
Compliance Monitoring Activities (5 years)	-
Date of Last Compliance Monitoring Activity	-
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	-
Formal Enforcement Actions (5 years)	-
Penalties from Formal Enforcement Actions (5 years)	-
EPA Cases (5 years)	-
Penalties from EPA Cases (5 years)	-

Regulatory Information

Other Regulatory Reports

 Clean Air Act (CAA): No Information
 Air Emissions Inventory (EIS): No Information

 Clean Water Act (CWA): No Information
 Greenhouse Gas Emissions (eGGRT): No Information

Resource Conservation and Recovery Act (RCRA): Inactive Other, (PRR000012567) Toxic Releases (TRI): No Information

Safe Drinking Water Act (SDWA): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Go To Enforcement/Compliance Details

Known Data Problems https://epa.gov/resources/echo-data/known-data-problems

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude	
FRS		110007822785					N	18.39562	-66.04411	
RCRAInfo	RCRA	PRR000012567	Other	Inactive ()			N			

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110007822785	PRASA - SJ1A SAGRADO CORAZON FACILITY	SAN JOSE ST VILLA PALMERAS, SAN JUAN, PR 00925	San Juan Municipio
RCRAInfo	RCRA	PRR000012567	PRASA - SJ1A SAGRADO CORAZON FACILITY	SAN JOSE ST VILLA PALMERAS, SAN JUAN, PR 00925	San Juan Municipio

No data records returned

 $Entries in italics are not included in ECHO's Compliance \textit{Monitoring Activity counts because they are not compliance monitoring strategy} < \texttt{https://www.epa.gov/compliance/strategy} < \texttt{https://www$ compliance-monitoring-programs> activities or because they are not counted as inspections within EPA's Annual Results https://www.epa.gov/enforcement/enforcement-data-results https://www.epa.gov/enforcement/enforcement-data-results https://www.epa.gov/enforcement/enforcement-data-results https://www.epa.gov/enforcement/enforcement-data-results https://www.epa.gov/enforcement/enforcement-data-results https://www.epa.gov/enforcement/enforcement-data-results https://www.epa.gov/enforcement/enfor and-results>.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRR000012567	No	08/09/2025	0	08/08/2025

Three-Year Compliance History by Quarter

Statute	Progra Polluta Violation	ant/	QTR1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12+
	RA (Source R00001256		10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24	04/01-06/30/24	07/01-09/30/24	10/01-12/31/24	01/01-03/31/25	04/01-06/30/25	07/01-09/30/25
	Facility- State		No Violation Identified											
	Violation	Agency												

Informal Enforcement Actions

Last 5 Years

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions | Last 5 Years

Issued/ Filed **Federal Penalty** State/ Local Penalty

No data records returned

Environmental Conditions

Watersheds

Dataset) HUC (RAD (Reach Address Subwatershed Name (RAD (Reach Address (Integrated Compliance Information System)) Within Last Two Species Act)-listed Aquation Within Last Year Related to Impairmen

No data records returned

Assessed Waters From Latest State Submission (ATTAINS)

State Report Cycle Assessment Unit ID Assessment Unit ID Assessment Unit ID Assessment Unit Name Water Condition Cause Groups Impaired Drinking Water Use Ecological Use Fish Consumption Use Recreation Use Other Use

No data records returned

Air Quality Nonattainment Areas

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

No data records returned

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

General Statistics (ACS (American Community Survey))	General Statistics (ACS (American Community Survey))				
Total Persons	23,934				
Population Density	7,674/sq.mi.				
Housing Units in Area	15,701				
Percent People of Color	99%				
Households in Area	10,741				
Households on Public Assistance	288				
Persons With Low Income	16,380				
Percent With Low Income	71%				

Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.39562
Center Longitude	-66.04411
Total Area	3.121 sq.mi.
Land Area	100%
Water Area	0%

Income Breakdown (ACS (American Community Survey)	Income Breakdown (ACS (American Community Survey)) - Households (%)				
Less than \$15,000	3,962 (36.89%)				
\$15,000 - \$25,000	1,689 (15.73%)				
\$25,000 - \$50,000	2,978 (27.73%)				
\$50,000 - \$75,000	949 (8.84%)				
Greater than \$75,000	1,162 (10.82%)				
Greater than \$75,000	1,162 (10.82				

Age Breakdown (ACS (American Community Survey)) - Persons (%)				
Children 5 years and younger 632 (3%)				
Minors 17 years and younger	3,111 (13%)			
Adults 18 years and older	20,823 (87%)			
Seniors 65 years and older	6,483 (27%)			

Race Breakdown (ACS (American Community Survey)) - Persons (%)				
White	10,571 (44%)			
African-American	3,632 (15%)			
Hispanic-Origin	23,547 (98%)			
Asian	84 (0%)			
Hawaiian/Pacific Islander	0 (0%)			
American Indian	98 (0%)			
Other/Multiracial	5,283 (22%)			

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	2,278 (12.66%)
9th through 12th Grade	1,173 (6.52%)
High School Diploma	3,343 (18.58%)
Some College/2-year	1,901 (10.56%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	6,832 (37.96%)



Appendix *: "USFWS "No Effect" Memo and supporting documentations

Date: May 8, 2025

Applicant ID: PR-ESP-00264

Street Address: Calle 15 1265 Ext San Agustin, San Juan PR, 00926

Municipality: San Juan

RE: No Effect Determination for PR-ESP-00264

Executive Summary

Section 7 of the Endangered Species Act (ESA) mandates that federal agencies ensure the actions that they authorize, fund, or carry out shall not jeopardize the continued existence of federally listed plants and animals or result in the adverse modification or destruction of designated critical habitat. Where their actions may affect resources protected by the ESA, agencies must consult with the Fish and Wildlife Service and/or the National Marine Fisheries Service ("FWS" and "NMFS" or "the Services").

This memo serves to document that the proposed project, PR-ESP-00264, located at Calle 15 1265 Ext San Agustin, San Juan PR, 00926 (Parcel ID# 087-045-849-11-001/087-045-849-12-000) was reviewed in accordance with Section 7 of the Endangered Species Act of 1973 (16 USC 1536) as well as the Fish and Wildlife Coordination Act (47 Stat. 401, as amended; 16 U.S.C. 661 et seq.) by a qualified Biologist, resulting in a 'No Effect' determination.

The CDBG-DR Energy Electrical Power Reliability and Resilience (ER2) Program's objective is to enhance electric system reliability, affordability, and resiliency through the development and interconnection of projects that qualify as electric system enhancements or improvements.

Project Description

The subject property is a Commercial Building located in San Juan, PR. The project scope includes the installation of a photovoltaic (solar) panel system and appurtenant storage system (batteries) on the existing commercial building's roof and will be built at Latitude: 18.390973, Longitude: -66.035318 (see Site Map at Appendix A, Figure 1). All improvements will be limited to the roof, floors, and walls of existing commercial buildings. The Field Observation Form and Environmental Screening Checklist depicting and clarifying the extent and location of project activities are included in Appendix B.

As indicated by the Official Species List obtained from the Information for Planning and Consultation (IPaC) system (Appendix C) and USFWS Critical Habitat data (Appendix A, Figure 2), the proposed project lies within the ranges of the following federally listed species and critical habitats:

Species	Status
Puerto Rican Boa (Chilabothrus inornatus)	Endangered

	Critical Habitat
None.	

Existing Conditions:

The project area where the activities will be taking place consists of approximately 0.35-acres of land located at Calle 15 1265 Ext San Agustin, San Juan PR, 00926. According to the U.S. Geological Survey National Land Cover Database (NLCD) (Appendix A, Figure 4) the majority of the project area consists of a medium intensity developed land. A structure matching project orientation and footprint is present on 1962 imagery, earliest available. The building construction date is circa 1960. A topographic map is included (see Appendix A, Figure 3). The project is located in Zone X on the FEMA Flood map and ABFE map, panel number 72000C0370J dated 11/18/2009 (see Flood Map Appendix A, Figure 5 and ABFE map Appendix A, Figure 6). A Preliminary FIRM has not been developed for this area. There is a mapped NWI riverine approximately 881 feet to the northeast of the proposed project location. The project activities will not occur within a natural or manmade wetlands and no direct or indirect impacts are anticipated as a result of the project activities (see wetlands map Appendix A, Figure 7).

Effect Determination:

Based on a review of site photos and other information gathered during a site visit on March 5, 2025, none of the species listed above were observed in the vicinity of the proposed project activities and no critical habitat was identified within the proposed project area. Having carefully analyzed the project site and the information available, including the IPaC species list and available Dkey(s), critical habitat data, nature of the project, previous site disturbance, and scope of project activities, the following effect determinations have been made:

Species	Effect Determination	Conservation Measures to be Implemented (if needed)
Puerto Rican Boa (Chilabothrus inornatus)	No Effect	None required

SPECIES ANALYSIS

Puerto Rican Boa (Chilabothrus inornatus)

Considered to be a habitat generalist, the Puerto Rican Boa tolerates a wide variety terrestrial and arboreal habitat, including rocky areas, haystack hill, trees and branches, rotting stumps, caves, plantations, various types of forested areas such as karst and mangrove forests, forested urban and rural areas, and along streams and road edges. The IPaC Determination Key (Dkey) for the Puerto Rican Boa, dated May 6, 2025, was used to evaluate the potential impacts to federally listed species from this project. Based on the Dkey responses, it was determined that the proposed project will have 'No Effect' on the Puerto Rican Boa (Appendix C).

