

GOBIERNO DE PUERTO RICO

Autoridad de Acueductos y Alcantarillados

Adopted Local Limits for Santa Isabel RWWTP

The Santa Isabel Regional Wastewater Treatment Plant (RWWTP) is located on Road 538 Km 0.5 in the Municipality of Santa Isabel. The plant operates under National Pollutant Discharge Elimination System (NPDES) permit number PR0023761. The treatment process consists of bar screens, drum screens, vortex grit removal, secondary treatment by sequencing batch reactors, and chlorine disinfection prior to discharge. The sludge-handling facilities consist of an aerobic digester followed by a belt filter press for sludge dewatering.

PRASA has completed a Technically Based Local Limits (TBLL) evaluation to meet NPDES requirements for the Santa Isabel WWTP. 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. PR0023761- Part IV, B.5.a.1) and 2). Table 1 lists the local limits to be adopted by PRASA.

Table 1. Adopted Local Limits

Parameter	Previous Limit	Adopted Local Limit
Arsenic	МО	0.390 mg/L
Cadmium	0.10 mg/L	0.130 mg/L
Chromium	1.0 mg/L	1.000 mg/L
Copper	0.50 mg/L	0.021 mg/L
Cyanide (Free)	0.05 mg/L	0.021 mg/L
Lead	0.10 mg/L	0.290 mg/L
Manganese	2.0 mg/L	No Limit
Mercury	0.05 mg/L	0.001 mg/L
Molybdenum	No Limit	0.380 mg/L
Nickel	0.50 mg/L	0.100 mg/L
Selenium	No Limit	0.311 mg/L
Silver	0.025 mg/L	0.094 mg/L
Zinc	0.30 mg/L	0.270 mg/L
Flow	No Limit	No Limit
BOD ₅	250 - 400 mg/L	250 mg/L surcharge level
TSS	250 mg/L	250 mg/L surcharge level
Color	No Limit	250 Pt/Co Units
Nitrogen (NH ₃ +NO ₃ +NO ₂)	МО	МО
Sulfate and Sulfide	МО	МО
Surfactants as MBAS	18.0 mg/L	МО

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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Table 1. Adopted Local Limits

Parameter	Previous Limit	Adopted Local Limit
Phenols ^a	0.25 mg/L	1.0 mg/L
рН	7.3–8.5 SU	7.3–9.0 SU
Oil and Grease (O&G)	50 mg/L Total O&G	50 mg/L
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
тто	МО	No Limit

^a Total phenols minus unsubstituted phenol

Notes:

 BOD_5 = 5-day biochemical oxygen demand

LEL = lower explosive limit

MBAS = methylene blue active substances

mg/L = milligram(s) per liter

MO = monitor only

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.