

Before



Case Study: Krestwood Estates

Upon acquiring the Krestwood Estates wastewater facility, a concerted effort was launched to rectify operational challenges and ensure efficient wastewater treatment. The facility, once a neglected steel package plant, grappled with multiple issues hindering its ability to provide safe and reliable service. Unpermitted tertiary sand filters caused overflows and discharge of untreated wastewater, while accumulated solids accumulation disrupted aeration processes. Environmental concerns were heightened by an overflowing lift station and overgrown site conditions, further complicated by unauthorized repair attempts.

A comprehensive rehabilitation plan unfolded to systematically address these challenges. Extensive efforts were devoted to removing solids, restoring treatment volume, and efficiency. Skilled technicians cleaned and removed accumulated solids from treatment basins, significantly enhancing treatment efficacy. The complete overhaul of the aeration system was a focal point, requiring the replacement of damaged components and the installation of new diffusers, drop pipes, air headers, blowers, and blower controls to meet stringent permit requirements. Additionally, structural repairs were conducted, ensuring the integrity of steel tanks through maintenance and safety enhancements, including bracing and catwalk installations. Inefficient sand filters were promptly removed from service, and the clarifier underwent optimization to control solids and prevent overflows. The installation of a new digester in a polymer tank dramatically improved solids handling, drastically reducing the cost of hauled solids and promoting cost-effectiveness. Upgraded disinfection equipment, calibrated to meet bacteriological and residual chlorine limits, ensured treated wastewater quality in compliance with regulatory standards. Moreover, power, control, and monitoring systems were installed, facilitating real-time data analysis and enabling proactive maintenance to prevent potential issues from escalating.

The culmination of these efforts yielded substantial improvements in operational efficiency and environmental compliance. Addressing critical deficiencies and integrating modern technologies transformed the facility into a symbol of operational excellence and environmental stewardship. The community now benefits from safe, reliable, and environmentally responsible wastewater treatment services, safeguarding public health and the environment for generations to come.

After

