

Before



Case Study: St. Joseph's Glen Subdivision

Upon acquisition, the St. Joseph's Glen Subdivision Wastewater Treatment Facility faced several critical operational and infrastructure issues that compromised its ability to manage wastewater effectively and maintain compliance. To address these issues, a comprehensive improvement plan was undertaken, focused on enhancing the facility's performance and reliability.

Key upgrades began with addressing critical infrastructure and operational needs. Effluent discharge pumps were replaced, and force main breaks were repaired to ensure consistent and reliable flow management. Air valve repairs were carried out to address system failures, and manhole repairs were completed to reduce inflow and infiltration (I&I), a common issue that can lead to inefficiencies and compliance problems. Electrical upgrades and piping modifications were implemented to support the overall system improvements.

To enhance the treatment process, aeration in the tank was rehabilitated, and a new dechlorination tablet feeder was installed to improve disinfection. A new influent screen was installed, and the influent box was modified to better handle incoming wastewater and prevent large solids from interfering with treatment processes. Metal repair work on the facility, along with sandblasting and repainting, was completed to ensure the longevity and durability of the infrastructure.

These improvements have led to significant enhancements in the facility's performance. Notably, ammonia levels have seen a substantial reduction, with average concentrations dropping from 4.2 mg/L in 2020 to 0.3 mg/L in the past year, representing a 92% reduction. Similarly, total suspended solids (TSS) have decreased significantly, with average levels falling from 17 mg/L in 2019 to 3.2 mg/L in the last year, an 81% reduction.

The system improvements and upgrades to the facility's infrastructure now ensure reliable wastewater treatment and improved compliance with regulatory standards. These efforts reflect a strong commitment to operational excellence and the long-term sustainability of the facility, ensuring it provides safe and effective wastewater management for the community.

After

