

# United States Environmental Protection Agency Region 2

Caribbean Environmental Protection Division City View Plaza II-Suite 7000, #48 Rd. 165 km 1.2 Guaynabo, Puerto Rico 00968-8069

# **FACT SHEET**

# DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM Hogares Seguros WTP PERMIT No. PR0025810

This Fact Sheet sets forth the principle facts and technical rationale that serve as the legal basis for the requirements of the accompanying draft permit. The draft permit has been prepared in accordance with Clean Water Act (CWA) section 402 and its implementing regulations at Title 40 of the *Code of Federal Regulations* (CFR), Parts 122 through 124, and the Water Quality Certificate (WQC) issued by the Puerto Rico Department of Natural and Environmental Resources (DNER) pursuant to CWA section 401 requirements.

Pursuant to 40 CFR 124.53, the Commonwealth of Puerto Rico must either grant a certification pursuant to CWA section 401 or waive this certification before the U.S. Environmental Protection Agency (EPA) may issue a final permit. On **January 31, 2023**, DNER provided in the Intent to Issue a Water Quality Certificate (IWQC) that the allowed discharge will not cause violations to the applicable water quality standards at the receiving water body if the limitations and monitoring requirements in the WQC are met. In accordance with CWA section 401, EPA has incorporated the conditions of the WQC into the draft permit. Any changes to the WQC will be incorporated into the final issuance of the permit. The WQC conditions are discussed in this Fact Sheet and are no less stringent than allowed by federal requirements. Additional requirements might apply to comply with other sections of the CWA. Review and appeals of limitations and conditions attributable to the WQC were made through the applicable procedures of the Commonwealth of Puerto Rico and not through EPA procedures.

#### PART I. BACKGROUND

#### A. Permittee and Facility Description

The Puerto Rico Aqueduct and Sewer Authority (PRASA) (referred to throughout as the Permittee) has applied for renewal on its Hogares Seguros WTP **National** Pollutant Discharge Elimination System (NPDES) permit. The Permittee is discharging pursuant to NPDES Permit No. PR0025810. The Permittee submitted **Application Form 1, and 2C dated December 17, 2021,** and applied for an NPDES permit to discharge treated wastewater from **Hogares Seguros WTP**, **Ponce** called the facility. The facility is classified as a minor discharger by EPA in accordance with the EPA rating criteria.

The Permittee owns and operates the wastewater treatment plant which provides secondary treatment. Attachment A of this Fact Sheet provides a map of the area around the facility and a flow schematic of the facility.

The treatment system consists of the following:

The Hogares Seguros Water Treatment Plant (WTP) is a conventional package filtration plant that treats raw water from Jauca River to provide potable water to rural wards of the Municipalities of Ponce and Jayuya. The clarified water from the STS is dechlorinated before being discharged to an intermittent creek tributary to Río Blanco. The thickened sludge is dried in the sludge drying beds and then hauled to an authorized landfill.

Sanitary wastewater is processed through the following units, see Attachment A (Schematic Flow Diagram for more details:

- Coagulation / Flocculation tank
- Sedimentation Tank
- Filtration Tanks
- Chlorination Systems

- Holding Tank
- > Thickener
- Sludge Drying Beds
- Dechlorination System

Sludge is thickened, dewatered and disposed in a landfill.

# **Summary of Permittee and Facility Information**

Permittee	Puerto Rico Aqueduct and Sewer Authority (PRASA)				
Facility contact, title, phone	Edgardo Bermudez Valentin, Executive Director Environmental Compliance, Health and Safety (787) 620-2277				
Permittee (mailing) address	P.O. Box 7697 Ponce, Puerto Rico 00732				
Facility (location) address	PR 143, Km 13.4, Hogares Seguros Sector, Anón Ward				
Type of facility	Water Supply				
Pretreatment program	N/A				
Facility daily average flow	0.0187 mgd				
Facility design flow	0.0364 mgd				
Facility classification	Minor				

# B. Discharge Points and Receiving Water Information

Wastewater is discharged from Outfall 001 to intermittent creek tributary to Río Blanco, a water of the United States.

The draft permit authorizes the discharge from the following discharge point(s):

Outfall	Effluent description	Outfall latitude	Outfall longitude	Receiving water name and classification
001	Coagulation, flocculation and sedimentation, filtration, filters backwashes, disinfection, tank drains	18°, 09', 38" N	66°, 36', 36" W	intermittent creek tributary to the Río Blanco, SD

As indicated in the Puerto Rico Water Quality Standards (PRWQS) Regulations, the designated uses for Class SD receiving waters include:

- Use as a raw source of public water supply; and
- Propagation and preservation of desirable species, including threatened and endangered species.

