

CASE STUDY

Wastewater Treatment At Tule River Tribe

Project Type: Municipalities / Wastewater Treatment

Location: Porterville, California

HIGHLIGHTS

Featuring a 600 kW standby generator guaranteeing continuous operation.

Installed a 75,000 GPD packaged MBR system capable of producing high-quality effluent.

Managed the civil installation of a massive duplex influent lift station for reliable conveyance.

ADVANCED WASTEWATER TREATMENT FACILITY IMPLEMENTATION

The successful completion of the Tule River Indian Tribe's Wastewater Treatment Facility provided the Tribe with a state-of-the-art 75,000 GPD Membrane Bioreactor (MBR) system and all associated infrastructure. The system was constructed to strict specifications developed in conjunction with US Indian Health Services. This turnkey project successfully overcame complex challenges.

CHALLENGES FACED

- **Integrating Complex Pre-Designed System:**
The project required a system based on a design completed by the Tribe in conjunction with US Indian Health Services, necessitating precise adherence to specifications.
- **Deep and Large Influent Lift Station Installation:**
The installation involved a substantial and deep structure: a 96-inch diameter by 28-foot deep duplex influent lift station, which presents significant excavation, safety, and structural challenges.
- **Stringent Effluent Quality Requirements:** The final treated water was intended for dispersal, implying the need for high-quality effluent.



SOLUTIONS IMPLEMENTED

- **MBR System Deployment:** Installed the 75,000 GPD package MBR wastewater treatment plant with equalization tanks for advanced, high-quality treatment.
- **Specialized Civil Installation:** Successfully executed the deep, large-diameter influent lift station and all associated conveyance piping.
- **Turnkey Facility Build-Out & Support:** Managed full site installation—including the 300,000-gallon storage tank, MCC/PLC electrical controls, and 600 kW standby power system—along with complete system testing, start-up, and ongoing support for a seamless transition to owner operation.



OUTCOME AND IMPACT

- **Modernized & Resilient Wastewater Treatment:** The Tribe received a modern, reliable facility for the rural community, featuring continuous operation capability powered by an installed 600 kW standby generator.
- **Achieved Environmental Compliance:** The system reliably meets the high standards required for effluent dispersal.
- **Successful Integrated Delivery:** The successful completion of the entire scope, from deep lift station installation to MBR commissioning, site grading, and fencing, provided the Tribe with a turnkey, fully integrated operational system.

The Tule River Indian Tribe project successfully delivered a complete, high-capacity MBR system and infrastructure. By expertly managing the installation of a complete site build-out, the project provided the Tribe with a robust, reliable solution for long-term wastewater management and environmental compliance.

