



**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

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
Jagual WTP
PERMIT No. PR0025470**

This Fact Sheet sets forth the principal facts and technical rationale that serve as the legal basis for the requirements of the accompanying permit. The 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* (C.F.R.), 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, 33 U.S.C. § 1341.

Pursuant to 40 C.F.R. § 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" or "Agency") may issue a final permit. On **September 25, 2024**, DNER provided a WQC 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 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 of its **Jagual Water Treatment Plant (WTP)**, National Pollutant Discharge Elimination System (NPDES) permit. The Permittee is discharging pursuant to existing NPDES Permit **No.0025470**. The Permittee submitted Application Form 1 and Form 2C dated **July 28, 2023**, and applied for an NPDES permit to discharge treated wastewater from Jagual WTP, Jagual (the "facility"). The facility is classified as a **minor** discharger by EPA pursuant to minor facility definition at 40 C.F.R. § 122.2.

The Permittee owns and operates Jagual WTP. 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 Jagual WTP is a filtration plant that treats raw water from the Quebrada Blanca to provide potable water to the municipality of San Lorenzo. The treatment consists of coagulation, flocculation, sedimentation, filtration, and disinfection. At present the sedimentation tanks drains and filters backwashes are treated in a sludge treatment system (STS). The clarified water is dechlorinated before being discharged to Quebrada Blanca. The thickened sludge is dried at the STS drying beds. The dry sludge is hauled to the municipal landfill.

Water is processed through the following units:

- **Clarifiers**
- **Filtration Tank**
- **Chlorine Contact and Clearwell Tanks**
- **Holding Tanks**
- **Sludge Treatment System**

- **Thickener**
- **Drying Beds**
- **Sludge is hauled to landfill**
- **Dichlorination System**

A long term remedial measure to construct a Sludge Treatment System (STS) by 2025 is included in the Consent Decree **Civil Action No 3:15-CV-02283(JAG)**.

Summary of Permittee and Facility Information

Permittee	Puerto Rico Aqueduct and Sewer Authority (PRASA)
Facility contact, title, phone	Mrs. Marichu Valentín, Executive Director Compliance and Quality Control (787) 620-2277
Permittee (mailing) address	Puerto Rico Aqueduct and Sewer Authority P.O. Box 7066 Barrio Obrero Station Santurce, Puerto Rico 00916-7066
Facility (location) address	State Road 181, Km. 7.0, San Lorenzo, PR 00754
Type of facility	WTP
Pretreatment program	N/A
Facility monthly average flow	0.0506 MGD
Facility design flow	0.11 MGD
Facility classification	minor

B. Discharge Points and Receiving Water Information

Wastewater is discharged from Outfall **001** to **Quebrada Blanca**, a water of the United States.

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

Outfall	Effluent description	Outfall latitude	Outfall longitude	Receiving water name and classification
001	Wastewater from a sludge treatment system	18°, 09', 32.7" N	65°, 58', 48.9" W	Quebrada Blanca, SD

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

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

C. Mixing Zone/Dilution Allowance -- N/A

D. Compliance Orders/Consent Decrees

The Permittee has a Consent Decree with the Agency (civil action **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:

- CWA Section 401 certification requirements;
- NPDES regulations (40 C.F.R. Part 122); and
- PRWQSR (2022).

PART II. RATIONALE FOR EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

CWA Section 301(b) and 40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 PRWQSR. The basis for each limitation or condition is discussed below.

A. Effluent Limitations

The permit establishes WQBELs for several pollutants and the basis for these limitations are discussed below. WQBEL are based on WQC.

1. **5-Day Biochemical Oxygen Demand (BOD₅):** 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 PRWQSR, and the DNER's WQC.
2. **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 PRWQSR and the WQC.
3. **Cadmium, Copper, Cyanide, Lead, Mercury and Residual Chlorine:** The effluent limitations is based on water quality criteria established in PRWQSR Rule 1303.1.1.1 of PRWQSR 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 PRWQSR, and the WQC.
5. **Flow:** An effluent limitation for flow has been established in the permit. Monitoring conditions are applied pursuant to 40 C.F.R. § 122.21(j)(4)(ii) and DNER's WQC.
6. **pH:** The effluent limitation is based on the water quality standards as specified in Rule 1303.2.C.2.d of PRWQSR, and the WQC.
7. **Suspended, Colloidal or Settleable Solids:** The effluent limitation is based on the water quality standards as specified in Rule 1303.1.E of PRWQSR, and the WQC.
8. **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 PRWQSR, and the WQC.
9. **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 PRWQSR, and the WQC.

10. **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 PRWQSR, and the WQC.