CWA section 303(d) requires the Commonwealth of Puerto Rico to develop a list of impaired waters, establish priority rankings for waters on the list, and develop TMDLs for those waters. The receiving water has not been determined to have water quality impairments for one or more of the designated uses as determined by section 303(d) of the CWA.

# C. Compliance Orders/Consent Decrees

The Permittee has a Consent Decree with the Agency (Civil Action No 3:15-cv-02283(JAG)) in which the facility is included. This consent decree does not affect this permit action.

# E. Summary of Basis for Effluent Limitations and Permit Conditions - General

The effluent limitations and permit conditions in the permit have been developed to ensure compliance with the following, as applicable:

- Clean Water Act section 401 certification requirements;
- > NPDES regulations (40 CFR Part 122); and
- > PRWQS (April 2022).

#### PART II. RATIONALE FOR EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

CWA section 301(b) and 40 CFR 122.44(d) require that permits include limitations more stringent than applicable technology-based requirements where necessary to achieve applicable water quality standards. In addition, 40 CFR 122.44(d)(1)(i) requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that cause, have the reasonable potential to cause, or contribute to an exceedance of a water quality criterion, including a narrative criterion. The process for determining reasonable potential and calculating water quality-based effluent limits (WQBELs) is intended to protect the designated uses of the receiving water and achieve applicable water quality criteria. Where reasonable potential has been established for a pollutant, but there is no numeric criterion for the pollutant, WQBELs must be established using (1) EPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 CFR 122.44(d)(1)(vi).

The effluent limitations and permit conditions in the permit have been developed to ensure compliance with all federal and state regulations, including PRWQS. The basis for each limitation or condition is discussed below.

#### A. Effluent Limitations

The permit establishes both Technology-based Effluent Limitations (TBELs) and WQBELs for several pollutants and the basis for these limitations are discussed below.

- 1. **Flow:** An effluent limitation for flow has been established in the permit for 0.024 MGD as a Daily Maximum. Monitoring conditions are applied pursuant to 40 CFR 122.21(g)(4) and DNER's Water Quality Certificate. The frequency monitoring for flow shall be continuous with a flow meter.
- 2. **5-Day Biochemical Oxygen Demand (BOD**<sub>5</sub>): The effluent limitation for BOD5 is based on the water quality criterion for all waters in Puerto Rico as specified in Rule 1303.1.F of PRWQS, and the WQC.
- pH: The effluent limitation is based on the water quality criterion for Class SD waters as specified in Rule 1303.2 C.2.d of PRWQS, and the WQC Temperature: The effluent limitation for temperature is based on the water quality criterion for all waters in Puerto Rico as specified in Rule 1303.1 D of PRWQS, and the WQC.
- 4. **Dissolved Oxygen (DO):** The effluent limitation is based on the water quality criterion for Class SD waters as specified in Rule 1303.2 C.2.a of PRWQS, and the WQC.
- 5. **Color:** The effluent limitation is based on the water quality criterion for **Class SD** waters as specified in Rule 1303.2.C 2.e of PRWQS, and the WQC.
- 6. **Copper**, , **Lead**, **Residual Chlorine**, **and Zinc**: The effluent limitations is based on water quality criteria established in PRWQS Rule 1303.1.1 of PRWQS and the WQC.
- 7. **Turbidity:** The effluent limitation is based on the water quality criterion for **Class SD** waters as specified in Rule 1303.2 C.2.f of PRWQS, and the WQC.
- 8. **Taste or Odor Producing Substances**: The effluent limitation is based on the water quality criterion for **Class SD** waters as specified in Rule 1303.2.C.2.h of PRWQS, and the WQC.
- 9. **Total Dissolved Solids**: The effluent limitation is based on the water quality criterion for Class SD waters as specified in Rule 1303.2 C.2.g of PRWQS, and the WQC.

