

CASE STUDY

Residential Wastewater Treatment Plant

Project Type: Residential Development / Wastewater Treatment

Location: Kendall County, Texas

HIGHLIGHTS

Successfully delivered within budget while meeting stringent TCEQ tertiary discharge limits.

The treatment plant was designed to accommodate flows up to 110,000 GPD.

Required seamless integration with the existing collection system.

A CLEAR SOLUTION: VEYRA'S IMPACT ON LERIN HILLS WASTEWATER

Completed the design, construction, and start-up of a new wastewater treatment plant for the Lerin Hills Subdivision in Kendall County, Texas. This facility was engineered to handle flows up to 110,000 gallons per day (GPD), with a start-up turndown capacity of 11,000 GPD. The plant was later transferred to the Lerin Hills Utility District for ownership and operation, serving the subdivision's residents.

CHALLENGES FACED

- **Stringent Regulatory Compliance:** The project required meeting strict Texas Commission on Environmental Quality (TCEQ) tertiary discharge limits for BOD (5 mg/l), TSS (5 mg/l), ammonia (1 mg/l), and phosphorous (0.5 mg/l).
- **Budgetary Constraints:** Veyra operated under a tight budget, necessitating cost-effective solutions that ensured the facility's long-term success and durability.
- **Project Complexity:** This was an intricate design-build project, demanding precise coordination, extensive site improvements, and seamless integration with the existing collection system.



SOLUTIONS IMPLEMENTED

- **Collaborative Design & Budget Optimization:** Secured the project with the lowest competitive bid and collaborated with the owner and vendors to select a cost-effective system meeting all discharge criteria.
- **Comprehensive Advanced Treatment:** Deployed a mix activated sludge wastewater treatment system with cloth media disc filtration, incorporating aeration, clarification, digestion, filtration, disinfection, and post-aeration fully compatible with the existing force main system.
- **Turnkey Project Delivery:** Assumed single-source responsibility across the entire lifecycle, managing design, site improvements, construction, and system commissioning. grinder pump force main collection system.



OUTCOME AND IMPACT

- **Successful, Compliant Plant Delivery:** The wastewater treatment plant was designed, constructed, and successfully started up, meeting stringent TCEQ tertiary discharge limits.
- **Budget Adherence:** Veyra delivered a high-quality solution within the owner's allocated budget.
- **High Client Satisfaction & Recommendation:** The project resulted in high client satisfaction, This led to a strong recommendation for future projects, solidifying Veyra's reputation for delivering complex projects effectively.

Through a combination of competitive pricing, collaborative design, and expert implementation of advanced treatment technologies, Veyra successfully delivered a critical wastewater treatment solution for the Lerin Hills Subdivision.

"[Veyra] really made this a smooth project, from working with the site civil engineer and completing the design, to constructing the system, and then doing the start-up. This was a complex project and needed creative thinking to provide a solution for the budget we had. [Veyra] added value to the project and I would highly recommend them for future projects."

Abel Godines Representative, LH Devco, Inc.



info@goveyra.com



[4616 W Howard Lane, Suite 105, Austin, TX 78728](#)



goveyra.com