

# United States Environmental Protection Agency Region 2

Clean Water Division 290 Broadway New York, New York 10007

# **FACT SHEET**

# DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM S.U. Pedro Rivera Molina School PERMIT No. PR0024309

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

Pursuant to 40 CFR 124.53, the Commonwealth of Puerto Rico must either grant a certification pursuant to CWA section 401 or waive this certification before the U.S. Environmental Protection Agency (EPA) may issue a final permit. On February 10, 2016, EQB 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 final WQC into the draft 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 S.U. Pedro Rivera Molina School, (referred to throughout as the Permittee) has applied for renewal of its National Pollutant Discharge Elimination System (NPDES) permit. The Permittee is discharging pursuant to NPDES Permit No. PR0024309. The Permittee submitted Application Form 1 dated March 19, 2013, and Form 2F dated March 19, 2013, and applied for an NPDES permit to discharge domestic sanitary flow from S.U. Pedro Rivera Molina School, Juncos, **c**alled the facility. The facility is classified as a minor discharger by EPA in accordance with the EPA rating criteria.

The Permittee operates an educational facility. There are no manufacturing activities at this site. Discharge to waters of the U.S. is made up of secondary treated wastewater. Attachment A of this Fact Sheet provides maps of the area around the facility and a flow chart of the treatment.

The treatment system consists of the following:

- screening, equalization tank, activated sludge, sedimentation, chlorination, and filtration.

# **Summary of Permittee and Facility Information**

Permittee	S.U. Pedro Rivera Molina School		
Facility contact, title, phone	Jose L. Davila Estrada, Manager, 787-722-0101		
Permittee (mailing) address	P.O. Box 41029, Minillas Station, Santurce, PR 00940		
Facility (location) address	State Road No. 183 Km. 16.0, Valenciano Ward, Juncos, PR 00937		
Type of facility	Industrial: SIC Code 8211		
Pretreatment program	Not Applicable		
Facility monthly average flow	64.36 m³/day (0.017 MGD)		
Facility design flow	Not Applicable		
Facility classification	Minor		

# **B.** Discharge Points and Receiving Water Information

Wastewater is discharged from Outfall 001 to the San Juan Bay, a water of the United States.

The draft permit authorizes the discharge from the following discharge point:

Outfall	Effluent description	Outfall latitude	Outfall longitude	Receiving water name and classification
001	Secondary Treated Wastewater	18.00°, 10.00', 32.34" N	65.00°, 55.00', 3.04" W	Unnamed Creek Tributary to Valenciano River, SD

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

Surface waters intended for use as a raw source of public water supply, propagation and preservation of desirable species, including threatened or endangered species, as well as primary and secondary contact recreation. Primary contact recreation is precluded in any water body or segment that does not comply with Rule 1303.2 (D) (2) (m) until such water body or segment meets the goal of the referred section. CWA section 303(d) requires the Commonwealth of Puerto Rico to develop a list of impaired waters, establish priority rankings for waters on the list, and develop TMDLs for those waters. The receiving water **has not** been determined to have water quality impairments for one or more of the designated uses as determined by section 303(d) of the CWA.

# C. Mixing Zone/Dilution Allowance

A mixing zone or dilution allowance has not been authorized for the discharger.

# D. Compliance Orders/Consent Decrees

The Permittee does not have any compliance order or consent decrees that affect this permit action.

# C. 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:

- 1. Clean Water Act
- 2. NPDES Regulations (40 CFR Part 122)
- 3. Secondary Treatment Requirements (40 CFR Part 133)
- 4. Biosolids (Sewage Sludge) Requirements (40 CFR Part 257, 258, and 503)
- 5. Region 2 Antibacksliding Policy (August 10, 1993)

6. Puerto Rico Environmental Quality Board Water Quality Certificate (PREQB WQC)

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

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

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

#### A. Effluent Limitations

The permit establishes both WQBELs and Best Professional Judgment (BPJ) for several pollutants and the basis for these limitations are discussed below.