- 10. **Total Ammonia Nitrogen (TAN)**: The effluent limitation is based on the water quality criterion for Class SD waters as specified in Rule 1303.2 C.2.I of PRWQS, and the WQC.
- 11. **Total Phosphorus**: The effluent limitation is based on the water quality criterion for Class SD waters as specified in Rule 1303.2 C.2.n of PRWQS, and the WQC.
- 12. **Suspended, Colloidal or Settleable Solids**: The effluent limitation is based on the water quality standards as specified in Rule 1303.1.E of PRWQS, and the WQC.
- 13. **Solids and Other Matter:** The effluent limitation is based on the water quality standards as specified in Rule 1303.1.A of PRWQS, and the WQC.

# **B.** Effluent Limitations Summary Table

#### 1. Outfall Number 001

	Units	Effluent limitations						
Parameter		Averaging period	Highest Reported Value (1)	Existing limits	Interim limits	Final limits	Basis	
BOD₅	mg/L	Daily maximum	53	5.0		5.0	WQBEL	
Color	Pt-Co	Daily maximum	10	15		15	WQBEL	
Copper	μg/L	Daily maximum	46.1	10.1		8.5	WQBEL	
Dissolved Oxygen	mg/L	Daily minimum	6.4	>5.0		>5.0	WQBEL	
Flow	MGD	Daily maximum	0.205	0.024		0.024	WQBEL	
Lead	μg/L	Daily maximum	3.74	3.60		2.77	WQBEL	
рН	SU	Daily min/maxim	6.71-8.11	6.0 - 9.0		6.0 - 9.0	WQBEL	
Residual Chlorine	μg/L	Daily maximum		11		11	WQBEL	
Sulfates	mg/L	Daily maximum		Monitor			WQBEL	
Suspended, Colloidal or Settleable Solids	ml/L	Daily maximum		Monitor		Monitor	WQBEL	
Temperature	°C	Daily maximum	25.1	32.2		30	WQBEL	
Total Ammonia Nitrogen (NH <sub>4</sub> +, NH <sub>3</sub> )	μg/L	Daily maximum	100	Monitor		0.18	WQBEL	
Total Dissolved Solids	mg/L	Daily maximum	300	500		500	WQBEL	
Total Phosphorus	μg/L	Daily maximum	200	160		160	WQBEL	
Turbidity	NTU	Daily maximum	40	50		50	WQBEL	

# Notes, Footnotes and Abbreviations

Note: Dashes (--) indicate there are no effluent data, no limitations, or no monitoring requirements for this parameter.

(1) Wastewater data from DMRs dated November 30, 2020, through October 31, 2022.

#### 2. Outfall 001 Narrative Limitations

- a. Color Shall not be altered by other than natural causes.
- b. Oil and Grease The waters of Puerto Rico shall be substantially free from floating non-petroleum oils and greases as well as petroleum derived oils and greases.
- c. Other Pathogenic Organisms These waters shall be free from other pathogenic organisms different to coliforms and enterococci.
- d. Solids and Other Matter The waters of Puerto Rico shall not contain floating debris, scum, or other floating materials attributable to discharges in amounts sufficient to be unsightly or deleterious to the existing or designated uses of the water body.

- e. Suspended, Colloidal or Settleable Solids Solids from wastewater sources shall not cause deposition in or be deleterious to the existing or designated uses of the waters.
- f. Taste and Odor-producing Substances Shall not be present in amounts that will interfere with primary contact recreation, or will render any undesirable taste or odor to edible aquatic life.

# C. Monitoring Requirements

NPDES regulations at 40 CFR 122.48 require that all permits specify requirements for recording and reporting monitoring results. The Part III of the Permit establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements for this facility.

# 1. Influent Monitoring Requirements

To calculate percent removal values, influent monitoring is required for BOD<sub>5</sub> and TSS in accordance with 40 CFR 133.102. Influent monitoring must be conducted before any treatment, other than de-gritting, and before any addition of any internal waste stream.

# 2. Effluent Monitoring Requirements

Effluent monitoring frequency and sample type have been established in accordance with the requirements of 40 CFR 122.44(i) and recommendations in EPA's TSD. Consistent with 40 CFR Part 136 monitoring data for toxic metals must be expressed as total recoverable metal. Effluent monitoring and analyses shall be conducted in accordance with EPA test procedures approved under 40 CFR Part 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act, as amended. For situations where there may be interference, refer to Solutions to Analytical Chemistry Problems with Clean Water Act Methods (EPA 821-R-07-002). A licensed chemist authorized to practice the profession in Puerto Rico shall certify all chemical analyses. All bacteriological tests shall be certified by a microbiologist or licensed medical technologist authorized to practice the profession in Puerto Rico.