If a Puerto Rican Boa is found in the project activity site, work shall cease until the Boa moves off on its own. If the Boa does not move off, the Construction Manager shall contact the Puerto Rico Department of Natural and Environmental Resources and ask them to relocate the Boa.



	5/8/2025
Patricia Carmenatty / Senior Biologist	Date



Appendix A: Figures

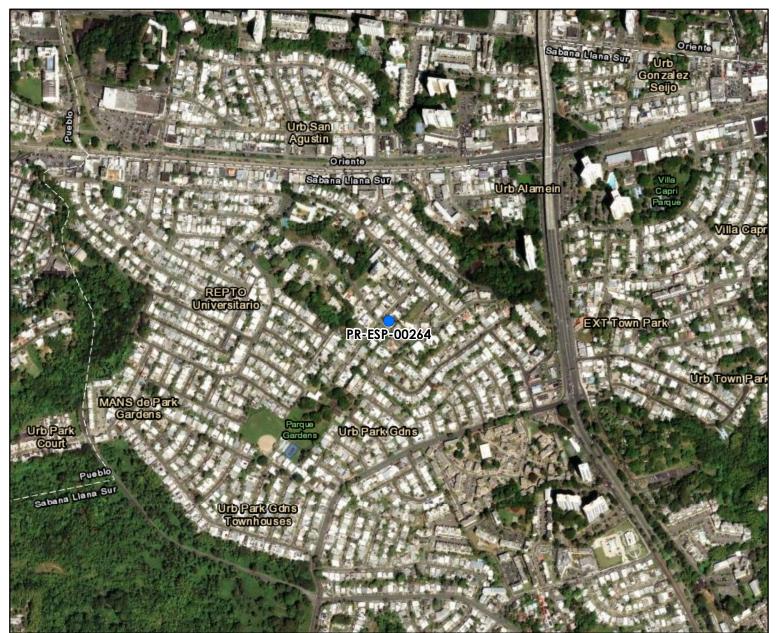


Location: Aerial Map
Electrical Power Reliability and Resilience Program (ER2)

Del Carmen Senior Living Corp Calle 15 1265 Ext. San Agustín, San Juan PR 00926

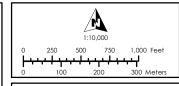
Catastro: 087-045-849-11-001/087-045-849-12-000

Lat: 18.390973, Lon: -66.035318





PR-ESP-00264





Service Layer Credits:

Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

Centro de Recaudación de Ingresos Municipales (CRIM) https://catastro.crimpr.net/cdprpc/



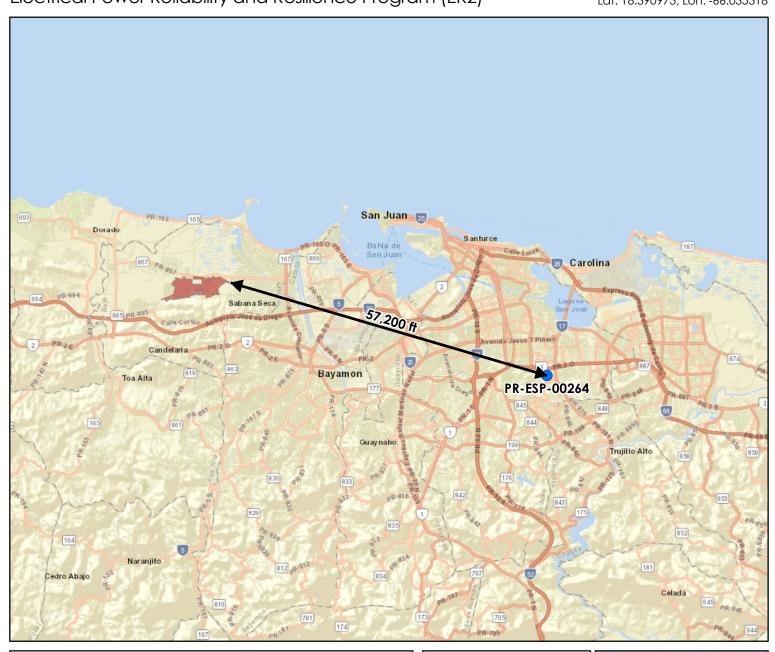
Threatened and Endangered Species Map San Juan PR 00926 Catastro: 087-045-849-11-001/087-045-849-12-000

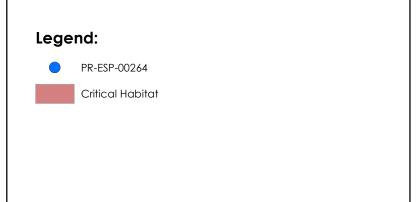
Del Carmen Senior Living Corp

Calle 15 1265

Lat: 18.390973, Lon: -66.035318

Electrical Power Reliability and Resilience Program (ER2)







Service Layer Credits:

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

NOAA Office of Response and Restoration https://response.restoration.noaa.gov/

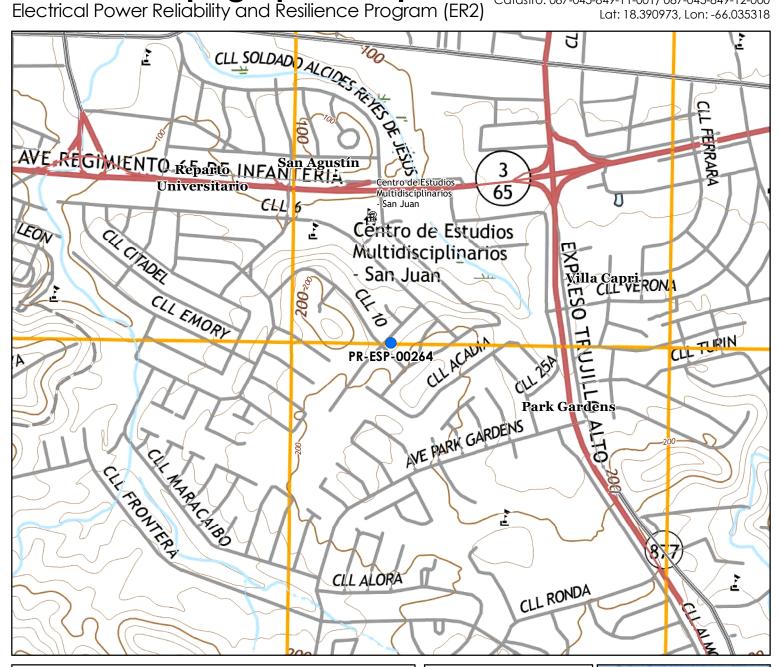


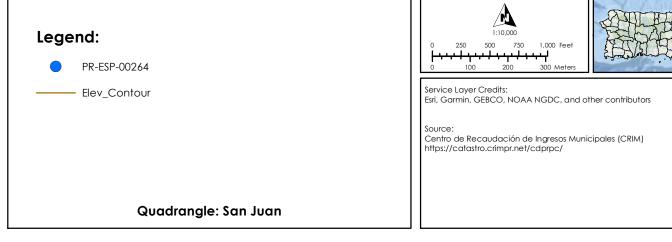
Location: Topographic MapElectrical Power Reliability and Resilience Program (ER2)

Del Carmen Senior Living Corp Calle 15 1265 Ext. San Agustín, San Juan PR 00926

Catastro: 087-045-849-11-001/087-045-849-12-000

Lat: 18.390973, Lon: -66.035318





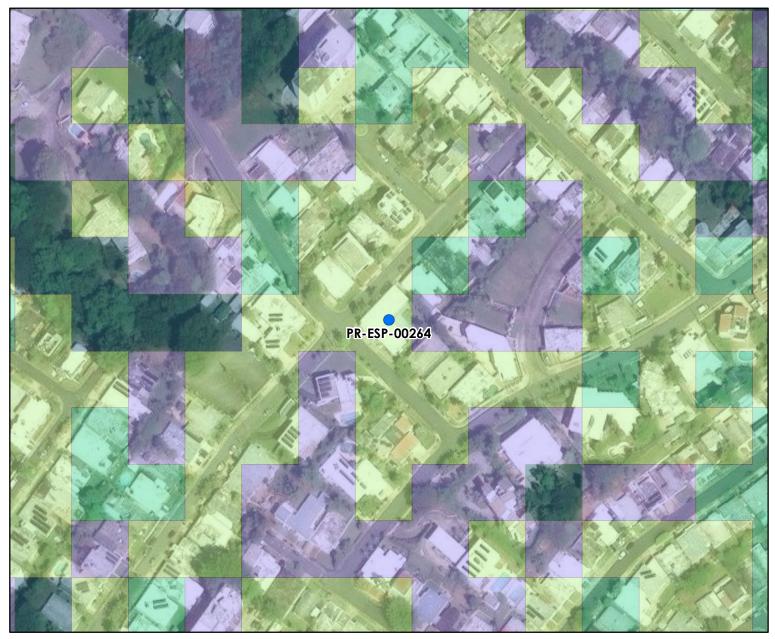


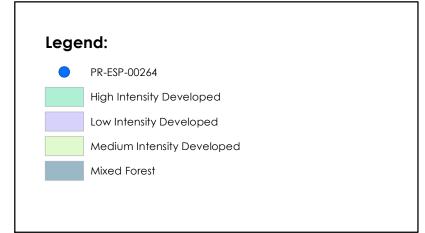
Land Cover Map
Electrical Power Reliability and Resilience Program (ER2)

