



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
Las Marias WTP
PERMIT No. PR0026930

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 requirements.

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 **June 25, 2024**, DNER provided in the 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 Las Marias Water Treatment Plant (WTP), **National Pollutant Discharge Elimination System (NPDES) permit**. The Permittee is discharging pursuant to existing **NPDES Permit No.0026930**. The Permittee submitted Application Form 1 and Form 2C dated **August 8, 2022**, and applied for an NPDES permit to discharge treated wastewater from Las Marias WTP, Las Marias (the “facility”). The facility is classified as a minor discharge by EPA in accordance with the EPA rating criteria.

The Permittee **owns and** operates Las Marias Water 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 Las Marias WTP is a filtration plant that treats raw water from the Rio Grande de Añasco River to provide potable water to the municipality of Las Marias. The treatment consists of coagulation, flocculation, sedimentation, filtration, and disinfection.

Water is processed through the following units:

- **Raw Water Strainers**
- **Coagulation Tank.**
- **Ballasted Flocculation Clarification System (BFCS-Hydro Cyclones)**
- **Filters**
- **Chlorination**
- **Dechlorination System**

- **Sludge Treatment System**
- **Sludge Drying Beds**

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 119, Km. 35.8, Maravillas Este Ward, Las Marias, PR 00670
Type of facility	WTP
Pretreatment program	N/A
Facility monthly average flow	0.56 MGD
Facility design flow	2.5 MGD
Facility classification	minor

B. Discharge Points and Receiving Water Information

Wastewater is discharged from Outfall **001** to **Rio Grande de Añasco**, 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	filters backwasher and sedimentation tanks drains	18°, 16', 31" N	66°, 58', 45" W	Rio Grande de Añasco, SD
002	Wash water coming from the strainers located at the raw water pump station	18° 16' 31.4" N	66° 58' 43.1" W	Stormwater ditch tributary to Rio Grande de Añasco, 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 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:

- Clean Water Act Section 401 certification requirements.
- NPDES regulations (40 C.F.R. Part 122); and
- PRWQS (2025).

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 PRWQS. 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. **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 Water Quality Certificate.
2. **Copper, Cyanide and Total Residual Chlorine (TRC):** 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.
3. **5-Day Biochemical Oxygen Demand (BOD5):** The effluent concentration and percent removal limitations are based on technology-based secondary treatment standards for publicly owned treatment works (POTWs) specified in 40 C.F.R. § 133.102(a). The permit also requires influent monitoring and reporting in accordance with 40 C.F.R. § 122.44(i) to meet the requirement of the percent removal limitation (see section C.1. — Monitoring Requirements— of this Part).
4. **Solids and Other Matters:** The effluent limitation is based on the water quality standards as specified in Rule 1303.1.A of PRWQSR, and the WQC.
5. **pH:** The effluent limitation is based on the water quality standards as specified in Rule 1303.2.C.2.d of PRWQS, and the WQC.
6. **Temperature:** The effluent limitation for temperature is based on the water quality criterion for **Class SD** waters as specified in Rule 1303.1.D.1 of PRWQS, and the WQC.
7. **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.
8. **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.
9. **Taste and Odor Producing Substances:** The effluent limitation is based on the water quality criterion for **Class SD** waters as specified in Rule 1303.2.D.2.h of PRWQS, and the WQC.

10. **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.
11. **Total Ammonia Nitrogen:** 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.
12. **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.
13. **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.

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	8	26.0	18.1	WQBEL	(1)
Color	Pt-Co	Daily maximum	--	--	15	WQBEL	(1)
Copper	µg/L	Daily maximum	26	8	6.9	WQBEL	(1)
Cyanide	µg/L	Daily maximum	0.5	Monitor	4.0	WQBEL	(1)
Dissolved Oxygen	mg/L	Daily Minimum	8.72	No less than 5.0	No less than 5.0	WQBEL	(1)
Flow	MGD	Daily maximum	1.8	0.5184	0.5184	WQBEL	(1)
pH	SU	Daily min/maxim	--	6.0 – 9.0	6.0 – 9.0	WQBEL	(1)
Residual Chlorine	µg/L	Daily maximum	10	11	11	WQBEL	(1)
Suspended, Colloidal or Settleable Solids	mL/L	Daily maximum	--	--	Monitor	WQBEL	(1)
Temperature	°C	Daily maximum	--	--	30 °C max	WQBEL	(1)
Total Ammonia Nitrogen	mg/L	Daily maximum	0.1	Monitor	0.081	WQBEL	(1)
Total Dissolved Solids	mg/L	Daily maximum	--	--	500	WQBEL	(1)
Total Phosphorus	µg/L	Daily maximum	190	160	160	WQBEL	(1)
Turbidity	NTU	Daily maximum	3.1	50	50	WQBEL	(1)
Whole Effluent Toxicity	TU		--	Monitor	Monitor	WQBEL	