The sampling point for Outfall 001 shall be located immediately after the primary flow measuring device of the effluent of the treatment system.

# D. Compliance with Federal Anti-Backsliding Requirements and Puerto Rico's Anti-Degradation Policy

Federal regulations at 40 CFR 131.12 require that state water quality standards include an anti-degradation policy consistent with the federal policy. The discharge is consistent with the anti-degradation provision of 40 CFR 131.12, 72 Federal Register 238 (December 12, 2007, pages 70517-70526) and DNER's *Anti-Degradation Policy Implementation Procedure* in Attachment A of PRWQS. In addition, CWA sections 402(o)(2) and 303(d)(4) and federal regulations at 40 CFR 122.44(I) prohibit backsliding in NPDES permits. Further, the Region 2 Antibacksliding Policy provides guidance regarding relaxation of effluent limitations based on water quality for Puerto Rico NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit with some exceptions where limitations may be relaxed.

- Existing effluent limitation for Sulfates has been removed based on CWA section 402(o)(2)(B)(i). CWA section 402(o)(2)(B)(i) authorizes the backsliding of effluent limitations if information is available which was not available at the time of permit issuance that would have justified the application of a less stringent effluent limitation at the time of permit issuance. Based on review of effluent data since issuance of the existing permit, the modified discharge does not show a reasonable potential for the exceedance of water quality criteria for these parameters.
- The water quality-based effluent limitation from the previous permit for **Copper**, **Lead**, **Temperature**, and **Total Ammonia Nitrogen have** been replaced with a more stringent water quality-based limitation in the Intent to Issue a WQC issued by the DNER. Pursuant to Section 401 (d) of the Act and 40 C.F.R. 122.44 (d) and 124.55, all State certified limitations and requirements contained in a Section 401 certification must be incorporated into a NPDES permit issued by EPA. The water quality-based effluent limitations referenced in this paragraph have been included in the draft NPDES permit, based on DNER's Intent to Issue a Water Quality Certificate.

#### PART III. RATIONALE FOR STANDARD AND SPECIAL CONDITIONS

#### A. Standard Conditions

In accordance with 40 CFR 122.41, standard conditions that apply to all NPDES permits have been incorporated by reference in Part IV.A.1 of the permit and expressly in Attachment B of the permit. The Permittee must comply with all standard conditions and with those additional conditions that are applicable to specified categories of permits under 40 CFR 122.42 and specified in Part IV.A.2 of the Permit.

# **B. Special Conditions**

In accordance with 40 CFR 122.42 and other regulations cited below, special conditions have been incorporated into the permit. This section addresses the justification for special studies, additional monitoring requirements, Best Management Practices, Compliance Schedules, and/or special provisions for POTWs as needed. The special conditions for this facility are as follows:

#### 1. Special Conditions from the Water Quality Certificate

In accordance with 40 CFR 124.55, EPA has established Special Conditions from the WQC in the permit that DNER determined were necessary to meet PRWQS. The Special Conditions established in this section are only those conditions from the IWQC that have not been established in other parts of the permit.

# 2. Whole Effluent Toxicity Testing N/A

#### 3. Best Management Practices (BMP) Plan

In accordance with 40 CFR 122.2 and 122.44(k), BMPs are schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution to waters of the United States. The Permittee is required to develop a BMP Plan in Part IV.B.3.a of the permit to control or abate the discharge of pollutants.

# 4. Compliance Schedules

A compliance schedule has not been authorized for any pollutant or parameter in the permit on the basis of 40 CFR 122.47.

#### 5. Other Special Conditions

The permit establishes additional special conditions for biosolids management and pretreatment requirements.

# PART IV. COMPLIANCE WITH APPLICABLE PROVISIONS OF OTHER FEDERAL LAWS OR EXECUTIVE ORDERS

# A. Coastal Zone Management Act: N/A

# **B.** Endangered Species Act

Under 40 CFR 122.49(c), EPA is required pursuant to section 7 of the Endangered Species Act (ESA), 16 U.S.C. 1531 *et seq.* and its implementing regulations (50 CFR Part 402) to ensure, in consultation with the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS) that the discharge authorized by the permit is not likely to jeopardize the continued existence of any endangered or threatened species or adversely affect its critical habitat. On April 16, 2009, EPA designated PRASA (a non-Federal representative) to conduct informal consultations or prepare a biological assessment for Section 7 Consultations, according to 50 CFR 402.8. In the past, no federally listed endangered or threatened species, or critical habitat, are in the vicinity of the discharge. Therefore, it has been determined that the discharge is not likely to affect species or habitat listed under the ESA.