- 1. **Flow:** An effluent limitation for flow has been established in the permit. Monitoring conditions are applied pursuant to 40 CFR 122.21(j)(4)(ii) and the WQC.
- 2. **Color:** This WQBEL is imposed in the final WQC dated February 10, 2016. The WQC was issued by the EQB for the purpose of assuring compliance with EQB's water quality standards and compliance with other appropriate requirements of State law as provided by Section 401(d) of the Clean Water Act.
- 3. **Oil and Grease:** This WQBEL is imposed in the final WQC dated February 10, 2016. The WQC was issued by the EQB for the purpose of assuring compliance with EQB's water quality standards and compliance with other appropriate requirements of State law as provided by Section 401(d) of the Clean Water Act.
- 4. Total Suspended Solids (TSS): The effluent concentration and percent removal limitations are based on technology-based secondary treatment standards as specified in 40 CFR 133.102(b). The permit also requires influent monitoring and reporting in accordance with 40 CFR 122.44(i) to meet the requirement of the percent removal limitation.
- 5. **pH:** The effluent limitation for pH is based on technology-based secondary treatment standards as specified in 40 CFR 133.102(c).
- 6. **Temperature:** The effluent limitation for temperature is based on the water quality criterion for Class SD waters as specified in the PRWQS, and the WQC.
- 7. **5-Day Biochemical Oxygen Demand (BOD**<sub>5</sub>): The effluent concentration and percent removal limitations are based on technology-based secondary treatment standards as specified in 40 CFR 133.102(a). The permit also requires influent monitoring and reporting in accordance with 40 CFR 122.44(i) to meet the requirement of the percent removal limitation.
- 8. **Solids and Other Matter:** This WQBEL is imposed in the final WQC dated February 10, 2016. The WQC was issued by the EQB for the purpose of assuring compliance with EQB's water quality standards and compliance with other appropriate requirements of State law as provided by Section 401(d) of the Clean Water Act.
- Suspended, Colloidal or Settleable Solids: This WQBEL is imposed in the final WQC dated February 10, 2016. The WQC was issued by the EQB for the purpose of assuring compliance with EQB's water quality standards and compliance with other appropriate requirements of State law as provided by Section 401(d) of the Clean Water Act.
- 10. **Taste and Odor Producing Substances:** This WQBEL is imposed in the final WQC dated February 10, 2016. The WQC was issued by the EQB for the purpose of assuring compliance with EQB's water quality

- standards and compliance with other appropriate requirements of State law as provided by Section 401(d) of the Clean Water Act.
- 11. **Residual Chlorine (RC):** RC has been identified as a contaminant of concern since the facility uses chlorination to disinfect the effluent to meet water quality criteria for pathogens. PRWQS do not have a numeric water quality criterion for TRC. Instead, Rule 1303(I) of PRWQS establishes a narrative water quality criterion that prohibits the discharge of toxic pollutants in toxic amounts.
- 12. **Copper:** The effluent limitation for copper is based on the water quality criterion for Class SW waters as specified in Rule 1303.1 and the WQC.
- 13. **Cyanide:** The effluent limitation for cyanide is based on the water quality criterion for Class SD waters as specified in Rule 1303.1 and the WQC.
- 14. **Lead:** The effluent limitation for lead is based on the water quality criterion for Class SD waters as specified in Rule 1303.1 of the PRWQS and the WQC.
- 15. **Coliform, Fecal:** The discharge consists of domestic sewage that is a source of pathogens. To ensure that the recreational use of the water body is met, effluent limitations for fecal coliform are established in the permit and are based on the water quality criterion for Class SD waters as specified in the PRWQS, and the WQC.
- 16. **Coliform, Total:** The effluent limitation for total coliforms is based on the water quality criterion for Class SD waters as specified in Rule 1303.2 of the PRWQS and the WQC.
- 17. **Ammonia (Total):** Based on PR EQB's analysis of the existing effluent data, ammonia does not have the reasonable potential to cause or contribute to an exceed of applicable water quality standards. However, PR EQB has requested that monitoring and reporting for ammonia be established in the permit.
- 18. **Sulfides:** The effluent limitation for sulfides is based on the water quality criterion for Class SD waters as specified in Rule 1303.1 and the WQC.
- 19. **Dissolved Oxygen (DO):** The effluent limitation is based on the water quality criterion for Class SD waters as specified in Rule 1303.2(D)(2)(a) of PRWQS, and the WQC.
- 20. **Surfactants as MBAs:** The effluent limitation for surfactants as MBAs is based on the water quality criterion for Class SD waters as specified in Rule 1303.2 of the PRWQS and the WQC.
- 21. **Total Dissolved Solids**: The effluent limitation is based on the water quality criterion for Class SD waters as specified in Rule 1303.2(D)(2)(g) of PRWQS, and the WQC.
- 22. **Total Nitrogen**: The effluent limitation is based on the water quality criterion for Class SD waters as specified in Rule 1303.2(D)(2)(m) of PRWQS, and the WQC.
- 23. **Total Phosphorous**: The effluent limitation is based on the water quality criterion for Class SD waters as specified in Rule 1303.2(D)(2)(n) of PRWQS, and the WQC.
- 24. **Turbidity**: The effluent limitation is based on the water quality criterion for Class SD waters as specified in Rule 1303.2(D)(2)(f) of PRWQS, and the WQC

