



GOBIERNO DE PUERTO RICO

Autoridad de Acueductos y Alcantarillados

Adopted Local Limits for Arecibo RWWTP

The Arecibo Regional Wastewater Treatment Plant (RWWTP) is located at the Municipality of Arecibo. The plant operates under National Pollutant Discharge Elimination System (NPDES) permit number PR0023710. The treatment process consists of preliminary screening, grit removal, primary clarification, gravity thickening, sludge dewatering, and effluent disinfection via chlorine injection. The treated effluent is then discharged offshore into 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.

PRASA has completed a Technically Based Local Limits (TBLL) evaluation to meet NPDES requirements for the Arecibo 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. PR0023710, Special Condition No. 25.b. Pretreatment Requirements a) and b). Table 1 lists the local limits to be adopted by PRASA.

Table 1. Adopted Local Limits

Parameter	Previous Limit	Adopted Local Limit
Arsenic	0.68 mg/L	0.190 mg/L
Beryllium	0.094	No Limit
Cadmium	0.10 mg/L	0.160 mg/L
Chromium	1.0 mg/L	1.000 mg/L
Copper	1.0 mg/L	1.000 mg/L
Cyanide (Free)	0.005 mg/L	0.005 mg/L
Fluoride	22.3 mg/L	No Limit
Lead	0.2 mg/L	0.760 mg/L
Manganese	2.0 mg/L	No Limit
Mercury	0.032 mg/L	0.044 mg/L
Molybdenum	2.06 mg/L	0.710 mg/L
Nickel	0.5 mg/L	1.700 mg/L
Nitrogen (NO ₂ , NO ₃ , NH ₃)	No Limit	Monitor Only
Selenium	0.07 mg/L	0.550 mg/L
Silver	0.05 mg/L	0.679 mg/L
Thallium	0.05 mg/L	0.018 mg/L
Zinc	0.5 mg/L	0.500 mg/L
Flow	No Limit	No Limit

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 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	250 Pt/Co Units
Surfactants as MBAS	1.26 mg/L	1.260 mg/L
Phenols ^a	0.5 mg/L	1.0 mg/L
pH	6.5–9.0 SU	6.5–9.0 SU
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 POTW 60°C (140°F) from SIU
Flammability	Specified as flashpoint >140 (°F)	No two consecutive readings at ≥5% LEL, and no reading of ≥10% LEL allowed
TTO	2.13 mg/L	2.13 mg/L

^a Total phenols minus unsubstituted phenol

Notes:

BOD₅ = 5-day biochemical oxygen demand

LEL = lower explosive limit

mg/L = milligram(s) per liter

POTW = publicly owned treatment works

Pt/Co = platinum cobalt

SIU = significant industrial user

SU = standard units

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.