#### C. Environmental Justice

EPA has performed an Environmental Justice (EJ) Analysis for the discharge in accordance with Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Population and Low-Income Populations, and EPA's Plan EJ 2014. EJ is the right to a safe, healthy, productive and sustainable environment for all, where

"environment" is considered in its totality to include the ecological, physical, social, political, aesthetic and economic environments. In the NPDES permitting program, the public participation process provides opportunities to address EJ concerns by providing appropriate avenues for public participation, seeking out and facilitating involvement of those potentially affected, and including public notices in more than one language where appropriate. The facility is in an area characterized as a Community of Concern and therefore is subject to the EJ requirements. In the EJ Analysis, but there is **no** potential for a disproportionate and/or adverse environmental burden in the area.

#### D. Coral Reef Protection

Under Executive Order 13089, *Coral Reef Protection*, EPA is required to ensure that discharge authorized under the permit will not degrade any coral reef ecosystem. No corals or coral ecosystems are in the vicinity of the discharge.

#### E. Climate Change

EPA has considered climate change when developing the conditions of the permit. This is in accordance with the draft *National Water Program 2012 Strategy: Response to Climate Change* that identifies ways to address climate change impacts by NPDES permitting authorities (77 Federal Register 63, April 2, 2012, 19661-19662). Climate change is expected to affect surface waters in several ways, affecting both human health and ecological endpoints. As outlined in the draft National Water Program 2012 Strategy, EPA is committed to protecting surface water, drinking water, and ground water quality, and diminishing the risks of climate change to human health and the environment, through a variety of adaptation and mitigation strategies. These strategies include encouraging communities and NPDES permitting authorities to incorporate climate change strategies into their water quality planning, encouraging green infrastructure and recommending that water quality authorities consider climate change impacts when developing water load and load allocations for new TMDLs, identifying and protecting designated uses at risk from climate change impacts. The 2010 *NPDES Permit Writers' Manual* also identifies climate change considerations for establishing low-flow conditions that account for possible climatic changes to stream flow. The conditions established in the permit are consistent with the draft National Water Program 2012 Strategy.

# F. National Historic Preservation Act

Under 40 CFR 122.49(b), EPA is required to assess the impact of the discharge authorized by the permit on any properties listed or eligible for listing in the National Register of Historic Places (NRHP) and mitigate any adverse effects when necessary in accordance with the National Historic Preservation Act, 16 U.S.C. 470 et seq. EPA's analysis indicates that no soil disturbing or construction-related activities are being authorized by approval of this permit; accordingly, adverse effects to resources on or eligible for inclusion in the NHRP are not anticipated as part of this permitted action.

# G. Magnuson-Stevens Fishery Conservation and Management Act

Under 40 CFR 122.49, EPA is required to ensure that the discharge authorized by the permit will not adversely Under 40 CFR 122.49, EPA is required to ensure that the discharge authorized by the permit will not adversely affect Essential Fish Habitat (EFH) as specified in section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), 16 U.S.C. 1801 *et seq.* As this activity has been permitted in the past, a reopener clause has been established that allows the permit to be modified or revoked based on the consistency determination. Therefore, a reopener clause has been established that allows the permit to be modified or revoked based on the findings of the Endangered Species Act consultation as it relates to the Magnuson-Stevens Fishery Conservation and Management Act.

# H. Clean Water Act, Section 403 Ocean Discharge.

N/A.

# PART V. PUBLIC PARTICIPATION

The procedures for reaching a final decision on the draft permit are set forth in 40 CFR Part 124 and are described in the public notice for the draft permit, which is published which is published on EPA's website at <a href="https://www.epa.gov/npdes-permits/puerto-rico-npdes-permits">https://www.epa.gov/npdes-permits/puerto-rico-npdes-permits</a>. Included in the public notice are requirements for the submission of comments by a specified date, procedures for requesting a hearing and the nature of the hearing, and other procedures for participation in the final agency decision. EPA will consider and respond in

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writing to all significant comments received during the public comment period in reaching a final decision on the draft permit. Requests for information or questions regarding the draft permit should be directed to

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# ATTACHMENT A — FLOW SCHEMATIC AND FACILITY MAP

The facility map and flow schematic are attached as provided by the discharger in the application.