#### **B.** Effluent Limitations Summary Table

# **Outfall Number 001**

		Effluent limitations					
Parameter	Units	Averaging period	Highest Reported Value (1)	Existing limits	Interim limits	Final limits	Basis
BOD₅	mg/L	Monthly/Weekly-	8.33	30.0/45.0		30.0/45.0	TBEL
Color	Pt-Co Units	Not Applicable	11.25	15		15	WQBEL
Copper	μg/L	Not Applicable	25.68	7.0		9.1	WQBEL

		Effluent limitations						
Parameter	Units	Averaging period	Highest Reported Value (1)	Existing limits	Interim limits	Final limits	Basis	
Cyanide	μg/L	Not Applicable	<1.00	None		5.2	WQBEL	
Dissolved Oxygen	mg/L	Not Applicable	Not Reported	5.0		5.0	WQBEL	
Fecal Coliforms	colonies/ 100mL	Not Applicable	118.5	200 colonies/ 100mL		200 colonies/ 100mL	WQBEL	
Flow	m³/day (MGD)	Monitor Only	0.017 MGD	0.017 MGD		0.017MGD	Not Applicable	
Lead	μg/L	Not Applicable	<2.00	2.1		3.1	WQBEL	
Oil and Grease	mg/L	Not Applicable	1.20				WQBEL	
рН	Standard units	Not Applicable	8.00	6.0-9.0		6.0-9.0	TBEL	
Residual Chlorine	μg/L	Not Applicable	0.96	500		7.5	WQBEL	
Solids and Other Matter	Not Applicable	Not Applicable	Not Reported				WQBEL	
Sulfide	μg/L	Not Applicable	2.94	2		2	WQBEL	
Suspended, Colloidal or Settleable Solids	mL/L	Not Applicable	None Reported				WQBEL	
Surfactants	μg/L	Not Applicable	116.50	100		100	WQBEL	
Taste and Odor Producing Substances	Not Applicable	Not Applicable	Not Reported				WQBEL	
Temperature	°F(°C)	Not Applicable	25.87°C	Less Than 90°F(32.2°C)		Less Than 90°F(32.2°C)	WQBEL	
Total Ammonia	μg/L	Not Applicable	13.43	2.00		Monitor Only	WQBEL	
Total Coliforms	colonies/ 100mL	Not Applicable	118.50	10K colonies/ 100mL		10K colonies/ 100mL	WQBEL	
Total Dissolved Solids	mg/L	Not Applicable	Not Reported	500		500	WQBEL	
Total Nitrogen	μg/L	Not Applicable	24,356	10,000		1,700	WQBEL	
Total Phosphorous	μg/L	Not Applicable	5.27	1000		160	WQBEL	
Total Suspended Solids	mg/L	Monthly/Weekly	8.08	30.0/45.0		30./45.0	TBEL	
Turbidity	NTU	Not Applicable	Not Reported	50		50	WQBEL	

#### Notes, Footnotes and Abbreviations

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

# C. Monitoring Requirements

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

# 1. Influent Monitoring Requirements.

<sup>(1)</sup> Wastewater data from application signed June 14, 2010.

To calculate percent removal values, influent monitoring is required for BOD₅ and TSS in accordance with 40 CFR 133.102. Influent monitoring must be conducted before any treatment, other than de-gritting, and before any addition of any internal waste stream.

# 2. Effluent Monitoring Requirements

Effluent monitoring frequency and sample type have been established in accordance with the requirements of 40 CFR 122.44(i) and recommendations in EPA's TSD. Consistent with 40 CFR Part 136 monitoring data for toxic metals must be expressed as total recoverable metal.