Note: Dashes (--) indicate there is no effluent data, no limitations, or no monitoring requirements for this parameter.
(1) Wastewater data from DMRs dated November 30, 2023, to October 31, 2025.

2. Outfall 001 Narrative Limitations

- a. The waters of Puerto Rico must 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.

3. Outfall Number 002

Parameter	Units	Effluent limitations					Notes
		Averaging period	Highest Reported Value (1)	Existing limits	Final limits	Basis	
BOD5	mg/L	Daily Maximum	--	--	5.0	WQBEL	
Color	Pt-Co	Daily maximum	--	--	15	WQBEL	
Copper	µg/L	Daily maximum	--	--	6.9	WQBEL	
Cyanide	µg/L	Daily maximum	--	--	4.0	WQBEL	
Dissolved Oxygen	mg/L	Daily Minimum	--	--	No less than 5.0	WQBEL	
Flow	MGD	Daily maximum	--	--	0.432	WQBEL	
pH	SU	Daily min/maxim	--	--	6.0 – 9.0	WQBEL	
Suspended, Colloidal or Settleable Solids	ml/L	Daily maximum	--	--	Monitor	WQBEL	
Temperature	°C	Daily maximum	--	--	30 °C max	WQBEL	
Total Ammonia Nitrogen	mg/L	Daily maximum	--	--	0.081	WQBEL	
Total Dissolved Solids	mg/L	Daily maximum	--	--	500	WQBEL	
Total Phosphorus	µg/L	Daily maximum	--	--	160	WQBEL	
Turbidity	NTU	Daily maximum	--	--	50	WQBEL	

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

4. Outfall 002 Narrative Limitations

- a. The waters of Puerto Rico must 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 must 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 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 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 PRWQSR. 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 Antibracksliding 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 limitations 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.

1. The water quality-based effluent limitation from the previous permit for **BOD5, Copper, Cyanide, and Total Ammonia Nitrogen** 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.

2. The proposed NPDES permit contains water quality-based effluent limitations for **Color, Suspended, Colloidal or Settleable Solids, Temperature, and Total Dissolved Solids** which were not included in the previous NPDES permit. 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 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 Water Quality Certificate

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 PRWQSR. The Special Conditions established in this section are only those conditions from the WQC that have not been established in other parts of the permit. 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 IV. 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 *United States Code* (U.S.C.) 1451 *et seq.* Section 307(c) of the act 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