B. Effluent Limitations Summary Table

1. Outfall Number 001

Parameter	Units	Effluent limitations					Notes
		Averaging period	Highest Reported Value (1)	Existing limits	Final limits	Basis	
BOD₅	mg/L	Daily maximum	86	11.1	26.0	WQBEL	(1)
Cadmium	µg/L	Daily maximum	.119	0.13	0.13	WQBEL	(1)
Color	Pt-Co	Daily maximum	10	15	15	WQBEL	(1)
Copper	µg/L	Daily maximum	1520	4.1	4.0	WQBEL	(1)
Cyanide	µg/L	Daily maximum	--	5.2	4	WQBEL	(1)
Dissolved Oxygen	mg/L	Daily Minimum	6.2 (Min Value)	No less than 5.0	No less than 5.0	WQBEL	(1)
Flow	MGD	Daily maximum	.116	0.046	0.046	WQBEL	(1)
Lead	µg/L	Daily maximum	14.28	0.93	0.9	WQBEL	(1)
Mercury	µg/L	Daily maximum	0.0477	0.050	0.050	WQBEL	(1)
Pentachlorophenol	µg/L	Daily maximum	--	1	--		(1)
pH	SU	Daily min/maxim	6.1-8.3	6- 9	6- 9	WQBEL	(1)
Residual Chlorine	µg/L	Daily maximum	-	11	11	WQBEL	(1)
Sulfates	mg/L	Daily maximum	146.8	Monitor	--		
Suspended, Colloidal or Settleable Solids	mL/L	Daily maximum	400	Monitor	Monitor	WQBEL	(1)
Temperature	°C	Daily maximum	30.9	32.2 °C max	30 °C max	WQBEL	(1)
Total Ammonia Nitrogen	µg/L	Daily maximum	100	Monitor	--		
Total Phosphorus	µg/L	Daily maximum	4030	160	160	WQBEL	(1)
Turbidity	NTU	Daily maximum	340	50	50	WQBEL	(1)

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

(1) Wastewater data from DMRs dated January 31, 2023, to April 30, 2025.

2. Outfall 001 Narrative Limitations

- a. **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.
- b. **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 C.F.R. § 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. Effluent Monitoring Requirements

Effluent monitoring frequency and sample type have been established in accordance with the requirements of 40 C.F.R. § 122.44(i) and recommendations in EPA's TSD. Consistent with 40 C.F.R. 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 C.F.R. Part 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the CWA, as amended. For situations where there may be interference, refer to Solutions to Analytical Chemistry Problems with CWA 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 C.F.R. § 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 C.F.R. § 131.12, 72 Federal Register 238 (December 12, 2007, pages 70517-70526) and DNER's *Anti-Degradation Policy Implementation Procedure* in Attachment A of PRWQSRR. In addition, CWA Sections 402(o)(2) and 303(d)(4) and federal regulations at 40 C.F.R. § 122.44(l) 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.

- The effluent limitations in the permit are at least as stringent as the effluent limitations in the existing permit, with the exception of effluent limitation for **Biochemical Oxygen Demand (BOD₅)**. The effluent limitation for this pollutant is less stringent than those in the existing permit. This relaxation of effluent limitation is consistent with the anti-backsliding requirements of CWA Section 401(o), 40 C.F.R. § 122.44(l), EPA Region 2's Anti-backsliding Policy dated August 10, 1993, and Puerto Rico's Anti-Degradation Policy Implementation Procedure established in PRWQSR. CWA Sec. 402(o)(2)(B)(i) allows backsliding if information is available which was not available at the time of permit issuance and would have justified a less stringent effluent limitation at the time of permit issuance. EPA has determined that it is appropriate to relax the effluent limitation for these parameters without violating anti-backsliding provisions of the CWA, in accordance with Section 402(o)(2), since one of the exceptions to the provisions has been satisfied; and Section 402(o)(3) since it complies with DNER's WQS which include antidegradation requirements. The DNER WQC constitutes a determination that the limit is sufficient to assure that the water quality standards are or will be attained.
- Existing effluent limitations for **Pentachlorophenol, Sulfates and Total Ammonia Phosphorus** have 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, Cyanide, Temperature and Lead** have been replaced with a more stringent water quality-based limitation in the 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 NPDES permit, based on DNER's WQC.

PART III. RATIONALE FOR STANDARD AND SPECIAL CONDITIONS

A. Standard Conditions

In accordance with 40 C.F.R. § 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 C.F.R. § 122.42 and specified in Part IV.A.2 of the Permit.

B. Special Conditions

In accordance with 40 C.F.R. § 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 WQC

In accordance with 40 C.F.R. § 124.55, EPA has established Special Conditions from the WQC in the permit that DNER determined were necessary to meet PRWQSRR. The Special Conditions for this facility are specified in the WQC, included as Attachment B.