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

Federal regulations at 40 CFR 131.12 require that state water quality standards include an anti-degradation policy consistent with the federal policy. The discharge is consistent with the anti-degradation provision of 40 CFR 131.12, 72 Federal Register 238 (December 12, 2007, pages 70517-70526) and EQB's Anti-Degradation Policy Implementation Procedure in Attachment A of PRWQS. In addition, CWA sections 402(o)(2) and 303(d)(4) and federal regulations at 40 CFR 122.44(I) prohibit backsliding in NPDES permits. Further, the Region 2 Antibacksliding Policy provides guidance regarding relaxation of effluent limitations based on water quality for Puerto Rico NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit with some exceptions where limitations may be relaxed. The effluent limitations in the permit are at least as stringent as the effluent limitations in the existing permit, with the exception of effluent limitations for: 2,4,6-Trichlorophenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2,4-Dinitrophenol, 2-Chlorophenol, 2-Methyl-4,6-Dinitrophenol, pentachlorophenol, phenol were monitor only parameters were found to be undetectable in samples during the life of the permit. The effluent limitations in the permit are at least as stringent as the effluent limitations in the existing permit, with the exception of effluent limitations for: total ammonia, arsenic, copper, and lead. The effluent limitations for these pollutants are less stringent than those in the existing permit. This relaxation of effluent limitations is consistent with the anti-backsliding requirements of CWA section 401(o), 40 CFR 122.44(I), EPA Region 2's Anti-backsliding Policy dated August 10, 1993, and Puerto Rico's Anti-Degradation Policy Implementation Procedure established in PRWQS. PR EQB's analysis of the existing effluent data did not indicate that these pollutants have the reasonable potential to cause or contribute to an exceedance of the applicable water quality standards in the receiving water. This new information is sufficient to relax these requirements based on the R2 Anti-backsliding Policy.

## PART III. RATIONALE FOR STANDARD AND SPECIAL CONDITIONS

# A. Standard Conditions

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

#### **B.** Special Conditions

In accordance with 40 CFR 122.42 and other regulations cited below, special conditions have been incorporated into the permit. The special conditions for this facility are as follows:

# 1. Special Conditions from the Water Quality Certificate

In accordance with 40 CFR 124.55, EPA has established Special Conditions from the WQC in the permit that EQB determined were necessary to meet PRWQS. 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.

## 2. Compliance Schedules

A compliance schedule has not been authorized for any pollutant or parameter in the permit.

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

# A. Coastal Zone Management Act

Under 40 CFR 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 CFR 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 that the outfall is in a coastal area managed by the Commonwealth's Coastal Zone Management Program.

# **B. Endangered Species Act**

Under 40 CFR 122.49(c), EPA is required pursuant to section 7 of the Endangered Species Act (ESA), 16 U.S.C. 1531 *et seq.* and its implementing regulations (50 CFR Part 402) to ensure, in consultation with the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS) that the discharge authorized by the permit is not likely to jeopardize the continued existence of any endangered or threatened species or adversely affect its critical habitat.

The ESA requires the Regional Administrator to ensure, in consultation with the Secretary of the Interior or Commerce, that any action authorized by EPA is not likely to jeopardize the continued existence of any endangered or threatened species or adversely affect its critical habitat.

In a May 2000 memo to the Regions, EPA Headquarters provided guidance to the Regions in making a determination as to whether a final permit may be issued while waiting for consultation to be concluded. As part of this permit action, if consultation has not been completed by final permit issuance and EPA has concluded that permit issuance is consistent with section 7 prior to the conclusion of consultation, EPA will re-issue the final permit before consultation is concluded and will document this decision in the Administrative Record. At the time consultation is completed, EPA may decide that changes to the permit are warranted after permit issuance based on the results of the consultation. Therefore, a reopener provision to this effect has been included in the permit.

# C. Environmental Justice

EPA has performed an Environmental Justice (EJ) Analysis for the discharge in accordance with Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Population and Low-Income Populations*, and EPA's Plan EJ 2014. EJ is the right to a safe, healthy, productive and sustainable environment for all, where "environment" is considered in its totality to include the ecological, physical, social, political, aesthetic and economic environments. In the NPDES permitting program, the public participation process provides opportunities to address EJ concerns by providing appropriate avenues for public participation, seeking out and facilitating involvement of those potentially affected, and including public notices in more than one language where appropriate. The facility is not in an area characterized as a Community of Concern.

#### E. Climate Change

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

#### F. National Historic Preservation Act

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

# G. Magnuson-Stevens Fishery Conservation and Management Act

Under 40 CFR 122.49, EPA is required to ensure that the discharge authorized by the permit will not adversely affect Essential Fish Habitat (EFH) as specified in section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), 16 U.S.C. 1801 *et seq.* This permit may be modified or revoked and reissued based on the results of the consultation to determine whether this permittee adversely affects an EFH. Therefore, a reopener provision to this effect has been included in the permit.

## **PART V: PUBLIC PARTICIPATION**

The procedures for reaching a final decision on the draft permit are set forth in 40 CFR Part 124 and are described in the public notice for the draft permit, which is published in *El Vocero De Puerto Rico*. 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 draft permit should be directed to

Stephen N. Venezia

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A copy of the draft permit is also available on EPA's website at www.epa.gov/region02/water/permits.html.

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ATTACHMENT A — FACILITY MAPS	
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