CASE STUDY

ENVIRO-AIRE Enables RV Park Expansion & Reduces Maintenance

Waller, TX

SYSTEM SPECIFICATIONS 30,000 GPD Wastewater Treatment System

INSTALLATION DATE Fall 2019

PRODUCTS ENVIRO-AIRE[™] Package Wastewater Treatment Plant OWNER Bryant Management Company

ENGINEER Weishuhn Engineering, Columbus, TX

DESCRIPTION

Yogi Bear's Jellystone Park in Waller, Texas, is a popular full-service campground and recreation center featuring cabins, tent sites, RV sites, swimming pools and a lazy river, and two food service venues. The park's existing sewage treatment system was at capacity, restricting park service expansion and requiring costly and time consuming maintenance. Weishuhn Engineering was charged with designing a new system that could handle the wastewater flow of 30,000 gallons per day (GPD) from all park facilities. The design needed to meet all Texas Commission of Environmental Quality standards including the requirement for a mechanical clarifier.

The new ENVIRO-AIRE Package Treatment Plant includes steel tankage that is coated with epoxy over A36 steel. The tanks were prepared using steel chard/grit to a near white metal condition. This coating system provides optimum service life due to the superior adhesion of the epoxy coating to the base metal. The package plant sits on an engineered, reinforced concrete structural slab. The duplicative plant features dual aeration basins, sludge holding tanks, blowers and pumps, and a single 10-foot diameter mechanical clarifier with skimmers and a clarifier bridge. A separate pump tank was also incorporated into the design.

The Jellystone package plant processes wastewater via an extended aeration and oxidation process that purifies the sewage using natually-occurring bacteria to destroy the organic compounds. Continued mixing with air feeds the biological organisms, which consume the volatile materials and convert them into water, carbon dioxide, and ash. The result is a clear and odor-free effluent.

The custom-designed ENVIRO-AIRE Package Treatment Plant was built at the factory and shipped to the project site as a self-contained unit and required little assembly.





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