

GOBIERNO DE PUERTO RICO

Autoridad de Acueductos y Alcantarillados

Adopted Local Limits for Fajardo RWWTP

The Fajardo RWWTP is located on PR 53 (interior) Quebrada Vueltas Ward in Las Carolinas Sector at the Municipality of Fajardo. The plant operates under National Pollutant Discharge Elimination System (NPDES) permit number PR0026484. The treatment process consists of bar screens, fine screen conveyor belts (rag removal), grit removal, three activated sludge treatment channels, three secondary clarifiers, fine screen disk filtration, ultraviolet (UV) disinfection, and post-aeration. The sludge handling facilities consist of an aerobic digestion tank and two belt filter press units.

PRASA has completed a Technically Based Local Limits (TBLL) evaluation to meet NPDES requirements for the Fajardo 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. PR0026484 Part 1, A. Special Conditions, No. 21. Table 1 lists the local limits to be adopted by PRASA.

Table 1. Adopted Local Limits

| Parameter | Previous Limit | Adopted Local Limit |
|------------------------------|--------------------------|--------------------------|
| Arsenic | No Limit | 0.53 mg/L |
| Cadmium | 0.1 mg/L | 0.0027 mg/L |
| Copper | 1.0 mg/L | 0.014 mg/L |
| Cyanide (Free) | 0.1 mg/L | 0.49 mg/L |
| Lead | 0.2 mg/L | 0.038 mg/L |
| Mercury | 0.05 mg/L | 0.025 mg/L |
| Molybdenum | No Limit | 1.95 mg/L |
| Nickel | No Limit | 1.59 mg/L |
| Selenium | 0.2 mg/L | 0.27 mg/L |
| Silver | 0.05 mg/L | 0.20 mg/L |
| Zinc | 0.5 mg/L | 1.94 mg/L |
| Flow | No Limit | No Limit |
| BOD₅ | 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 |
| Phosphorus | No Limit | Monitor Only |
| Ammonia | No Limit | Monitor Only |
| Total Nitrogen (TKN+NO3+NO2) | 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.



Cumplimiento y Control de Calidad: #604 Avenida Barbosa, Hato Rey - PO Box 7066, San Juan, PR 00916-7066

Table 1. Adopted Local Limits

| Parameter | Previous Limit | Adopted Local Limit |
|----------------------|-------------------|--|
| Phenols ^a | No Limit | 1.0 mg/L |
| рН | 6.5–9.0 SU | 6.5–9.0 SU |
| Oil and Grease | 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 | No Limit | No two consecutive readings at ≥5% LEL, and no reading of ≥10% LEL allowed |

^a Total phenols minus unsubstituted phenol

Notes:

 BOD_5 = 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.