2. Best Management Practices (BMP) Plan

In accordance with 40 C.F.R. §§ 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.

3. Compliance Schedules

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

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

A. Coastal Zone Management Act

Under 40 C.F.R. § 122.49(d), and in accordance with the Coastal Zone Management Act of 1972, as amended, 16 U.S.C. § 1451 *et seq.* (CZMA) Section 307(c) of the CZMA and its implementing regulations (15 C.F.R. Part 930), EPA may not issue an NPDES permit that affects land or water use in the coastal zone until the Permittee certifies that the proposed activity complies with the Coastal Zone Management Program in Puerto Rico, and that the discharge is certified by the Commonwealth of Puerto Rico to be consistent with the Commonwealth's Coastal Zone Management Program. **The Permittee has indicated the outfall is not in a coastal area managed by the**

Commonwealth's Coastal Zone Management Program and, although nearby, EPA has determined it will not affect the coastal area. Therefore, the requirements of 40 C.F.R. § 122.49(d) do not apply to this discharge.

B. Endangered Species Act

Under 40 C.F.R. § 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 C.F.R. 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 C.F.R. § 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. Coral Reef Protection - Not Applicable

D. National Historic Preservation Act

Under 40 C.F.R. § 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.

E. Magnuson-Stevens Fishery Conservation and Management Act - Not Applicable

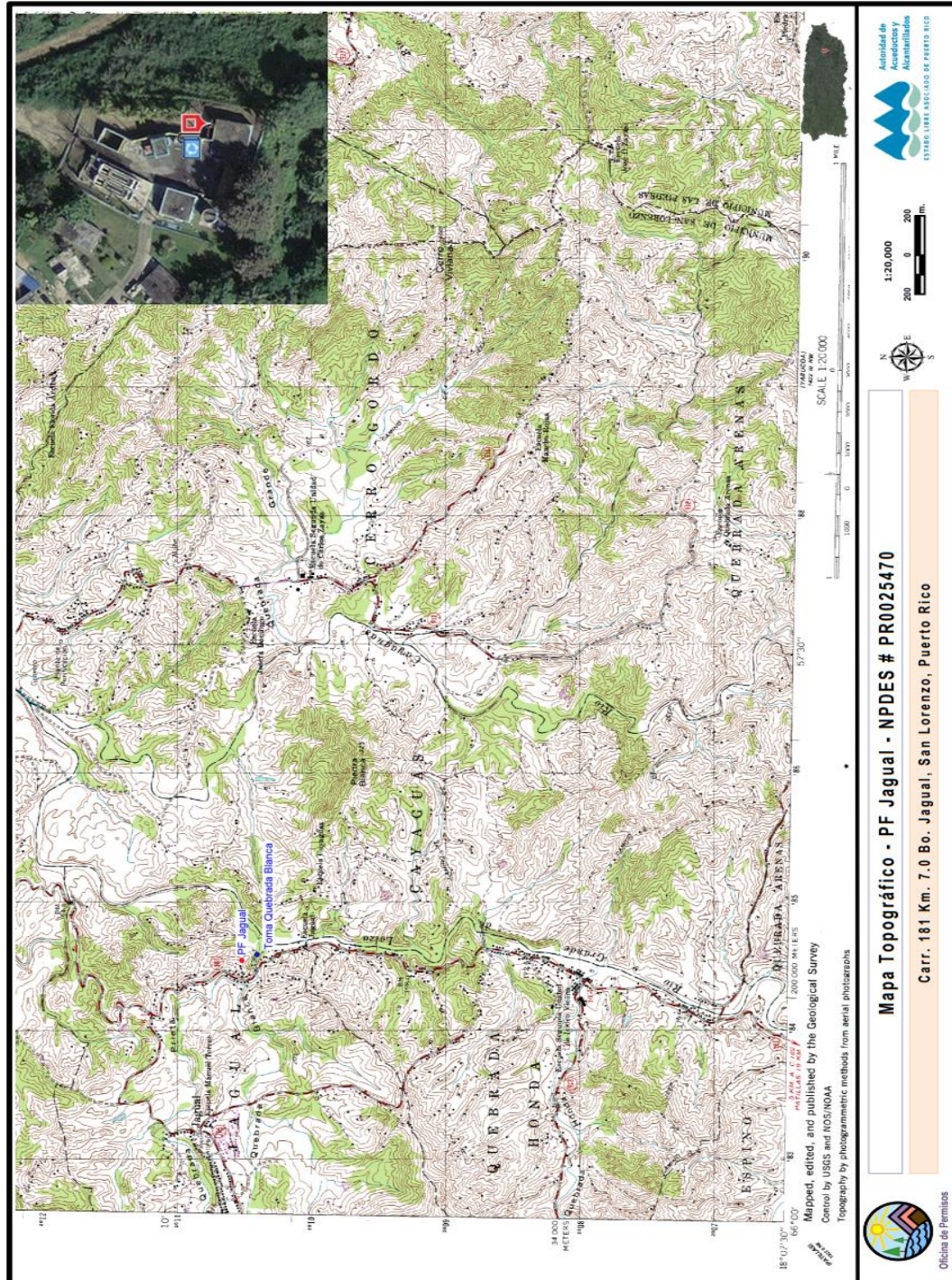
