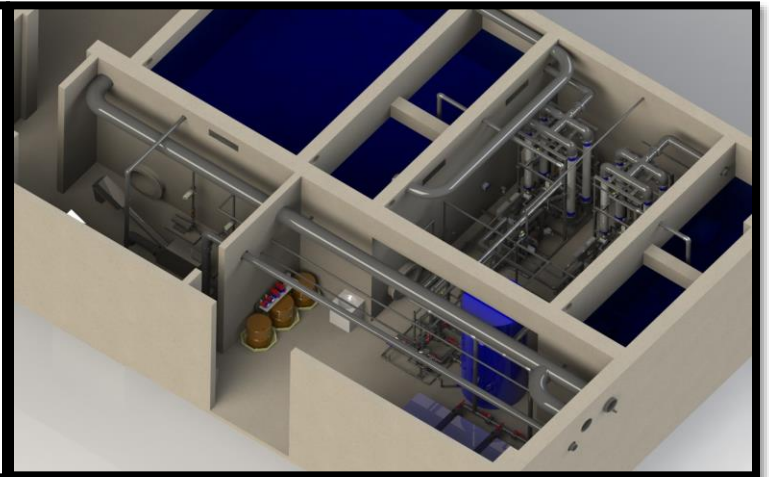


SYSTEM CASE STUDY: U.S. Land Port Entry - California



FAST FACTS

Project:

- ✓ bioPULSE™ MBR System for U.S. Land Port Entry

Industry:

- ✓ Decentralized Wastewater Treatment

Application:

- ✓ Biochemical Oxygen Demand (BOD) Removal
- ✓ Total Suspended Solids (TSS) Removal
- ✓ TKN Removal
- ✓ Water Reuse

bioPULSE™ MBR System

Benefits/Highlights:

- ◆ Fully automated MBR process
- ◆ Low energy consumption
- ◆ Title 22 Certified
- ◆ High flux rates – small footprint
- ◆ Back-pulsed to enhance and sustain flux

Problem:

The United States Land Port Entry was experiencing high concentrations of BOD, TSS and TKN in the wastewater. The effluent discharge generated by the wastewater were not meeting the permit requirements.

Solution:

bioprocessH2O installed a bioPULSE™ Airlift Membrane Bioreactor (MBR) biological wastewater treatment system. The MBR consists of an activated sludge process and an external membrane filtration system. These systems together provide many advantages for the plant including ease of operation and high performance as well as meeting the effluent discharge requirements set forth by the CA Title 22 Standards for water reuse. Treated wastewater is being used for irrigation purposes around the site.

Status/Results:

bioprocessH2O's bioPULSE™ Airlift MBR System will lower the BOD, TSS, and TKN levels to meet the effluent discharge requirement. Additionally, the treated wastewater is reused for flush water, watering plants, and truck washing at the facilities.

System Design Criteria:

Parameter	Influent	Effluent
Wastewater Flow	32,000 GPD	-
BOD	300 mg/L	<5 mg/L
TSS	250 mg/L	<5 mg/L
TKN	150 mg/L	NA

Contact bioprocessH2O today!

