



Adopted Local Limits for Barceloneta Regional Wastewater Treatment Plant

The Barceloneta Regional Wastewater Treatment Plant (RWWTP) is on State Road 684, Kilometer 3.8, Palmas Altas Ward at the Municipality of Barceloneta. The plant operates under National Pollutant Discharge Elimination System (NPDES) permit number PR0021237.

The treatment process consists of screening, grit removal, sedimentation, biological treatment with aeration, secondary clarification, and aerobic digestion of biosolids before discharging the treated effluent to the Atlantic Ocean through a high-rate diffuser outfall. The sludge-handling facilities dewater the sludge, which is then treated to create Class A compost.

The Puerto Rico Aqueduct and Sewer Authority (PRASA) has completed a Technically Based Local Limits evaluation to meet NPDES requirements for the Barceloneta RWWTP. The limits that will be adopted by PRASA have been developed in accordance with U.S. Environmental Protection Agency Technical Support Document *Local Limits Development Guidance*¹ and NPDES Permit No. PR0021237 Part IV.B.6.b.1 (a) and (b). Table 1 lists the local limits to be adopted by PRASA.

Table 1. Adopted Local Limits

Parameter	Previous Local Limit	Adopted Local Limit
Arsenic	No Limit	0.17 mg/L
Cadmium	0.10 mg/L	0.15 mg/L
Chromium	1.0 mg/L	1.0 mg/L
Copper	1.0 mg/L	0.93 mg/L
Cyanide (Free)	0.10 mg/L	0.10 mg/L
Fluoride	9.43 mg/L	No Limit
Lead	0.2 mg/L	0.31 mg/L
Mercury	0.05 mg/L	0.06 mg/L
Molybdenum	No Limit	0.16 mg/L
Nickel	0.5 mg/L	0.68 mg/L
Nitrogen (as TKN + NO ₃ + NO ₂)	No Limit	Monitor Only
Selenium	0.20 mg/L	0.165 mg/L
Silver	0.05 mg/L	1.67 mg/L

¹ U.S. Environmental Protection Agency Office of Wastewater Management. 2004. *Local Limits Development Guidance*. EPA Publication EPA 833-R-04-002A. July.

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Parameter	Previous Local Limit	Adopted Local Limit
Surfactants (MBAS)	No Limit	23.4 mg/L
Zinc	0.5 mg/L	3.54 mg/L
Flow	SIU-specific	SIU-specific
BOD ₅	No Limit	250 mg/L surcharge level
TSS	No Limit	250 mg/L surcharge level
pH	5.0–10.0 SU	6.5–9.0 SU
Phenolics (phenolic substances)	0.5 mg/L	1.0 mg/L
Oil and Grease	50 mg/L Total O&G	50 mg/L Total O&G
Temperature	60°C (140°F)	40°C (104°F) at POTW 60°C (140°F) at discharge point
Flammability	No limit	Closed-cup flashpoint < 140°F (60°C) No two consecutive readings at ≥5% LEL, and no reading of ≥10% LEL allowed
Toxicity	Parameter-specific	Industry permit-specific technically based limits

Notes:

For parameters where no limit has been adopted, PRASA reserves the right to establish limits on a case-by-case basis when an industry discharges in amounts that could cause interference or pass-through.

°C = degrees Celsius

°F = degrees Fahrenheit

BOD₅ = 5-day biochemical oxygen demand

LEL = lower explosive limit

MBAS = methylene blue active substances

mg/L = milligram(s) per liter

NO₂ = nitrite

NO₃ = nitrate

O&G = oil and grease

POTW = publicly owned treatment works

SIU = significant industrial user

SU = standard units

TKN = total Kjeldahl nitrogen

TSS = total suspended solids