Del Carmen Senior Living Corp Calle 15 1265 Ext. San Agustín, San Juan PR 00926

Catastro: 087-045-849-11-001/087-045-849-12-000

Lat: 18.390973, Lon: -66.035318







Service Layer Credits:

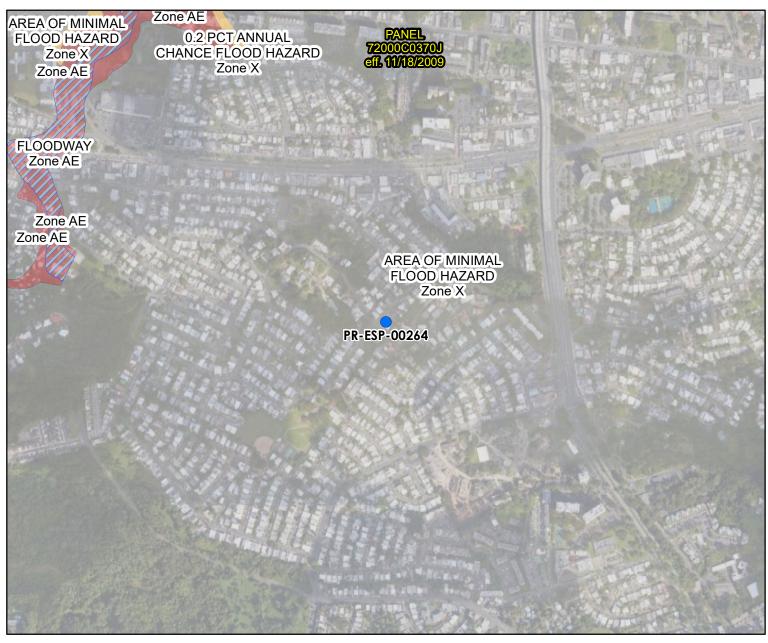
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

Multi-Resolution Land Characteristics (MRLC) Consortium https://www.mrlc.gov/viewer/



Flood Insurance Rate Map Electrical Power Reliability and Resilience Program (ER2)

Del Carmen Senior Living Corp Calle 15 1265 Ext. San Agustín, San Juan PR 00926 Catastro: 087-045-849-11-001/087-045-849-12-000 Lat: 18.390973, Lon: -66.035318



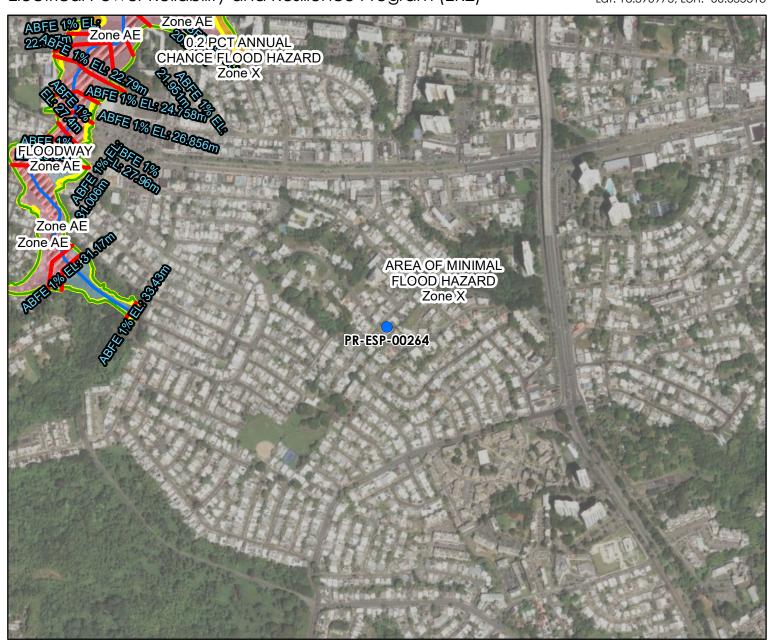


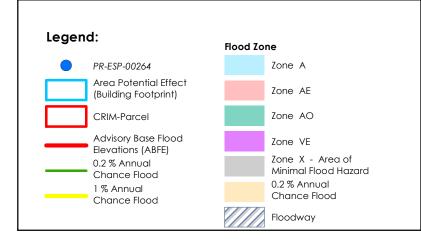


Del Carmen Senior Living Corp Calle 15 1265 Ext. San Agustín,

Advisory Base Flood Elevation Map
San Juan PR 00926
Electrical Power Reliability and Resilience Program (ER2)

Ext. San Agustin,
San Juan PR 00926
Lat: 18.390973, Lon: -66.035318







Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

Federal Emergency Management Agency (FEMA), https://gis-r2-fema.hub.arcgis.com/ Junta de Planificacion de Puerto Rico (JP), https://maps.jp.pr.gov/ Mapas de Niveles de Inundacion Base Recomendados



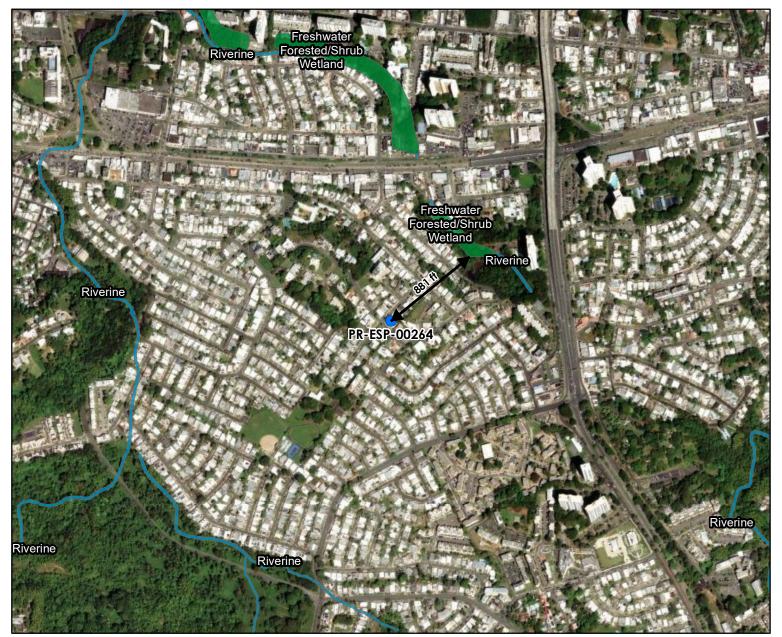
Wetlands Map

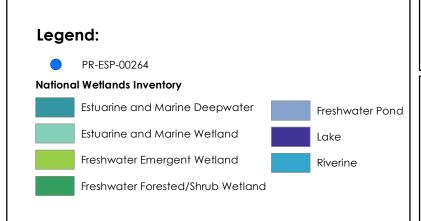
Electrical Power Reliability and Resilience Program (ER2)

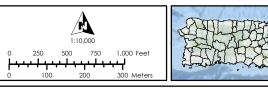
Del Carmen Senior Living Corp Calle 15 1265 Ext. San Agustín, San Juan PR 00926

Catastro: 087-045-849-11-001/087-045-849-12-000

Lat: 18.390973, Lon: -66.035318







Service Layer Credits:

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

Source

U.S. Fish and Wildlife Service - National Weatlands Inventory https://www.fws.gov/program/national-wetlands-inventory



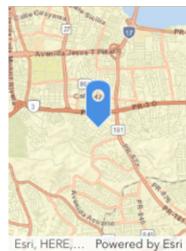
Appendix B: Field Observation Form and Environmental Screening Checklist





Environmental Field Assessment Form - PR-ESP-00264

	APPLICAN	IT/LOCATION INFORMATION
Applicant ID:	PR-ESP-00264	
Applicant Name:	Del Carmen Senior Living Corp	slie Grayama Siciliz
Parcel ID:	087-045-849-11-001/087-045-849-12-000	Avenida Jesus T Pinero
Coordinates:	18.390973, -66.035318	B Gal Q
Street Address:	CALLE 15 1265 EXT SAN AGUSTIN	181
Municipio:	San Juan	
Zip Code:	00926	
Site Inspector:	Egon Gonzalez	
Date of Visit:	March 5, 2025	
Time of Visit:	14:01	Carl UCDC Developed
Year Built:	circa 1980	Esri, HERE, Powered by





	Building Information		
	Question	Answer	Notes
1.	Location verified:	Yes	18.390973, -66.035318
2.	Is the building correct on GIS?	Yes	Building is correct on GIS
3.	Building Type:	Commercial	
4.	# of Stories:	2	
5.	Building Foundation:	Concrete Slab	
6.	Is the building in use?	Yes	Building is in use
7.	Does the building have a detached garage / carport present?	No	
8.	Is the electricity connected?	Yes	Electricity is connected
9.	Is the water connected?	Yes	Water is connected
10.	Are there signs of poor housekeeping on site? (mounds of rubble, garbage, storm debris, solid waste, petroleum products, paint, pesticides, cleaning fluids, vehicle batteries, abandoned vehicles, pits, pools, ponds of hazardous substances, electrical equipment etc.)	No	
11.	Is a septic system present? If Yes report apparent condition.	No	
12.	Are there any obvious signs of animals, birds nesting or burrows near the site?	No	