PART IV. PUBLIC PARTICIPATION

The procedures for reaching a final decision on the permit are set forth in 40 C.F.R. Part 124 and are described in the public notice for the draft permit, which is published which is published on EPA's website at <https://www.epa.gov/npdes-permits/puerto-rico-npdes-permits>. 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 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 permit should be directed to

Russell Correa
EPA Region 2, Caribbean Environmental Protection Division
Permit Writer Phone: 787-977-5847
Permit Writer Email: correacaban.russell@epa.gov

ATTACHMENT A — FACILITY MAP AND FLOW SCHEMATIC

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



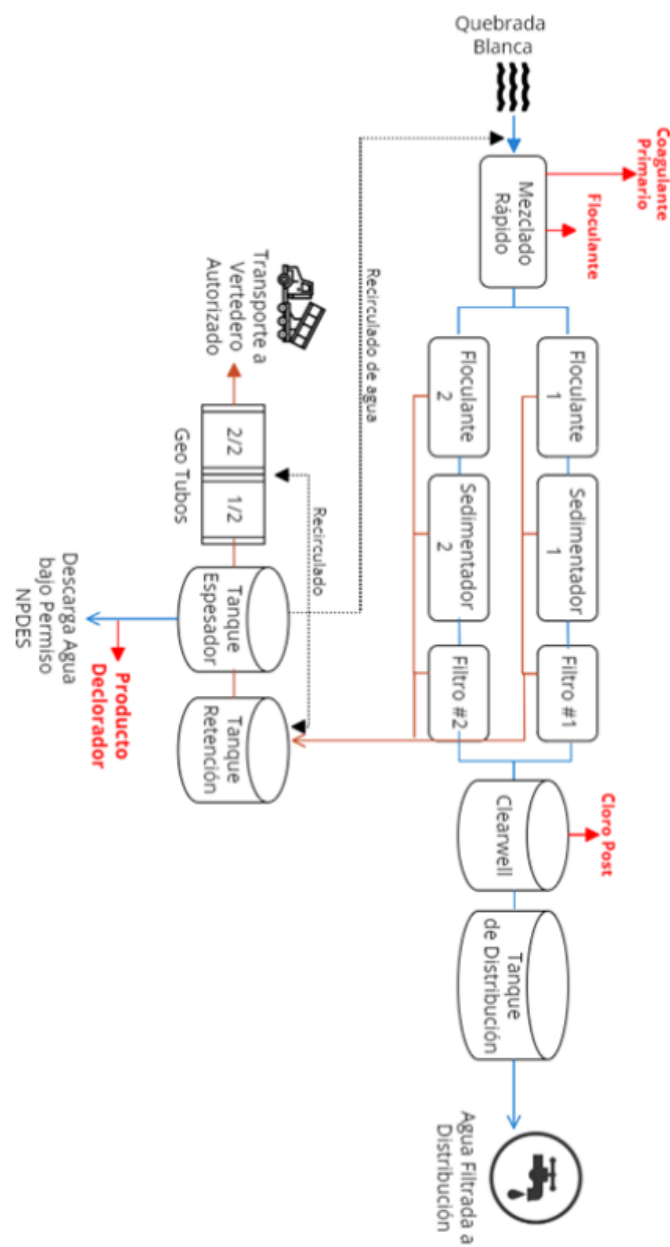


Figura 1: Esquemático Planta de Filtración y Sistema de Manejo de Lodo PF Jagual

ATTACHMENT B — WATER QUALITY CERTIFICATE



GOVERNMENT OF PUERTO RICO
DEPARTMENT OF NATURAL AND ENVIRONMENTAL RESOURCES

SEP 25 2024

SENT VIA ELECTRONIC MAIL (orlando.rodriguez@acueductospr.com)

Mr. Orlando Rodríguez Hernández
Executive Director
Environmental Compliance, Health and Safety
Puerto Rico Aqueduct and Sewer Authority
P. O. Box 7066
San Juan, Puerto Rico 00916-7066

Dear Mr. Rodríguez

RE: WATER QUALITY CERTIFICATE
JAGUAL WATER TREATMENT PLANT
STATE ROAD NO. 181, KM 7.0
JAGUAL WARD
SAN LORENZO, PUERTO RICO
NPDES NO. PR0025470

We have received and reviewed the application for a permit under Section 402, National Pollutant Discharge Elimination System (NPDES), of the Federal Clean Water Act, as amended (33 U.S.C. 466 *et seq.*) (the Act) for the referenced facility.

