



GOBIERNO DE PUERTO RICO

Autoridad de Acueductos y Alcantarillados

Adopted Local Limits for Mayagüez RWWTP

The Mayagüez Regional Wastewater Treatment Plant (RWWTP) is located at Road 342 Km. 0.5 in the Municipality of Mayagüez. The plant operates under National Pollutant Discharge Elimination System (NPDES) permit number PR0023795.

The treatment process consists of bar screening, grit chambers, primary clarifiers, biological nutrient removal tanks, secondary clarifiers, and disinfection via chlorine injection. The treated effluent from the plant is then discharged offshore into the Atlantic Ocean through a high-rate diffuser outfall. The sludge-handling facilities consist of a thickener followed by dewatering with belt filter presses. The sludge cake is transported by truck and disposed at either the Mayagüez composting facility or a landfill.

The Puerto Rico Aqueduct and Sewer Authority (PRASA) has completed a Technically Based Local Limits evaluation to meet NPDES requirements for the Mayagüez RWWTP. The limits that will be adopted by PRASA have been developed in accordance with EPA's Technical Support Document *Local Limits Development Guidance*¹ and in accordance with NPDES Permit No. PR0023795 Part IV B.5.a.1. Table 1 lists the local limits to be adopted by PRASA.

Table 1. Adopted Local Limits

Parameter	Previous Local Limit	Adopted Local Limit
Arsenic	0.153 mg/L	0.156 mg/L
Cadmium	0.015 mg/L	0.176 mg/L
Chromium	1.0 mg/L	1.0 mg/L
Copper	1.0 mg/L	3.880 mg/L
Cyanide	0.1 mg/L	0.1 mg/L
Lead	0.2 mg/L	1.286 mg/L
Manganese	4.0 mg/L	No Limit
Mercury	0.007 mg/L	0.002 mg/L
Molybdenum	No Limit	0.229 mg/L
Nickel	0.5 mg/L	2.425 mg/L
Nitrogen (NO ₃ , NO ₂ , NH ₃)	No Limit	Monitor only
Selenium	0.2 mg/L	0.386 mg/L
Silver	0.05 mg/L	2.94 mg/L
Zinc	0.5 mg/L	3.725 mg/L
Surfactants as MBAS	Monitor Only	No Limit
Flow	No Limit	Monitor Only

¹U.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
BOD ₅	250 mg/L surcharge level	250 mg/L surcharge level
TSS	250 mg/L surcharge level	250 mg/L surcharge level
Color	No Limit	Monitor Only
pH	6.5–9.0 SU	6.5–9.0 SU
Phenols ^a (phenolic substances)	1.0 mg/L	1.0 mg/L
Oil and Grease (O&G)	50 mg/L Total O&G	50 mg/L Total O&G
Temperature	40°C	40°C (104°F) at the POTW 60°C (140°F) at discharge point
Flammability	Specified as flashpoint >140 (°F)	No two consecutive readings at ≥5% Lower Explosive Limit (LEL), and no reading of ≥10% LEL allowed

^a Total phenols minus unsubstituted phenol

Notes:

BOD₅ = 5-day biochemical oxygen demand

LEL = lower explosive limit

MBAS = methylene blue active substances

mg/L = milligram(s) per liter

POTW = publicly owned treatment works

SIU = significant industrial user

SU = standard units

TDS = total dissolved solids

TSS = total suspended solids

TTO = total toxic organics

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.