



GOBIERNO DE PUERTO RICO

Autoridad de Acueductos y Alcantarillados

Adopted Local Limits for Cayey RWWTP

The Cayey Regional Wastewater Treatment Plant (RWWTP) is located at Road 171 Km 5.8 Interior Rincón Ward at the Municipality of Cidra. The plant operates under National Pollutant Discharge Elimination System (NPDES) permit number PR0025356. The treatment process begins offsite with mechanically raked bar screens. The flow is then pumped to cyclone grit separators and then to activated sludge aeration basins that contain anaerobic and anoxic reactor zones for enhanced biological nitrogen and phosphorus removal. After the aeration basins, the flow proceeds through secondary clarifiers, cloth disk filters, ultraviolet disinfection, and cascade aeration prior to discharge. The sludge-handling facilities consist of an aerated sludge storage tank followed by dewatering with belt filter presses.

PRASA has completed a Technically Based Local Limits (TBLL) evaluation to meet NPDES requirements for the Cayey 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. PR0025356- Part IV.B.5.a.2). Table 1 lists the local limits to be adopted by PRASA.

Table 1. Adopted Local Limits

Parameter	Previous Limit	Adopted Local Limit
Arsenic	0.057 mg/L	0.093 mg/L
Cadmium	0.033 mg/L	0.0057 mg/L
Copper	0.35 mg/L	0.092 mg/L
Cyanide (Free)	0.035 mg/L	0.046 mg/L
Lead	0.07 mg/L	0.054 mg/L
Manganese	0.645 mg/L	No Limit
Mercury	0.00055 mg/L	0.027 mg/L
Molybdenum	No Limit	0.380 mg/L
Nickel	0.5 mg/L	0.5 mg/L
Selenium	0.14 mg/L	0.073 mg/L
Silver	0.05 mg/L	0.35 mg/L
Zinc	0.175 mg/L	0.91 mg/L
Surfactants as MBAS	0.68 mg/L	No Limit
Flow	No Limit	No 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
Ammonia	No Limit	Monitor Monthly

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
Total Nitrogen (TKN+NO ₃ +NO ₂)	No Limit	Monitor Monthly TKN, NH ₃ , NO ₃ , NO ₂
Phenols ^a	0.175 mg/L	1.0 mg/L
pH	6.5–9.0 SU	6.5–9.0 SU
Total Phosphorus	No Limit	10 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 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

^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

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.