

PROJECT PROFILE

CASS™ - Cyclic Activated Sludge System



Location: Jau, Brazil
Client: Earth Tech Brazil
Type: Municipal Wastewater Treatment Facility
Value: Not Disclosed
Date: Commissioned June 2003

Project Description:

This municipal wastewater treatment facility was designed for the 122,000 pe town of Jau, which is located 300 km north of Sao Paulo.

The plant comprises inlet screens, three CASS™ SBR basins, and UV Disinfection. Aerobic sludge digester, thickening and dewatering, and storage facilities are also provided for waste activated sludge treatment.

The plant is designed for an average flow of 28,656 m³/d with a peak flow of 45,965 m³/d. A high quality effluent is produced which is discharged into a small stream and then the main watercourse. Nitrification and denitrification reduce the total nitrogen of the wastewater while phosphorus removal is achieved biologically within the CASS™ SBR process. Earth Tech Brazil operate the WWTP, and the project was executed as design-build-finance-operate.

Design Flow: 7.6 MGD (28,656 m³/d) Peak Flow: 12.1 MGD (45,965 m³/d).
 Influent Conditions: BOD₅ 230 mg/L, TSS 230 mg/L, NH₃-N 30 mg/L, P 10 mg/L
 Effluent Standard: BOD₅ 20 mg/L, TSS 20 mg/L, NH₃-N 5 mg/L