Pursuant to Section 401 (a) (1) of the Act, after due consideration of the applicable provisions established in the Puerto Rico Water Quality Standards Regulation (PRWQSR), as amended and in Sections 301, 302, 303, 306 and 307 of the Act, including the corresponding public participation procedures established in the Act and the PRWQSR, it is certified that there is reasonable assurance, as determined by the Department of Natural and Environmental Resources (DNER), as successor of the Environmental Quality Board, that the allowed discharge will comply with the applicable water quality requirements if the limitations and monitoring requirements on Table A-1 are met. The conditions specified in the aforementioned table shall be incorporated into the NPDES permit in order to satisfy the provisions of Section 401 (d) of the Act.

The applicant must comply with the aforementioned special conditions. Each condition of this WQC is considered as separate. Therefore, if the applicability of any condition of this WQC is stayed due to any circumstance, the remaining conditions of this WQC will not be affected. Pursuant to the provisions of Title 40 of the Code of Federal Regulations (CFR) Part 121.11 (c), the Environmental Protection Agency shall be responsible for enforcing the WQC's conditions incorporated in the federal permit.

San José Industrial Park, 1375 Ave Ponce de León, San Juan, PR 00926

787.999.2303

www.dnera.pr.gov

787.999.2200

Mr. Orlando Rodríguez Hernández
WQC - Jagual WTP
NPDES No. PR0025470
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This certification applies only to the effects that this activity may have on water quality, and not for other ecological, biological, or environmental effects that may result from the project.

The DNER reserves the right to comment at a later date concerning other environmental aspects of the discharge.

Cordially,


Roberto Méndez Martínez
Acting Secretary
Department of Natural and Environmental Resources

Enclosures

c: Ms. Yasmin Laguer, EPA-CEPD

G:\División de Permisos para Fuentes Preciadas\WORD\Niva\CCA\WQC PRASA Jagual WTP_PR0025470_2024_R.doc

TABLE A-1

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

NPDES NO. PR0025470

During the period beginning on the Effective Date of the NPDES Permit (EDP) and lasting through the EDP + 5 years, the permittee is authorized to discharge from outfall serial number 001 wastewater consisting of filters backwash and flocculators and sedimentation tanks drain, treated in a sludge treatment system prior to be discharged. Such discharge shall be limited and monitored by the permittee as specified below:

Receiving Water Name and Classification: Quebrada Blanca, SD

Effluent Characteristics	Gross Discharge Limitations		Monitoring Requirements	
	Monthly Average	Daily Maximum	Measurements Frequency	Sample Type
BOD ₅ (mg/L)		26.0 (*)	Quarterly	Grab
Cadmium (Cd) (µg/L)		0.13 (*)	Monthly	Grab
Color (Pt-Co Units)		15	Annually	Grab
Copper (Cu) (µg/L)		4.0 (*)	Monthly	Grab
Cyanide, Total (CN) (µg/L) δ		4 (*)	Quarterly	Grab
Dissolved Oxygen (mg/L)		Shall not contain less than 5.0.	Daily	Grab
Flow m ³ /day (MGD)		174.13 (0.046)	Estimated or Continuous Recording	
Lead (Pb) (µg/L)		0.9 (*)	Monthly	Grab
Mercury (Hg) (µg/L)		0.050 (*)	Quarterly	Grab
pH (SU)		Shall always lie between 6.0 and 9.0.	Daily	Grab
Residual Chlorine (µg/L) γ		11	Daily	Grab

NPDES NO. PR0025470

TABLE A-1 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Receiving Water Name and Classification: Quebrada Blanca, SD

<u>Effluent Characteristics</u>	<u>Gross Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	Monthly Average	Daily Maximum	Measurements Frequency	Sample Type
Solids and Other Matter	The waters of Puerto Rico shall not contain floating debris, scum or other floating materials attributable to the discharge in amounts sufficient to be unsightly or deleterious to the existing or designated uses of the water body.		-----	---
Suspended, Colloidal or Settling Solids (mL/L)	Solids from wastewater sources shall not cause deposition in or be deleterious to the existing or designated uses of the water body.		Daily	Grab
Taste or Odor Producing Substances	Shall not be present in amounts that will interfere with the use for potable water supply, or will render any undesirable taste or odor to edible aquatic life.		-----	---
Temperature °F (°C)	Except by natural phenomena, no heat may be added to the waters of Puerto Rico, which would cause the temperature of any site to exceed 86°F (30°C).		Daily	Grab
Total Phosphorus (P) (µg/L)	160 (*)		Monthly	Grab
Turbidity (NTU)	50		Monthly	Grab
Special Conditions	See attached sheet, which contains special conditions part of this certification.		-----	-----

