



GOBIERNO DE PUERTO RICO

Autoridad de Acueductos y Alcantarillados

Adopted Local Limits for Vega Baja WWTP

The Vega Baja WWTP is located at Road 686, Km 14.7 Cabo Caribe Ward in Los Naranjos Sector in the Municipality of Vega Baja. The plant operates under National Pollutant Discharge Elimination System (NPDES) permit number PR0021679. The treatment process consists of mechanical bar screens, grit removal, and lift pumps. The flow is then split between one of three separate treatment trains, which were built independently of each other:

- Train 1 consists of a package plant with an aeration basin and secondary clarification.
- Train 2 provides two “racetrack” aeration basins, followed by clarification in independent secondary clarifiers.
- Train 3 uses rotating biological contactors (RBC), after which the flow is sent to an independent clarifier.

After treatment, the flow from the three treatment trains is recombined, passes through disk filters, and is chlorinated before discharge. The sludge handling facilities consist of a belt filter press and sludge drying beds. The sludge cake is transported by truck to the Arecibo composting facility for conversion into Class A compost.

PRASA has completed a Technically Based Local Limits (TBLL) evaluation to meet NPDES requirements for the Vega Baja 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. PR0021679 Part 1, A. Special Conditions, No. 20c. 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	0.990 mg/L
Cadmium	0.1 mg/L	0.170 mg/L
Copper	1.0 mg/L	1.000 mg/L
Cyanide (Free)	0.1 mg/L	0.100 mg/L
Lead	0.2 mg/L	0.200 mg/L
Mercury	0.05 mg/L	0.170 mg/L
Molybdenum	No Limit	4.290 mg/L
Nickel	0.5 mg/L	0.500 mg/L
Selenium	0.2 mg/L	2.060 mg/L
Silver	0.05 mg/L	0.050 mg/L
Zinc	0.5 mg/L	0.5 mg/L
Undissociated Sulfide	No Limit	Monitor Only
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.



Table 1. Adopted Local Limits

Parameter	Previous Limit	Adopted Local Limit
BOD ₅	No Limit	250 mg/L surcharge level
TSS	No Limit	250 mg/L surcharge level
Color	No Limit	250 Pt/Co Units
TDS	No Limit	500 mg/L
Phenols ^a	1.0 mg/L	1.0 mg/L
pH	6.5–9.0 SU	6.5–9.0 SU
Total Phosphorus	2.62 mg/L	Monitor Only
Ammonia	No Limit	Monitor Only
Total Nitrogen (TKN+NO ₃ +NO ₂)	No Limit	Monitor Monthly TKN, NH ₃ , NO ₃ , NO ₂
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	No Limit	No Limit

^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

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.