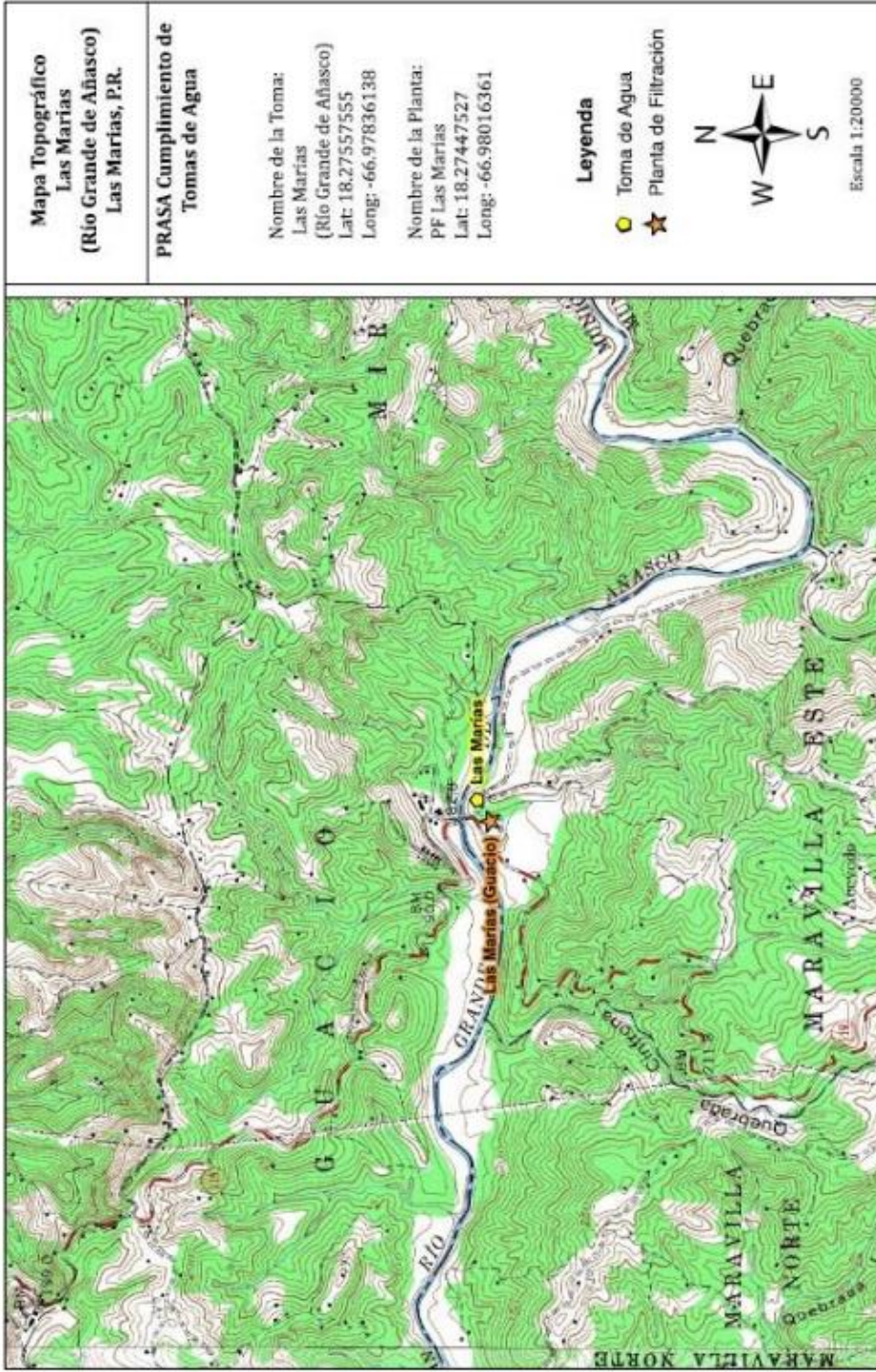
PART V. PUBLIC PARTICIPATION

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 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 permit. Requests for information or questions regarding the permit should be directed to

Jose Lugo-Figueroa
EPA Region 2, Caribbean Environmental Protection Division
Permit Writer Phone: 787-977-5841
Permit Writer Email: lugo-figueroa.jose@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.



Mapa Topográfico - PF Las Marias (New) - NPDES # PR0026930
Carr. PR-119 Km 35.8, Las Marias, Puerto Rico



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**
LAS MARIÁS WATER TREATMENT PLANT
STATE ROAD NO. 119, KM 44.9 (INTERIOR)
MARAVILLAS ESTE WARD
LAS MARIÁS, PUERTO RICO
NPDES NO. PR0026930

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.dner.pr.gov

787.999.2200

Mr. Orlando Rodríguez Hernández
WQC - PRASA Las Marias WTP
NPDES No. PR0026930
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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. Yasmín Laguer, EPA-CEPD

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TABLE A-1

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

NPDES NO. PR0026930

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 ballasted-flocculation-clarification system (BFCS) wash waters, 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: Rio Grande de Añasco, SD