	Parcel Conditions		
	Question	Answer	Notes
1)	Are there any 55-gallon drums visible on site? If yes, are they leaking?	No	
2)	Are there any (or signs of any) underground storage tanks on the property?	No	
3)	Are there signs of AST on the parcel or adjacent parcel? If yes, list approximate size and contents, if known.	Yes	(1) 300lbs Propane tank located in front of structure. (2) 800gal Water cistern located on right side of structure. 200gal Diesel tank located on right side of structure.
4)	Is there any stained soil or pavement on the parcel?		
5)	Are there any potentially hazardous trees that could fall?		
6)	Are there any groundwater monitoring wells on the site or adjacent parcel?	No	
7)	Is there distressed vegetation on the parcel?		
8)	Are any additional environmental or non-environmental site hazards observed?		
9)	Is there any permanent standing water, such as a pond or stream, located on the site(do not include ponding from recent rain / weather events)?	No	
10)	Does the subject property have water frontage?	No	
11)	Is the applicant aware of any significant historical event or persons associated with the structure, or of it being located in a historic district/ area?	No	
12)	Is a historic marker present?	No	
13)	Based on the above finding, does additional information need to be obtained from the applicant to determine whether an environmental hazard is present?	No	





	Building Envi	ronmental	Conditions
	Question	Answer	Notes
1.	Is there any visible evidence of asbestos, chipping, and flaking or peeling paint, or hazardous materials present in or on the structure?	No	
2.	Is there any visible indication of mold?	No	
3.	Are there any pungent, foul or noxious odors?	No	

Additiona	l Needs Ar	nalysis
Question	Answer	Notes
Based on the above findings, does additional information need to be obtained from the applicant to determine whether an environmental hazard is present?	No	

I verify that I have physically visited this property and that the findings outlined above are accurate.

Inspector Signature

Egon Gonzalez

March 5, 2025





Front of Structure

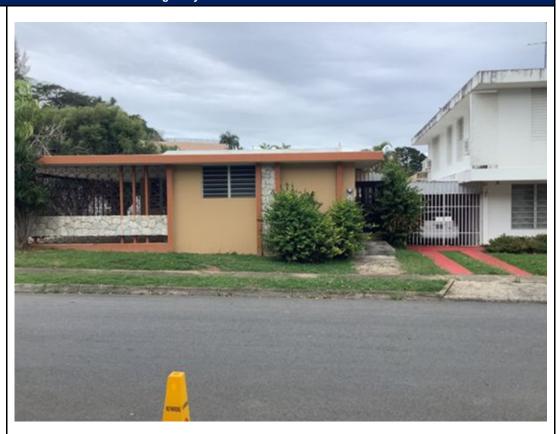
Photo Direction: Northwest

Comments:



Facing Away from Front

Photo Direction: Northwest







Side #1 of Structure

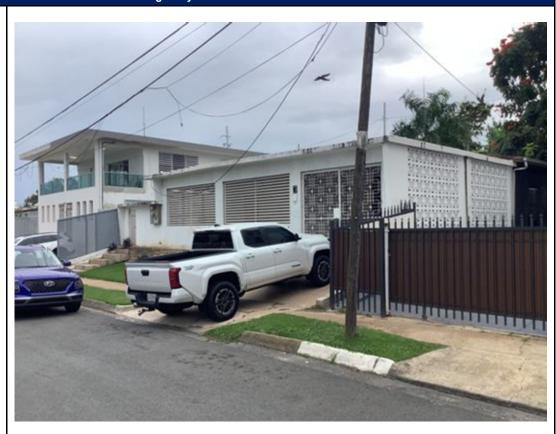
Photo Direction: Southeast

Comments:



Facing Away From Side #1

Photo Direction: East







Back of Structure

Photo Direction: Northwest

Comments:



Facing Away from Back

Photo Direction: Northeast







Side #2 of Structure

Photo Direction: East

Comments:



Facing Away from Side #2

Photo Direction: Southeast







Streetscape #1

Photo Direction: Southwest

Comments:



Streetscape #2

Photo Direction: Northeast







Address

Photo Direction: Southeast

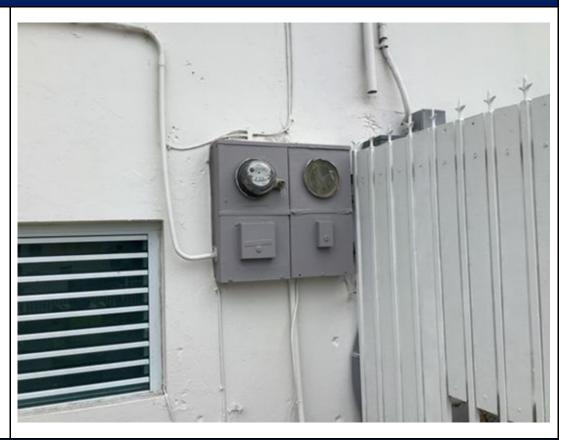






Photo Direction:

Photo Description: Electricity is connected



Architectural Details 2

Photo Direction:

Photo Description: Water is connected







Photo Direction:

Photo Description: 200gal Diesel tank for generator located on righ side of structure



Architectural Details 4

Photo Direction:

Photo Description: General interior view

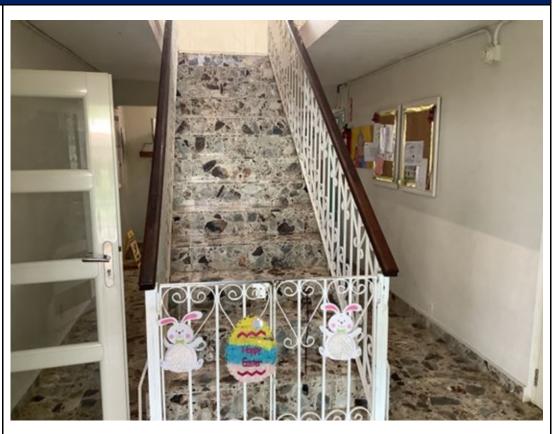






Photo Direction:

Photo Description: General interior view



Architectural Details 6

Photo Direction:

Photo Description: (1) 300lbs Propane tank located in front of structure







Photo Direction:

Photo Description: (2) 800gal Water Cisterns located on right side of structure



Architectural Details 8

Photo Direction:

Photo Description: Detached storage structure located in backyard







Photo Direction:

Photo Description: Additional back of structure view



Architectural Details 10

Photo Direction:

Photo Description: 500gal Water cistern located on left side of structure

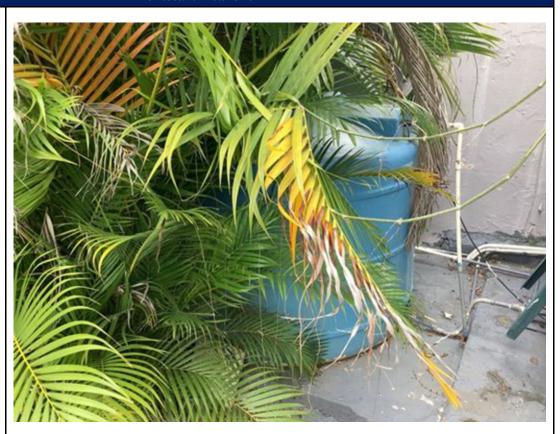






Photo Direction:

Photo Description: Proposed location for battery storage system



Photo Direction: Photo Description:

Architectural Details 12



Appendix C: Information for Planning and Consultation (IPaC) system



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Caribbean Ecological Services Field Office Post Office Box 491 Boqueron, PR 00622-0491 Phone: (939) 320-3135 Fax: (787) 851-7440

Email Address: <u>CARIBBEAN ES@FWS.GOV</u>

In Reply Refer To: 05/06/2025 12:29:37 UTC

Project Code: 2025-0092670 Project Name: PR-ESP-00264

Subject: List of threatened and endangered species that may occur in your proposed project

location or may be affected by your proposed project

To Whom It May Concern:

THE FOLLOWING SPECIES LIST IS NOT A SECTION 7 CONSULTATION. PLEASE CONTACT OUR OFFICE TO COMPLETE THE CONSULTATION PROCESS

The purpose of the Endangered Species Act (Act) is to provide a means whereby threatened, and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect those species and/or their designated critical habitat.

Federal agencies are required to "request of the Secretary of Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action". The enclosed species list provides information to assist with the U.S. Fish and Wildlife Service (Service) consultation process under section 7 of the Act. However, **the enclosed species list does not complete the required consultation process.** The species list identifies threatened, endangered, proposed and candidate species, as well as proposed and designated critical habitats, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. A discussion between the Federal agency and the Service should include what types of listed species may occur in the proposed action area and what effect the proposed action may have on those species. This process initiates informal consultation.

Once a species list is obtained for the proposed project, an effect determination for endangered and threatened species should be made. The applicant could make an effect determination by using available keys on IPaC for specific species. For species with no determination keys, the applicant should request concurrence from the Service by sending a project package

to <u>caribbean es@fws.gov</u>. To obtain guidance for completing this process and the minimum requirements for project packages, please visit:

https://www.fws.gov/sites/default/files/documents/consultation-under-section-7-of-the-endangered-species-act-with-the-caribbean-ecological%20Services-field-office-template-letter.pdf

When a federal agency, after discussions with the Service, determines that the proposed action is not likely to adversely affect any listed species, or adversely modify any designated critical habitat, and the Service concurs, the informal consultation is complete, and the proposed project moves ahead. If the proposed action is suspected to affect a listed species or modify designated critical habitat, the Federal agency may then prepare a Biological Assessment (B.A.) to assist in its determination of the project's effects on species and their habitat. However, a B.A. is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a B.A. where the agency provides the Service with an evaluation on the likely effects of the action to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a B.A. are described at 50 CFR 402.12.

