

## Adopted Local Limits for Dorado Regional Wastewater Treatment Plant

The Dorado Regional Wastewater Treatment Plant (RWWTP) is on State Road 693, Kilometer 5.6, Higuillar Ward at the Municipality of Dorado. The plant operates under National Pollutant Discharge Elimination System (NPDES) permit number PR0020460.

The treatment process consists of mechanical bar screening, anaerobic reactors, anoxic reactors, aerobic reactor, secondary clarification, disc filtration, and ultraviolet treatment or chlorination before discharging the treated effluent to the La Plata River. The sludge-handling process consists of aerobic digestion followed by belt filter pressing, after which the sludge is transported by truck for composting.

The Puerto Rico Aqueduct and Sewer Authority (PRASA) has completed a Technically Based Local Limits evaluation to meet NPDES requirements for the Dorado 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*<sup>1</sup> and NPDES Permit No. PR0020460 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	0.014 mg/L	0.49 mg/L
Beryllium	0.075 mg/L	No Limit
Cadmium	0.084 mg/L	0.20 mg/L
Chromium (Total)	0.8 mg/L	5.0 mg/L
Copper	1.0 mg/L	0.05 mg/L
Cyanide	0.1 mg/L	0.07 mg/L
Lead	0.2 mg/L	1.45 mg/L
Manganese	0.23 mg/L	No Limit
Mercury	0.0007 mg/L	0.0001 mg/L
Molybdenum	No Limit	0.45 mg/L
Nickel	0.5 mg/L	0.44 mg/L
Selenium	0.19 mg/L	0.22 mg/L
Silver	0.05 mg/L	2.51 mg/L

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

Table 1. Adopted Local Limits

Parameter	Previous Local Limit	Adopted Local Limit
Surfactants (MBAS)	8.1 mg/L	SIU-specific
Zinc	0.5 mg/L	3.49 mg/L
Flow	SIU-specific	SIU-specific
BOD₅	250-4,401 mg/L	250 mg/L surcharge level
TSS	250-5,106 mg/L	250 mg/L surcharge level
рН	6.5-9.0 SU	6.5-10.0 SU
Total Nitrogen	No Limit	40 mg/L
Phenols	0.5 mg/L	1.0 mg/L
FOG	50 mg/L Total FOG	50 mg/L Total FOG
Temperature	60°C (140°F)	40°C (104°F) at POTW 60°C (140°F) at discharge point
Flammability	Flashpoint (°F) > 140	Specified as no material with a closed-cup flashpoint <140°F No two consecutive readings at ≥5% LEL, and no reading of ≥10% LEL allowed

## 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

BOD<sub>5</sub> = 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

 $NO_2$  = nitrite  $NO_3$  = nitrate

O&G = oil and grease

POTW = publicly owned treatment works

SIU = significant industrial user

SU = standard units

TKN = total Kjeldahl nitrogenTSS = total suspended solids