



Adopted Local Limits for Humacao Regional Wastewater Treatment Plant

The Humacao Regional Wastewater Treatment Plant (RWWTP) is on State Road 3, Kilometer 77.2, Río Abajo Ward at the Municipality of Humacao. The plant operates under National Pollutant Discharge Elimination System (NPDES) permit number PR0025399.

The treatment process consists of mechanical bar screening, influent pumps, grit removal, primary clarification, biofiltration, secondary clarification, and chlorination before discharging the treated effluent to the Caribbean Sea. The sludge-handling facilities use anaerobic digestion followed by sludge drying beds, after which the resulting sludge cake is trucked to an approved landfill for disposal.

The Puerto Rico Aqueduct and Sewer Authority (PRASA) has completed a Technically Based Local Limits evaluation to meet NPDES requirements for the Humacao 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. PR0025399 Part IV.A.1.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	0.057 mg/L	0.299 mg/L
Cadmium	0.1 mg/L	0.093 mg/L
Chromium	0.3 mg/L	28.41 mg/L
Copper	1.0 mg/L	1.86 mg/L
Cyanide (Free)	0.1 mg/L	0.271 mg/L
Lead	0.2 mg/L	0.824 mg/L
Mercury	0.011 mg/L	0.003 mg/L
Molybdenum	No Limit	0.155 mg/L
Nickel	0.5 mg/L	1.327 mg/L
Selenium	No Limit	0.152 mg/L
Zinc	0.5 mg/L	1.346 mg/L
Flow	No Limit	No Limit Needed
BOD ₅	250 mg/L	250 mg/L surcharge level

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
TSS	250 mg/L	250 mg/L surcharge level
Total Nitrogen (TKN+NO ₃ +NO ₂)	No Limit	40 mg/L
pH	6.5–9.0 SU	6.5–9.0 SU
Phenols	0.5 mg/L	1.0 mg/L
FOG	50 mg/L Total FOG	50 mg/L Total FOG
Temperature	40°C	40°C (104°F) at POTW 60°C (140°F) at discharge point
Flammability	Specified as flashpoint < 140°F	No two consecutive readings at ≥5% LEL, and no reading of ≥10% LEL allowed
Total Toxic Organics	No Limit	No Limit

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

FOG = fats, oil, and grease

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