If a federal agency determines, based on its B.A. or biological evaluation, that listed species and/ or designated critical habitat may be affected by the proposed project, the agency is required to further consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species, and proposed critical habitat be addressed within the consultation process. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species.

This list is provided pursuant to Section 7 of the Endangered Species Act and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action". Please use this list to determine whether your project requires consultation and to make your effects determination. For more guidance, use the Guideline for Consultation under Section 7 of the Endangered Species Act with the Caribbean Ecological Services Field Office by clicking here.

This species list is provided by:

Project code: 2025-0092670

Caribbean Ecological Services Field Office caribbean es@fws.gov
Post Office Box 491
Boqueron, PR 00622-0491
(786) 244-0081

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Caribbean Ecological Services Field Office Post Office Box 491 Boqueron, PR 00622-0491 (939) 320-3135

PROJECT SUMMARY

Project Code: 2025-0092670
Project Name: PR-ESP-00264
Project Type: Power Gen - Solar

Project Description: Del Carmen Senior Living Corp / Commercial Bulding

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@18.39095524999998,-66.035314225,14z



Counties: San Juan County, Puerto Rico

ENDANGERED SPECIES ACT SPECIES

Project code: 2025-0092670

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Project code: 2025-0092670 05/06/2025 12:29:37 UTC

REPTILES

NAME STATUS

Puerto Rican Boa *Chilabothrus inornatus*

Endangered

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6628

General project design guidelines:

 $\frac{https://ipac.ecosphere.fws.gov/project/P2SQB5VCCZCEBO6M55IXBPEUM4/documents/generated/7159.pdf}{}$

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act ² and the Migratory Bird Treaty Act (MBTA) ¹. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

- 1. The Bald and Golden Eagle Protection Act of 1940.
- 2. The Migratory Birds Treaty Act of 1918.
- 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

BALD & GOLDEN EAGLES INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

MIGRATORY BIRDS

Project code: 2025-0092670

The Migratory Bird Treaty Act (MBTA) ¹ prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

- 1. The Migratory Birds Treaty Act of 1918.
- 2. The Bald and Golden Eagle Protection Act of 1940.
- 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

MIGRATORY BIRD INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

WETLANDS

Impacts to <u>NWI wetlands</u> and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local <u>U.S. Army Corps of Engineers District</u>.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

Project code: 2025-0092670 05/06/2025 12:29:37 UTC

IPAC USER CONTACT INFORMATION

Agency: Private Entity

Name: Patricia Carmenatty

Address: Perseo St. 554 Cond. Iberia Suite J-3

City: San Juan

State: PR Zip: 00920

Email patricia.carmenatty@byaea.com

Phone: 7877830290



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Caribbean Ecological Services Field Office Post Office Box 491 Boqueron, PR 00622-0491

Phone: (939) 320-3135 Fax: (787) 851-7440 Email Address: <u>CARIBBEAN ES@FWS.GOV</u>

In Reply Refer To: 05/06/2025 12:31:12 UTC

Project code: 2025-0092670 Project Name: PR-ESP-00264

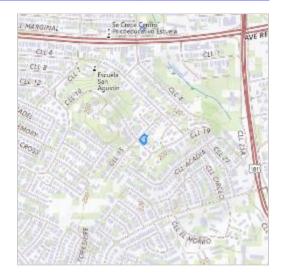
Subject: Technical Assistance letter for the project named 'PR-ESP-00264' for specified

threatened and endangered species, that may occur in your proposed project location, pursuant to the IPaC determination key titled Caribbean Determination Key (DKey).

Dear Applicant:

Thank you for using the assisted evaluation keys in IPaC. This letter is provided pursuant to the Service's authority under the Endangered Species Act of 1973, as amended (ESA) (87 Stat. 884; 16 U.S.C. 1531et seq.). On May 06, 2025, Patricia Carmenatty used the Caribbean DKey; dated January 03, 2025, in the U.S. Fish and Wildlife Service's online IPaC application to evaluate potential impacts to federally listed species, from a project named 'PR-ESP-00264'. The project is located in San Juan County, Puerto Rico (shown below).

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@18.39095524999998,-66.035314225,14z



The following description was provided for the project 'PR-ESP-00264':

Del Carmen Senior Living Corp / Commercial Bulding

Project code: 2025-0092670

Based on your answers and the assistance of the Service's Caribbean DKey, you determined the proposed Action will have "No Effect" on the following species:

SpeciesListing StatusDeterminationPuerto Rican Boa (Chilabothrus inornatus)EndangeredNo effect

Thank you for informing the Service of your "No Effect" determination(s) for this project. No further consultation/coordination for this project is required for these species. However, be aware that reinitiation of consultation may be necessary if later modifications are made to the project so that it no longer meets the criteria or outcome described above, or if new information reveals effects of the action that could affect listed species or critical habitat in a manner or to an extent not previously considered, or if a new species is listed.

This letter serves as documentation of your consideration of the federally listed species as required under section 7 of the ESA. However, effects to the other federally listed species or critical habitat as listed below from the "IPaC print-out for the project" (see below) should be considered as part of your ESA review for the project.

The Service will notify you within 30 calendar days if we determine that this proposed Action does not meet the criteria for a "No Effect" (NE) determination for Federally listed species in the Caribbean. If we do not notify you within that timeframe, you may proceed with the Action under the terms of the NE concurrence provided here. This verification period allows the Caribbean Ecological Services Field Office to apply local knowledge to evaluate the Action, as we may identify a small subset of actions having unanticipated impacts. In such instances, the Caribbean Ecological Services Field Office may request additional information to verify the effects determination reached through the DKey.

Note: Projects located within the range of the Puerto Rican boa or the Virgin Islands tree boa might encounter these species during project activities. **This letter does not provide take to handle or move these species.** If relocation of the species is needed, please contact either the Puerto Rico Department of Natural Resources (DNER) at 787-724-5700, 787-230-5550, or 787-771-1124 for projects in Puerto Rico, or the Virgin Islands Department of Planning and Natural Resources, Division of Fish and Wildlife (DFW) at 340-775-6762 for projects in the Virgin Islands. Otherwise, contact the Caribbean Ecological Services Field Office (caribbean_es@fws.gov) to determine whether the consultation needs to be reinitiated.

If the proposed project is located within species range where a DKey has not been developed for those species, please follow the established guidance for initiating section 7 consultation Caribbean Ecological Services Field Office.

We appreciate your interest in protecting endangered species and their habitats. It is the Service's mission to work with others to conserve, protect, and enhance fish, wildlife, and plants and their habitats for the continuing benefit of our people. If you have any questions or require additional information, please contact our office at Caribbean_es@fws.gov.

Project code: 2025-0092670

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

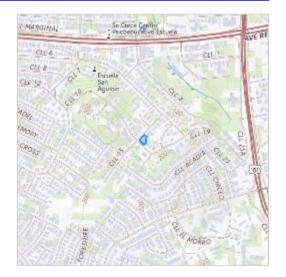
PR-ESP-00264

2. Description

The following description was provided for the project 'PR-ESP-00264':

Del Carmen Senior Living Corp / Commercial Bulding

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@18.39095524999998,-66.035314225,14z



QUALIFICATION INTERVIEW

 Is the proposed project an EPA Multi-Sector General Permit (MSGP) renewal for an existing project? (MSGP Fact Sheet)

No

2. Is the proposed project within an urban developed area? (i.e., cities, downtowns, shopping malls etc.)

Note: Urban and developed areas has one or more of the following characteristics: Presence of existing buildings, residential areas, and commercial establishments. Well-established infrastructure including roads, utilities, and urban facilities. High population density. Established neighborhoods and urban amenities ("urbanizaciones"). Developed landscape with paved surfaces, parking lots, and industrial areas. Signs of human activity and urbanization, such as shopping centers and recreational facilities. Location within the boundaries of a city or town ("casco urbano"). High concentration of built-up structures and limited open spaces. Aerial imagery might be requested to the applicant. .

Yes

3. [Hidden Semantic] Does the proposed project intersect the Puerto Rican boa area of influence?

Automatically answered

Yes

IPAC USER CONTACT INFORMATION

Agency: Private Entity

Patricia Carmenatty Name:

Address: Perseo St. 554 Cond. Iberia Suite J-3

City: San Juan

State: PR Zip: 00920

Email patricia.carmenatty@byaea.com

Phone: 7877830290



Appendix D: USFWS Species Analysis



U.S. FISH AND WILDLIFE SERVICE CARIBBEAN ECOLOGICAL SERVICES FIELD OFFICE

Conservation Measures for the Puerto Rican boa (*Chilabothrus inornatus*)

Section 7 (a)(1) of the Endangered Species Act (ESA) charges Federal agencies to aid in the conservation of listed species, and section 7 (a)(2) requires the agencies, through consultation with the U.S. Fish and Wildlife Service (Service), to ensure their activities are not likely to jeopardize the continued existence of listed species or adversely modify designated critical habitats. Section 7 applies to the management of Federal lands as well as Federal actions that may affect federally listed species, such as Federal approval of private activities through the issuance of Federal funding, permits, licenses, or other actions. Any person that injures, captures, or kills a Puerto Rico boa is subject to penalties under the ESA. If Federal funds or permits are needed, the funding or permitting agency should initiate Section 7 consultation with the Service. To initiate a consultation under the Section 7 of the ESA, you must submit a project package with the established minimum requirements. These conservation measures should be incorporated into the project plans to minimize possible impacts to the species.