Effluent Characteristics	Gross Discharge Limitations		Monitoring Requirements	
	Monthly Average	Daily Maximum	Measurements Frequency	Sample Type
BOD ₅ (mg/L)		18.1 (*)	Quarterly	Grab
Color (Pt-Co Units)		15	Mensual	Grab
Copper (Cu) (µg/L)		6.9 (*)	Monthly	Grab
Cyanide, Total (CN) (µg/L) 8		4.0 (*)	Quarterly	Grab
Dissolved Oxygen (mg/L)		Shall not contain less than 5.0.	Daily	Grab
Flow m ³ /day (MGD)		1,962.4 (0.5184)	Continuous Recording	
pH (SU)		Shall always lie between 6.0 and 9.0.	Daily	Grab
Residual Chlorine (µg/L) 7		11	Daily	Grab
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.		

TABLE A-1

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

NPDES NO. PR0026930

Receiving Water Name and Classification: Rio Grande de Añasco, SD

<u>Effluent Characteristics</u>	<u>Gross Discharge Limitations</u>		<u>Monitoring Requirements</u>
	Monthly Average	Daily Maximum	
Suspended, Colloidal or Settleable 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 Ammonia Nitrogen (TAN) (mg/L)	0.081 (*)		Monthly Grab
Total Dissolved Solids (mg/L)	500		Monthly Grab
Total Phosphorus (P) (µg/L)	160 (*)		Monthly Grab
Turbidity (NTU)	50		Quarterly Grab
Special Conditions	See attached sheet, which contains special conditions part of this certification.		---

Notes:

To comply with the monitoring requirements specified above, samples shall be taken at the sampling point for discharge 001.

TABLE A-1

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

NPDES NO. PR0026930

Receiving Water Name and Classification: Río Grande de Añasco, SD

All flow measurements shall achieve accuracy within the range $\pm 10\%$.

- γ See Special Conditions 6 and 7.
- δ See Special Condition 10.

• 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 Río Grande de Añasco) and effluent (filters backwash and balasted-floculation-clarification system (BFC5) wash waters, 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.

TABLE A-2 **EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS** **NPDES NO. PR0026930**

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 002 wastewater consisting of wash waters coming from the strainers located at the raw water pump station. Such discharge shall be limited and monitored by the permittee as specified below:

Receiving Water Name and Classification: Stormwater ditch tributary to Río Grande de Añasco, SD

<u>Effluent Characteristics</u>	<u>Gross Discharge Limitations</u>		<u>Monitoring Requirements</u>
	<u>Monthly Average</u>	<u>Daily Maximum</u>	
BOD ₅ (mg/L)	5.0 (*)		Monthly Grab
Color (Pt-Co Units)	15		Monthly Grab
Copper (Cu) (µg/L)	6.9 (*)		Monthly Grab
Cyanide, Total (CN) (µg/L) δ	4.0 (*)		Monthly Grab
Dissolved Oxygen (mg/L)	Shall not contain less than 5.0.		Daily Grab
Flow m ³ /day (MGD)	1,635.3 (0.432)		Continuous Recording or Estimated
pH (SU)	Shall always lie between 6.0 and 9.0.		Daily Grab
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 Settleable 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

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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

TABLE A-2

Receiving Water Name and Classification: Stormwater ditch tributary to Rio Grande de Añasco, SD

δ See Special Condition 10.

* 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 the discharge point 002.

- If the applicable water quality standard is exceeded in the inlet, the same measurements shall be achieved at discharge point 002.

In order to demonstrate compliance with the No Net Addition Limitation, influent (raw water from Rio Grande de Añasco) and effluent (wash waters coming from the strainers located at the raw water pump station) 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

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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 discharges 001 and 002 shall not exceed the limitation of 1,962.43 m³/day (0.5184 MGD) and 1,635.3.6 m³/day (0.432 MGD) as daily maximum, respectively. No increase in flow of discharges shall be authorized without a recertification from the Department of Natural and Environmental Resources (DNER).
2. The discharge 001 consists of filters backwash and balasted-flocculation-clarification system (BFCS) wash waters, treated in a Sludge Treatment System (STS) constructed for this purpose.
3. The discharge 002 consists of wash waters coming from the strainers located at the raw water pump station.
4. 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.
5. The permittee shall install, maintain and operate all water pollution control equipment in such a manner as to be in compliance with the Applicable Rules and Regulations.
6. 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.
7. The waters of Puerto Rico shall not contain any substance attributable to discharges 001 and 002, 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.
8. The discharges 001 y 002 shall not cause the presence of oil sheen in the receiving water body.
9. 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.
10. 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.