TABLE A-1

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

NPDES NO. PR0025470

Receiving Water Name and Classification: Quebrada Blanca, SD

Notes:

To comply with the monitoring requirements specified above, samples shall be taken at the sampling point for discharge 001.
All flow measurements shall achieve accuracy within the range $\pm 10\%$.

7 See Special Conditions 6 and 7.
8 See Special Condition 9.

* No Net Addition Limitation

- If the applicable water quality standard is not exceeded in the inlet, the established effluent limitation shall not be exceeded at discharge point 001.
- If the applicable water quality standard is exceeded in the inlet, the same measurements shall be achieved at discharge point 001.

In order to demonstrate compliance with the No Net Addition Limitation, influent (raw water from Quebrada Blanca and Rio Grande de Loiza) and effluent (filters backwash and flocculators and sedimentation tanks drain, treated in a sludge treatment system prior to be discharged) monitoring must be conducted at the frequency specified herein. The permittee shall take into consideration the residence time of the influent when scheduling influent and effluent monitoring. The permittee shall report the results of these measurements in the Discharge Monitoring Reports. Alternately, the permittee may forego influent monitoring and comply with the applicable water quality standard as effluent limitation at the end of the pipe of the discharge.

A. SPECIAL CONDITIONS

NPDES NO. PR0025470

These special conditions are an integral part of the Water Quality Certificate (WQC) and are authorized by Article 9 of the Environmental Public Policy Act, Law No. 416-2004, as amended. Therefore, they must be incorporated into the NPDES permit in order to satisfy the provisions of Section 401 (d) of the Federal Clean Water Act (CWA) as amended (33 U.S.C. 466 *et seq.*):

1. The flow of discharge 001 shall not exceed the limitation of 174.13 m³/day (0.046 MGD) as daily maximum. No increase in flow of discharge 001 shall be authorized without a recertification from the Department of Natural and Environmental Resources (DNER).
2. The discharge 001 consists of filters backwash and flocculators and sedimentation tanks drain, treated in a Sludge Treatment System (STS) constructed for this purpose.
3. Prior to the construction of any additional STS or the modification of the existing one, the permittee shall obtain the approval from the DNER of the engineering report, plans and specifications.
4. The permittee shall install, maintain and operate all water pollution control equipment in such manner as to be in compliance with the Applicable Rules and Regulations.
5. No toxic substances shall be discharged, in toxic concentrations, other than those allowed as specified in the NPDES permit. Those toxic substances included in the permit renewal application, but not regulated by the NPDES permit, shall not exceed the concentrations specified in the applicable regulatory limitations.
6. The waters of Puerto Rico shall not contain any substance attributable to discharge 001, at such concentration which, either alone or as result of synergistic effects with other substances, is toxic or produces undesirable physiological responses in human, fish or other fauna or flora.
7. The discharge 001 shall not cause the presence of oil sheen in the receiving water body.
8. All sample collection, preservation, and analysis shall be carried out in accordance with Title 40 of the Code of Federal Regulations (40 CFR), Part 136. 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.
9. The samples taken for the analysis of cyanide shall be analyzed using the analytic method approved by the Environmental Protection Agency (EPA) with the lowest possible detection level, in accordance with Rule 1306.8 of the Puerto Rico Water Quality Standards Regulation (PRWQSR), as amended.
10. Within thirty (30) days after the Effective date of the NPDES Permit (EDP), the permittee shall submit to the DNER, for its evaluation and approval, a method to measure or estimate flow at discharge 001. If a flow-measuring device is installed, it must be periodically calibrated and

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properly maintained. Calibration and maintenance records must be kept in compliance with the applicable Rules and Regulations.

11. If a flow-measuring device for the effluent is installed, the sampling point for discharge 001 shall be located immediately after it.
12. The sampling point for discharge 001 shall be labeled with an 18 inches per 12 inches (minimum dimensions) sign that reads as follows:

"Punto de Muestreo para la Descarga 001"

13. All water or wastewater treatment facilities, whether publicly or privately owned, must be operated by a person licensed by the Examination Board of Water and Wastewater Treatment Plants Operators of Puerto Rico.
14. This special condition shall not become in effect until DNER has determined the applicability to the respective facility and has notified the permittee and the EPA, in writing, of the necessity to comply with this special condition.