The endangered Puerto Rican (PR) boa (*Chilabothrus inornatus*, formerly *Epicrates inornatus*) is the largest endemic snake species that inhabits Puerto Rico. The PR boa is non-venomous and does not pose any life threatening danger to humans, but some individuals may try to bite if disturbed or during capture or handling. Its body color ranges from tan to dark brown with irregular diffuse marking on the dorsum, but some individuals lack marking and are uniformly dark. Juveniles may have a reddish color with more pronounced markings. In general, as they mature, their body color tends to darken.



The PR boa was federally listed in 1970. Currently, the species has an island-wide distribution and occurs in a wide variety of habitat types, ranging from wet montane to subtropical dry forest and can be found from mature forest to areas with different degrees of human disturbance such as roadsides or houses, especially if near their habitat in rural areas. The PR boa is considered mostly nocturnal, remaining less active, concealed or basking under the sun during the day.

The Service has developed the following conservation measures with the purpose of assisting others to avoid or minimize adverse effects to the PR boa and its habitat. These recommendations may be incorporated into new project plans and under certain circumstances into existing projects. Depending on the project, additional conservation measures can be implemented besides the ones presented in this document.

Conservation Measures:

- 1. Inform all project personnel about the potential presence of the PR boa in areas where the proposed work will be conducted. A pre-construction meeting should be conducted to inform all project personnel about the need to avoid harming the species as well as penalties for harassing or harming PR boas. An educational poster or sign with photo or illustration of the species should be displayed at the project site.
- Prior to any construction activity, including removal of vegetation and earth movements, the boundaries of the project and areas to be excluded and protected should be clearly marked in the project plan and in the field in order to avoid further habitat degradation into forested and conservation areas.
- 3. Once areas are clearly marked, and prior to the use of heavy machinery and any construction activity (including removal of vegetation and earth movement), a biologist or project personnel with experience on this species should survey the areas to be cleared to verify the presence of any PR boa within the work area.
- 4. If a PR boa is found within any of the working or construction areas, activities should stop at that area and information recorded (see #5). **Do not capture the boa.** If boas need to be moved out of harm's way, designated personnel shall immediately contact the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers for safe capture and relocation of the animal (PRDNER phone #s: (787) 724-5700, (787) 230-5550, (787) 771-1124). **If immediate relocation is not an option, project-related activities at that area must stop until the boa moves out of harm's way on its own**. Activities at other work sites, where no boas have been found after surveying the area, may continue.
- 5. For all boa sightings (dead or alive), record the time and date of the sighting and the specific location where it was found. PR boa data should also include a photo of the animal (dead or alive), site GPS coordinates, the time and date, and comments on how the animal was detected and its behavior.

- 6. If a PR boa is captured by PRDNER personnel, record the name of that person and information on where the PR boa will be taken. This information should be reported to the Service.
- 7. Measures should be taken to avoid and minimize PR boa casualties by heavy machinery or motor vehicles being used on site. Any heavy machinery left on site (staging) or near potential PR boa habitat (within 50 meters of potential boa habitat), needs to be thoroughly inspected each morning before work starts to ensure that no boas have sheltered within engine compartments or other areas of the equipment. If PR boas are found within vehicles or equipment, do not capture the animal, and let it move on its own or call PRDNER Rangers for safe capture and relocation of the animal (see #4). If not possible, the animal should be left alone until it leaves the vehicle on its own.
- 8. PR boas may seek shelter in debris piles. Measures should be taken to avoid and minimize boa casualties associated with sheltering in debris piles as a result of project activities. Debris piles should be placed far away from forested areas. Prior to moving, disposing or shredding, debris piles should be carefully inspected for the presence of boas. If debris piles will be left on site, we recommend they be placed in areas that will not be disturbed in the future.
- 9. If a dead PR boa is found, immediately cease all work in that area and record the information accordingly (see #5). If the PR boa was accidentally killed as part of the project actions, please include information on what conservation measures had been implemented and what actions will be taken to avoid further killings. A dead boa report should be sent by email (see contacts below) to the Service within 48 hours of the event.
- 10. Projects must comply with all state laws and regulations. Please contact the PRDNER for further guidance.

If you have any questions regarding the above conservation measures, please contact the Service:

- José Cruz-Burgos, Endangered Species Program Coordinator
 - o Email: jose_cruz-burgos@fws.gov
 - o Office phone (305) 304-1386
- Jan Zegarra, Fish and Wildlife Biologist
 - o Email: jan_zegarra@fws.gov
 - o Office phone (786) 933-1451



Appendix 7: SECTION 106 CONSULTATION PACKAGE

Executive Director | Carlos A. Rubio Cancela | carubio@prshpo.pr.gov

Tuesday, June 17, 2025

Kristin Sanders

Historic Preservation Manager 269 Avenida Ponce de León, San Juan, PR, 00917

SHPO-CF-06-04-25-01 PRDOH CDBG-DR_ESP Program_20250604_17 Improvements_NHPA



Our Office has received and reviewed the above referenced project in accordance with 54 U.S.C. 306108 (commonly known as Section 106 of the National Historic Preservation Act) and 36 CFR Part 800: Protection of Historic Properties.

Our records support your finding of "no historic properties affected" within the following properties' Area of Potential Effects (APE):

Aguadilla PR-ESP-00208 Bo. Caimital Abajo Carr 2 Km 121.6

Aibonito PR-ESP-00132 Carretera 14 Km 46.7 Bo. Asomante

Bayamón PR-ESP-00154 Ave. Santa Juanita AK6 Urb. Santa Juanita

Bayamón PR-ESP-00217 MARGINAL A-3 URB FOREST HILLS BAY

Bayamón PR-ESP-00230 URB MIRAFLORES 3-9 CALLE 2

Bayamón PR-ESP-00362 REPARTO TERESITA AL-2 CALLE 23

Caguas PR-ESP-00128 Ave Gautier Benitez B-13 Urb Villa Carmen

Lajas PR-ESP-00119 Carr 303 Km 3.2 Bo. Olivares

Laias PR-ESP-00212 CARR 102 KM 17.2 INT SECTOR PALMER #8

Manatí PR-ESP-00139 1 D2 Villa Maria

Moca PR-ESP-00229 CARR 125 KM 3.5

San Juan PR-ESP-00125 V3-22 AVE SAN ALFONSO

San Juan PR-ESP-00200 Urb Monte Carlos 1265 Ave Monte Carlos

San Juan PR-ESP-00257 773 AVE SAN PATRICIO

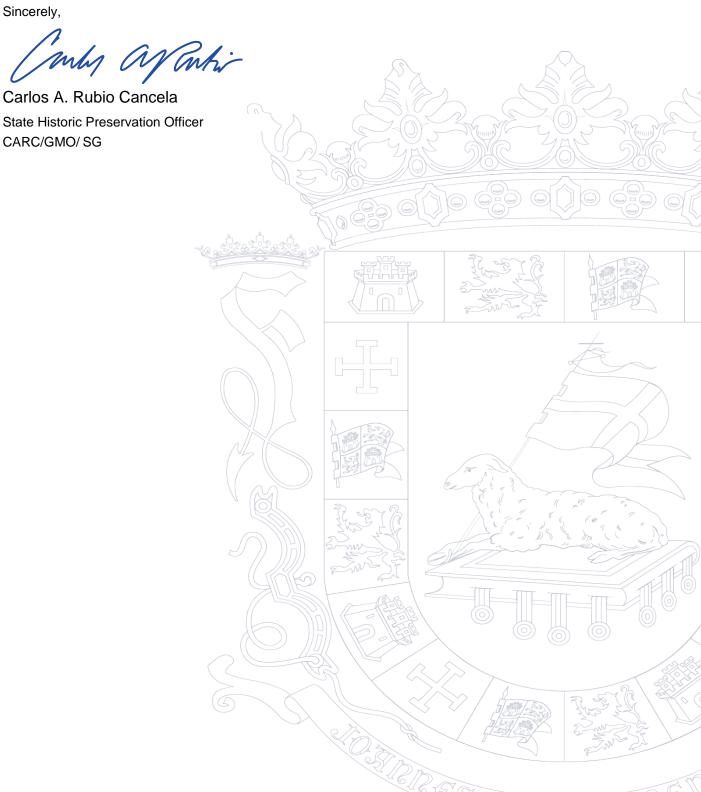
San Juan PR-ESP-00264 CALLE 15 1265 EXT SAN AGUSTIN

San Juan PR-ESP-00356 1727 Avenida Jesus T. Pinero

Villalba PR-ESP-00149 CARR. 149 ESQUINA BORINQUEN #44

If you have any questions regarding our comments, please do not hesitate to contact our Office.









June 4, 2025

Carlos A. Rubio Cancela Director Ejecutivo Oficina Estatal de Conservación Histórica Cuartel de Ballajá (Tercer Piso) San Juan, PR 00902-3935

PUERTO RICO DISASTER RECOVERY, CDBG-DR PROGRAM: ENERGY POWER RELIABILITY AND RESILIENCE/DDEC ENERGY SUPPORT PROGRAM (ESP)

SECTION 106 NHPA EFFECT DETERMINATION SUBMITTAL – SEVENTEEN (17) NON-HISTORIC CASE(S) – NO HISTORIC PROPERTIES AFFECTED

Dear Architect Rubio Cancela,

In accordance with Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR Part 800, HORNE is providing information for your review and requesting your concurrence regarding the above-referenced projects on behalf of the Puerto Rico Department of Housing (PRDOH) and the Energy Power Reliability and Resilience/DDEC Energy Support Program (ESP). On February 9, 2018, an allocation of Community Development Block Grant - Disaster Recovery (CDBG-DR) funds was approved by the United States Department of Housing and Urban Development (HUD) under the Federal Register Volume 83, No. 28, 83 FR 5844, to assist the Commonwealth of Puerto Rico in meeting unmet needs in the wake of Hurricanes Irma and Maria. On August 14, 2018, an additional \$8.22 billion recovery allocation was allocated to Puerto Rico under the Federal Register Volume 83, No. 157, 83 FR 40314. With these funding allocations, the Puerto Rico Department of Housing (Housing) aims to lead a comprehensive and transparent recovery for the benefit of Puerto Rico residents.