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11. The flow-measuring device for discharge 001, shall be periodically calibrated and properly maintained. Calibration and maintenance records must be kept in compliance with the Applicable Rules and Regulations.
12. The sampling point for discharge 001 shall be located immediately after the primary flow-measuring device of the effluent.
13. Within thirty (30) days after the EDP, the PRASA shall submit to DNER a method to measure or estimate flow at discharge 002. If a flow measuring device is installed, it shall be periodically calibrated and properly maintained. Calibration and maintenance records must be kept in compliance with the applicable Rules and Regulations. In addition, the sampling point for discharge 002 shall be located immediately after the installed flow-measuring device of the effluent.
14. The sampling points for discharges 001 y 002 shall be labeled with an 18 inches per 12 inches (minimum dimensions) sign that reads as follows:

"Punto de Muestreo para la Descarga 001"
"Punto de Muestreo para la Descarga 002"

15. 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.
16. 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 Environmental Protection Agency (EPA), in writing, of the necessity to comply with this special condition.

The permittee shall conduct one (1) acute toxicity test, during the permit effectiveness period, of its wastewater discharges through outfall serial number 001 and 002, 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.

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- 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.
 - 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.
17. 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,

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- 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.

18. A logbook 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 logbook.

19. 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.
20. 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 Puerto Rico Water Quality Standards Regulation, 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, 3	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.	<ul style="list-style-type: none"> • Rule 1306.1.B of the PRWQSR • Sections 301, 302 and 303 of the CWA
3, 13	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.	<ul style="list-style-type: none"> • Rule 1306.7 of the PRWQSR
5, 10	These special conditions are 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.	<ul style="list-style-type: none"> • Rule 1306.6.A.1 of the PRWQSR • Sections 301, 302 and 303 of the CWA
6, 7	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.	<ul style="list-style-type: none"> • Rule 1303.1.J of the PRWQSR • Rule 1306.1.B of the PRWQSR • Sections 301, 302, 303 and 307 of the CWA
8	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.	<ul style="list-style-type: none"> • Rule 1303.1.H of the PRWQSR • Rule 1306.1.B 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.	<ul style="list-style-type: none"> • Rule 1306.2.C of the PRWQSR • Sections 301, 302 and 303 of the CWA
10	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.	<ul style="list-style-type: none"> • Rule 1306.2.C of the PRWQSR • Rule 1306.8 of the PRWQSR • Sections 301, 302 and 303 of the CWA
12, 14	These special conditions are necessary to assure proper characterization of the discharge to comply with the applicable water quality requirements established in	<ul style="list-style-type: none"> • Rule 1306.2.E of the PRWQSR

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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
	the PRWQSR and in Sections 301, 302 and 303 of the CWA.	<ul style="list-style-type: none"> Sections 301, 302 and 303 of the CWA
15	This special condition is necessary to assure that the discharge will comply with the water quality requirements established in the PRWQSR.	<ul style="list-style-type: none"> Rule 1306.6.B of the PRWQSR
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, 303 and 307 of the CWA.	<ul style="list-style-type: none"> Rule 1306.9 of the PRWQSR Sections 301, 302, 303 and 307 of the CWA.
17	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.	<ul style="list-style-type: none"> 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
18	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.	<ul style="list-style-type: none"> Rule 1306.2.A of the PRWQSR Sections 301, 302 and 303 of the CWA
19, 20	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.	<ul style="list-style-type: none"> Rule 1306.1.B of the PRWQSR
Tables A-1 and A-2	Tables A-1 and A-2 are necessary to establish the water quality-based effluent limitations and monitoring requirements in order to assure that the allowed discharges will comply with the applicable water quality requirements established in the PRWQSR and in Sections 301, 302, 303 and 307 of the CWA.	<ul style="list-style-type: none"> Rule 1302 of the PRWQSR Rule 1303 of the PRWQSR Rule 1306 of the PRWQSR Sections 301, 302, 303 and 307 of the CWA