No later than one hundred eighty (180) days after the Effective Date of this NPDES Permit Condition (EDPC), the permittee shall conduct semiannually acute toxicity tests for a period of one (1) year, after which the tests shall be performed annually, of its wastewater discharge through outfall serial number 001, in accordance with the following:

- a. The test species should be the *Fathead Minnow* (*Pimephales promelas*) and *Cladocera* (*Daphnia magna*). The test should be static renewal type.
- b. The toxicity test shall be conducted in accordance with the EPA publication, EPA-821-R-02-012 Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fifth Edition), October 2002, or the most recent edition of this publication, if such edition is available.
- c. The test shall provide a measure of the acute toxicity as determined by the wastewater concentration, which causes 50 percent mortality of the test organisms over a 48-hour period. The test results shall be expressed in terms of Lethal Concentration (LC) and reported as 48-hour, LC₅₀.
- d. A procedure report shall be submitted within ninety (90) days after the Effective Date of this NPDES Permit Condition. The following information shall be included in the procedure report:
 - i. An identification of the organizations responsible for conducting the test and the species to be tested.

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- ii. A detailed description of the methodology to be utilized in the conduct of the test, including equipment, sample collection, dilution water and source of test organisms.
 - iii. A schematic diagram, which depicts the effluent sampling location in relation to the wastewater treatment facility and the discharge monitoring point.
 - iv. If stream flow monitoring is required, the method used to obtain the stream flow data in estimating the seven-day two-year low flow (7Q₂).
 - e. The results of the test conducted shall be submitted to the Municipal Water Programs Branch of EPA's Region 2 Caribbean Environmental Protection Division and the DNER's Water Quality Area, within sixty (60) days of completion of the test. Based on the review of the test results, the Regional Administrator of EPA or the DNER can require additional toxicity tests, including chronic tests and toxicity/treatability studies, and may impose toxicity limitations.
15. The solid waste (such as sludge, screenings, and grit) generated due to the operation of the STS shall be:
- a. Disposed in compliance with the applicable requirements established in the 40 CFR, Part 257. A semiannual report shall be submitted to the Water Quality Area and the Land Pollution Control Area of the DNER and to the Municipal Water Programs Branch of EPA's Region 2 Caribbean Environmental Protection Division, notifying the method or methods used to dispose the solid waste generated in the facility. Also, a copy of the approval or permit applicable to the disposal method used shall be submitted, if any.
 - b. Transported adequately in such a way that access is not gained to any water body or soil. In the event of a spill of solid waste on land or into a water body, the permittee shall notify the Point Sources Permits Division of the DNER's Water Quality Area in writing within a term no longer than twenty-four (24) hours after the spill to the following electronic address: bypass@drna.pr.gov.

This notification shall include the following information:

- i. spilled material,
- ii. spilled volume,
- iii. measures taken to prevent the spilled material to gain access to any water body.

This special condition does not relieve the permittee from its responsibility to obtain the corresponding permits from the DNER's Land Pollution Control Area and other state and federal agencies, if any.

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16. A log book must be kept for the material removed from the STS detailing the following items:

- a. removed material, date and source of it;
- b. approximate volume and weight;
- c. method by which it is removed and transported;
- d. final disposal and location;
- e. person that performs the service.

A copy of the Non-Hazardous Solid Waste Collection or Transportation Services Permit issued by the authorized official from the DNER must be attached to the log book.

17. The permittee must request and obtain from the DNER the corresponding permit for the operation of the septic tank used to dispose the sanitary wastewater coming from the facility, according to the Underground Injection Control Regulation and the Regulation for the Certification of Plans and Documents under Consideration of the Environmental Quality Board.
18. The DNER, by the issuance of the WQC, does not relieve the applicant from its responsibility to obtain additional permits or authorizations from the DNER as required by law. The issuance of the WQC shall not be construed as an authorization to conduct activities not specifically covered in the WQC, which will cause water pollution as defined by the PRWQSR, as amended.