The purpose of the ESP is to benefit Puerto Rican communities by funding projects that enhance electric system reliability, affordability, and resiliency. The Program's design will be carried out through the development and interconnection of microgrids and distributed energy resources, including renewable energy generation, combined heat and power (CHP) systems, phototovoltaic systems (PVS), and battery storage systems (BSS), among other eligible project types.



On behalf of PRDOH, we are submitting the following seventeen (17) cases for Section 106 consultation as it cannot be cleared with Programmatic Agreement allowances. These cases consist of the installation of PV systems with battery backup systems. The prepared excel file presents all information for these properties for your review including the ESP Case ID, locational data, photographs, a link to the google map, key dates and supporting imagery, and the PRDOH Eligibility and Effect Determinations.

MUNICIPALITY	CASE ID	ADDRESS							
Aguadilla	PR-ESP-00208	Bo. Caimital Abajo Carr 2 Km 121.6							
Aibonito	PR-ESP-00132	Carretera 14 Km 46.7 Bo. Asomante							
Bayamón	PR-ESP-00154	Ave. Santa Juanita AK6 Urb. Santa Juanita							
Bayamón	PR-ESP-00217	MARGINAL A-3 URB FOREST HILLS BAY							
Bayamón	PR-ESP-00230	URB MIRAFLORES 3-9 CALLE 2							
Bayamón	PR-ESP-00362	REPARTO TERESITA AL-2 CALLE 23							
Caguas	PR-ESP-00128	Ave Gautier Benitez B-13 Urb Villa Carmen							
Lajas	PR-ESP-00119	Carr 303 Km 3.2 Bo. Olivares							
Lajas	PR-ESP-00212	CARR 102 KM 17.2 INT SECTOR PALMER #8							
Manatí	PR-ESP-00139	1 D2 Villa Maria							
Моса	PR-ESP-00229	CARR 125 KM 3.5							
San Juan	PR-ESP-00125	V3-22 AVE SAN ALFONSO							
San Juan	PR-ESP-00200	Urb Monte Carlos 1265 Ave Monte Carlos							
San Juan	PR-ESP-00257	773 AVE SAN PATRICIO							
San Juan	PR-ESP-00264	CALLE 15 1265 EXT SAN AGUSTIN							
San Juan	PR-ESP-00356	1727 Avenida Jesus T. Pinero							
Villalba	PR-ESP-00149	CARR. 149 ESQUINA BORINQUEN #44							

The properties are not individually eligible, listed in the National Register of Historic Places (NRHP) or located within or adjacent to an eligible or listed Historic District. A recommendation of "No Historic Properties Affected", pursuant to 36 CFR 800.4(d)(1), has been made for these proposed projects.

We look forward to your review and concurrence. Please contact me with any questions or concerns by email at kristin.sanders@horne.com or phone at 225-276-2109.

Kindest regards,

Kristin P. Sanders

risten P. Sonders



Historic	Preservation	Manager

Enclosures



PUERTO RICO DEPARTMENT OF HOUSIS

CDBG-DR ENERGY POWER RELIABILITY AND RESILIENCE/DDEC ENERGY SUPPORT PROGRAM (ESP)

IMPROVIMENTS TO NON-HISTORIC PROPERTIES: PROPERTIES 45 YEARS OR GREATER, NOT INDIVIDUALLY BLIGIBLE OR LISTED IN THE NATIONAL REGISTER OF HISTORIC PLACES (NRHP), AND NEITHER ADJACENT TO NOR LOCATED WITHIN AN ELIGIBLE OR LISTED NRHP HISTORIC DISTRICT

PROPOSED UNDERTAKINGS CONSIST OF THE INSTALLATION OF PHOTOVOLTAIC SYSTEMS (PVS) AND A BATTERY STORAGE SYSTEMS (BSS) ON THE ROOF OF THE SUBJECT BUILDING

SUBMISSION DATE: JUNE 4, 2025 - 17 CASES

							207744179		PROPIRTY I	NFORMATION						NATIONAL R	EGISTER ELIGIBILITY	ANDON SERVICE	SHPO CONCURRENCE (SHPO USE ONLY)	NATION OF EFFECT	
CASE ID	STREET ADDRESS	MUNICIPALITY	PARCEL ID	LATITUDE	LONGITUD	ACREAGE	FUNDING		PHOTO (CURRENT ARRIAL IMAGERY)	AND UP TO 3 PHOTOS: FRONT, SIGHT, LEFT)		LINK TO GOOGLE.	VI	KEY DA RIFIED BY GOOGLE EARTH PRO, A	TES ERIAL PHOTO AND USGS MAPS	ELIGIBILITY DETERMINATIO	SHPO CONCURRENCE (SHPO USE ONLY)	DETERMINATION	SHPO CONCURRENCE (SHPO USE ONLY)	PREPARER AND DATE / APPROVER AND DATE	SHPO COMMENTS
PR-ESP-00208	Bo. Calmital Abajo Carr 2 Km 121.6	Aguadila	024-062-002- 09-901	18.4463	-67.113-48	0.23	\$50,000					https://mapsapa.goo.g/PARTqsq/tbFt/in48	Circo 1970	Structure is present in 1975 ceriol imagery but a different structure is present on 1968 imagery.		treligible	Select tilgibility	No Historic Properties Affected	SelectIffect	Prepared by Jorge L Liberdi Pollock, PhD on 5/h/2025 and approved by Elizabeth Atkins, MA/Lauren Poche, M.A. on 5/10/2025.	
PR-ESP-00132	Carretera 14 Km 48.7 Bo. Asamante	Albonito	297-075-178-01 001	18129888	-66.285385	0.3	\$50,000					hites (Image app goo. gi/107/#hitesex 7viris g	Circa 1982	Structure is present in 1968 cerial imagery but obsent on 1968 cerial imagery.	S	tneligible	Select Eligibity	No Historic Properties Affected	Select Effect	Prepared by Jorge L Lizardi Poliock, PhD on 5/1/2025 and approved by Elizabeth Albins, MA/Lauren Poche, M.A. on 5/19/2025.	
PR-ESP-00/54	Ave: Santa Juanita AX6 Urb: Santa Juanita	Bayamón	113-014-522-08-	18.367247	-66.163003	0.09	\$19,534					https://maps.app.goo. gl/84TO:mSkrs7447nB	Circa 1982	Structure is present in 1962 cerical imagery. (tarfiest available)		Ineligible	Salact Eligibility	No Historic Properties Affected	Select Effect	Prepared by Jorge L Liaordi Pollock, PhD on 5/1/2025 and approved by Elizabeth Atkins, MA/Lauren Poche, M.A. on 5/19/2025.	
PR-ESP-00217	MARGINAL A-3 URB FOREST HILLS BAY	Bayamón	085-054-239- 25-000	18.385542	-06,165/15	0.2	\$48,287			A RHH		https://mapsapp.goo. gf/u?ws560Metsyer3N 89	Circa 1965	Structure is present in 1962 cerial imagery but obsent from 1930 municipality imagery.		Ineligible	Select Eligibity	No Historic Properties Affected	Select Effect	Prepared by Jorge L Lisondi Pollock, PhD on 5/1/2025 and approved by Elizabeth Atkins, M.A./Lauren Poche, M.A. on 5/16/2025.	
PR-ESP-00230	URB MIRAFLORES 3-9 CALLE 2	Bayamón	084-089-285- 09-001	18,37671	-66.196617	0.06	\$25,883				100	https://maps.apa.goo. gl/Out/ThutliftsWIWoII Z	Circa 1985	Structure is present in 1967 cerial imagery but absent from 1962 cerial imagery.	1	Ineligible	Select Eligibity	No Historic Properties Affected	Select Effect	Prepared by Jorge L Lizardi Pollock, PhD on 5/1/2025 and approved by Elizabeth Atkins, M.A./Lauren Poche, M.A. on 5/19/2025.	
PR-ESP-00382	REPARTO TERESITA AL-2 CALLE 23	Bayamén	061-061-201-04 001	18.414818	-66.183469	0.21	\$50,000					https://maps.apa.go. gs/dst.485g4Xu7Uncb7	Circa 1972	Structure is present in 1977 cerial imagery but no structure is present on 1967 cerial imagery.		treligible	Select Eligibity	No Historic Properties Affected	Select Effect	Prepared by Jorge I. Lizardi Pollock, PhD on 5/h/2025 and approved by Elizabeth Atkins, MA/Lauren Poche, M.A. on 5/16/2025.	
PR-ESP-00128	Ave Gautier Beniter B- 13 Urb Villa Commen	Caguas	251-003-345-15 001	18.215947	-66.043577	0.07	\$18,478					https://maps.apa.go. gi/satis/COVN-public/126	Circa 1980	Structure is present in 1962 cerial imagery. (tarliest imagery available)	Francisco (1980)	treligible	Salact Eligibity	No Historic Properties Affected	Select Effect	Prepared by Jorge L Libordi Poliock, PhD on 5/h/2025 and approved by Elizabeth Atkins, MA/Lauren Poche, M.A. on 5/19/2025.	
PR-ESP-00III9	Corr 303 Km 3.2 Bo. Olivania	Lojas	381-000-010-III- 002	18.002324	-67.068464	415	\$49,173					https://maps.apa.go. gilnjc7l46q8mmm189	Circa 1970	Structure is present in 1975 cerical imagery. (tarliest imagery available)		treligible	Salvet Eligibity	No Historic Properties Affected	Select Effect	Prepared by Jorge L Lizardi Polock, PhD on 5/h/2025 and opproved by Elizabeth Atkins, MA/Lauren Poche, M.A. on 5/19/2025.	
PR-ESP-00212	CARR 102 KM 17.2 INT SECTOR PAIMER #8	Lojas	358-051-088-15 001	18.043257	-67.058622	0.11	\$50,000	14				https://maps.apa.go. gi/shirs/comh/httl/dajb	Circa 1970	Structure is present in 1975 cerial Imagery not on 1941-43 cerials		treligible	Salact Eligibity	No Historic Properties Affected	Select Effect	Prepared by Jorge L Lizardi Poliock, PhD on 5/l/2025 and approved by Elizabeth Atkins, M.A./Lauren Poche, M.A. on 5/16/2025.	
PR-ESP-00(39	1 D2 Vilia Maria	Manati	058-012-139-03	18.430947	-66.489996	0.1	\$50,000				P	hitps://maps.apa.goo. gi/rGA9.th-w7srSBA2TE	Circa 1960	Structure is present in 1967 cerial imagery. (tarliest available imagery)		tneligible	Select Eligibity	No Historic Properties Affected	Select Effect	Prepared by Jorge L Lizardi Polock, PhD on 5]/1/2025 and approved by Elizabeth Alkins, M.A./Lauren Poche, M.A. an 5/19/2025.	
PR-ESP-00029	CARR 125 KM 3.5	Moca	070-044-033- 82-000	18.390318	-67.102544	0.33	\$39,600				THE RESERVE TO SERVE THE PARTY OF THE PARTY	https://maps.app.goo. gi/passiaama/277-mus. 2	Circa 1965	Structure is present in 1975 cerial imagery. Not present on 1958 cerial imagery.		tneligible	Select Eligibity	No Historic Properties Affected	Select Effect	Prepared by Jorge Liliandi Poliosi, PhD on 5/1/2025 and approved by Elizabeth Alkins, M.A./Lauren Poche, M.A. an 5/16/2025.	
PR-ESP-00125	V3-22 AVE SAN ALFONSO	San Juan	095-055-450- 23-802	18.389325	-66.09498	0.08	\$40,605				AB III	https://maps.apa.goo. gi/zgths:Pijiff.whrcBA	Circa 1965	Structure is present in 1962 ceriol imagery (torilest Available)	6	Ineligible	Select Eligibity	No Historic Properties Affected	Select Effect	Prepared by Jorge Liliandi Poliosi, PhD on 5//1/2025 and approved by Elizabeth Atkins, M.A./Lauren Poche, M.A. on 5/19/2025.	
PR-ESP-00200	Urb Monte Carlos 1265 Ave Monte Carlos	San Juan	087-048-376- 06-001	18.397794	-66.013808	0.09	\$32,500					billos //mops opp goo. gi/iMitTigilib/huoFreiTA	Circa 1985	Structure is present in 1967 cerical imagery but absent from 1962 cerical imagery.		tneligible	Select Eligibity	No Historic Properties Affected	Select Effect	Prepared by Jorge Lilaardi Poliosi, PhD on 5/1/3025 and approved by Elizabeth Albins, M.A./Lauren Poche, M.A. on 5/19/2025.	
PR-ESP-00057	773 AVE SAN PATRICIO	San Juan	088-025-418-3: 802	² 18.338043	-68.096977	0.07	\$34,941					httas I Imops opp goo. gli a Thhol/bysubtus Toft	Circa 1980	Structure is present in 1962 cerical imagery.(Cortiest imagery available)	S S	tneligible	Select Eligibity	No Historic Properties Affected	Select Effect	Prepared by Jorge Liliandi Poliosi, PhD on 5//1/2025 and approved by Elizabeth Atkins, M.A./Lauren Poche, M.A. on 5/16/2025.	