B. CITATION AND JUSTIFICATION FOR SPECIAL CONDITIONS

Special Condition	Statement explaining why the condition is necessary (40 CFR 121.7 (d) (3))	Citation to federal or state law that authorizes the condition
1, 2	These special conditions are established to assure that no changes in nature or flow of the allowed discharge occur without an evaluation of the effects of such changes in the compliance with the applicable water quality requirements set forth in the PRWQSR and in Sections 301, 302 and 303 of the CWA.	• Rule 1306.1.B of the PRWQSR • Sections 301, 302 and 303 of the CWA
3, 10	These special conditions are necessary to assure that the treatment system be evaluated and authorized by the DNER for compliance with the requirement to implement control measures to prevent adverse effects on the receiving water body.	• Rule 1306.7 of the PRWQSR
4	This special condition is necessary to require the permittee to establish control measures to prevent that the discharge coming from the facility affects or causes impairment to the applicable water quality requirements set forth in the PRWQSR and in Sections 301, 302 and 303 of the CWA.	• Rule 1306.6.A.1 of the PRWQSR • Sections 301, 302 and 303 of the CWA
5, 6	These special conditions are established to assure that the discharge coming from the facility does not affect or cause impairment to the applicable water quality requirements set forth in the PRWQSR and Sections 301, 302, 303 and 307 of the CWA.	• Rule 1303.1.J of the PRWQSR • Rule 1306.1.B of the PRWQSR • Sections 301, 302, 303 and 307 of the CWA
7	This special condition is established to assure that the discharge coming from the facility does not affect or cause impairment to the applicable water quality requirements set forth in the PRWQSR and Sections 301, 302 and 303 of the CWA.	• Rule 1303.1.H of the PRWQSR • Rule 1306.1.B of the PRWQSR • Sections 301, 302 and 303 of the CWA
8	This special condition is necessary to establish source monitoring, record keeping, reporting, sampling, and testing methods requirements in the WQC, to assure that the allowed discharge will comply with the applicable water quality requirements established in the PRWQSR and in Sections 301, 302 and 303 of the CWA.	• Rule 1306.2.C of the PRWQSR • Sections 301, 302 and 303 of the CWA
9	This special condition is necessary to establish source monitoring, record keeping, reporting, sampling, and testing methods requirements in the WQC, to assure that the allowed discharge will comply with the applicable water quality requirements established in the PRWQSR and in Sections 301, 302 and 303 of the CWA.	• Rule 1306.2.C of the PRWQSR • Rule 1306.8 of the PRWQSR • Sections 301, 302 and 303 of the CWA
11, 12	These special conditions are necessary to assure proper characterization of the discharge to comply with the applicable water quality requirements	• Rule 1306.2.E of the PRWQSR • Sections 301, 302 and 303

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Special Condition	Statement explaining why the condition is necessary (40 CFR 121.7 (d) (3))	Citation to federal or state law that authorizes the condition
	established in the PRWQSR and in Sections 301, 302 and 303 of the CWA.	of the CWA
13	This special condition is necessary to assure that the discharge will comply with the water quality requirements established in the PRWQSR.	• Rule 1306.6.B of the PRWQSR
14	This special condition is necessary to establish source monitoring, record keeping, reporting, sampling, and testing methods requirements in the WQC, to assure that the allowed discharge will comply with the applicable water quality requirements established in the PRWQSR and in Sections 301, 302, 303 and 307 of the CWA.	• Rule 1306.9 of the PRWQSR • Sections 301, 302, 303 and 307 of the CWA.
15	This special condition is necessary to require the permittee to establish Best Management Practice to prevent solids and other pollutants coming from the facility gaining access to the water body, in such manner that the permitted activity comply with the applicable water quality requirements established in the PRWQSR, and in Sections 301, 302 and 303 of the CWA. Also, this condition is necessary to establish record keeping and reporting requirements in the WQC, to comply with water quality requirements established in the PRWQSR.	• Rule 1306.1 of the PRWQSR • Rule 1306.2 of the PRWQSR • Rule 1306.4 of the PRWQSR • Rule 1306.6.A.2 of the PRWQSR • Sections 301, 302 and 303 of the CWA
16	This special condition is necessary to establish source monitoring, record keeping, reporting, sampling, and testing methods requirements in the WQC, to assure that the allowed discharge will comply with the applicable water quality requirements established in the PRWQSR and in Sections 301, 302, and 303 of the CWA.	• Rule 1306.2.A of the PRWQSR • Sections 301, 302 and 303 of the CWA
17, 18	These special conditions are necessary to require the permittee to establish the Best Management Practice to prevent pollutants coming from facility gaining access to the water body, in such manner that the facility comply with the applicable requirements established in the PRWQSR concerning the conservation and protection of the natural resources that may affect the quality of water resources.	• Rule 1306.1.B of the PRWQSR
Table A-1	Table A-1 is necessary to establish the water quality-based effluent limitations and monitoring requirements in order to assure that the allowed discharge will comply with the applicable water quality requirements established in the PRWQSR and in Sections 301, 302, 303 and 307 of the CWA.	• Rule 1302 of the PRWQSR • Rule 1303 of the PRWQSR • Rule 1306 of the PRWQSR • Sections 301, 302, 303 and 307 of the CWA