PUERTO RICO DEPARTMENT OF HOUSING

CDBG-DR ENERGY POWER RELIABILITY AND RESILIENCE/DDEC ENERGY SUPPORT PROGRAM (ESP)

IMPROVIMENTS TO NON-HISTORIC PROPERTIES: PROPERTIES 45 YEARS OR GREATER, NOT INDIVIDUALLY ELIGIBLE OR LISTED IN THE NATIONAL REGISTER OF HISTORIC PLACES (NRHP), AND NEITHER ADJACENT TO NOR LOCATED WITHIN AN ELIGIBLE OR LISTED NRHP HISTORIC DISTRICT

PROPOSED UNDERTAKINGS CONSIST OF THE INSTALLATION OF PHOTOVOLTAIC SYSTEMS (PVS) AND A BATTERY STORAGE SYSTEMS (BSS) ON THE ROOF OF THE SUBJECT BUILDING

		SUBMISSION	DATE: JUN	E 4. 2025 -	17 CASES	i											
								PROPERTY INFORMATION				NATIONAL I	EGISTER ELIGIBILITY		DETERM	INATION OF EFFECT	
CASE ID	STREET ADDRESS	MUNICIPALITY	PARCEL ID	LATITUDE	LONGITUD	ACREAGE	ESTIMATE D FUNDING	PHOTO (CURRENT ARRIAL IMAGERY AND UP TO 3 PHOTOS: FRONT, RIGHT, LEPT)	LINK TO GOOGLE. MAP	VII)	KEY DATES RUFIED BY GOOGLE BARTH PRO, AERIAL PHOTO AND USGS MAPS	PROOH ELIGIBILITY DETERMINATIO	SHPO CONCURRENCE (SHPO USE ONLY)	PROON EFFECT DETERMINATION	SHPO CONCURRENCE (SHPO USE ONLY)	PREPARER AND DATE / APPROVER AND DATE	SHPO COMMENTS
PR-ESP-00264	CALLE 15 1265 EXT SAN AGUSTIN	San Juan	087-045-849-11 001 / 087-045- 849-12-000	18.390973	-66.035318	0.24	\$50,000		Mos I Imapa opp goo. Il hwwtatt IPCC svjCW(B.	Circa 1980	Structure is present in 1950 avoid imagery (tarkest imagery available)	Ineligible	Select Eligibity	No Historic Properties Affected	Select Effect	Prepared by Jorge L Lizardi Pošlock, PhD on 5]/1/2025 and approved by Elizabeth Atkins, M.A./Lauren Poche, M.A. on 6/2/2025.	
PR-ESP-00356	1727 Avenido Jesus T. Pinero	San Juan	088-024-48-06	18.397422	-66.029655	0.09	\$31,317		Hipsellmaps app geo. slithytis OyaTvaVeeny 5	Circa 1980	Structions is present in 1982 cards imagery (trainest available imagery)	Ineligible	Select Eligibity	No Historic Properties Affected	Select Effect	Prepared by Jorge L Lizardi Poliock, PhD on 5/1/2025 and approved by Elizabeth Albins, M.A./Lauren Poche, M.A. on 5/19/2025.	
PR-ESP-00149	CARR 140 ESQUINA BORINQUEN #44	Villalba	294-081-038- 06-001	18127703	-66.494476	0.21	\$33,654		Hipsellmaps app geo. of AMH (200 Kaphilin Tring B	Circo 1972	Structura is present in 1977 cavid emagacy but desent on 1967 ourid emagacy.	Ineligible	Select Eligibity	No Historic Properties Affected	Select Effect	Prepared by Jorge L Lizardi Poliock, PhD on 5/1/2025 and approved by Elizabeth Albins, M.A./Lauren Poche, M.A. on 5/19/2025.	



Arch. Carlos A. Rubio Cancela

Executive Director Puerto Rico State Historic Preservation Office Cuartel de Ballajá, Third Floor San Juan, Puerto Rico 00901

Re: Authorization to Submit Documents for Consultation

Dear Arch. Rubio Cancela,

The U.S. Department of Housing (HUD) approved the allocations of Community Development Block Grant (CDBG-DR) funds on February 9, 2018. It also approved the allocation of Community Development Block Grant Mitigation (CDBG-MIT) funds on January 27, 2020. The purpose of these allocations is to address unsatisfied needs as a result of Hurricanes Irma and Maria in September 2017; and to carry out strategic and high-impact activities to mitigate disaster risks and reduce future losses.

To comply with the environmental requirements established by HUD, the Department of Housing of Puerto Rico (PRDOH) contracted Horne Federal LLC to provide environmental review services, among others, that will support the objectives of the agenda for both CDBG-DR and CDBG -MIT Programs.

To expedite the processes, Horne Federal LLC, is authorized to submit to the State Historic Preservation Officer, documentation of projects related to both the CDBG-DR and CDBG-MIT on behalf of PRDOH.

Cordially,

Aldo A. Rivera Vázquez, PE

Director

Division of Environmental Permitting and Compliance

Office of Disaster Recovery