

PROJECT PROFILE

An Affordable Wastewater Treatment Solution for Government Properties

POINTES WEST RECREATIONAL AREA, GEORGIA

Problem A failing sand filter at an Army recreational area urgently needed to be replaced with a system that could handle seasonal flows.

Solution The U.S. Army Corps of Engineers (the Corps) chose to sole-source Orenco's AdvanTex® Treatment System as a preferred technology. As a result, an experienced construction bidder was able to complete the installation within 120 days.

Corps of Engineers Turns to Orenco® for Solutions

The Pointes West Recreational Area, on Lake Thurmond in Georgia, serves the U.S. Army's nearby installation, Fort Gordon. Pointes West includes cabins, campsites, boating facilities, and a motel.

In late 2008, officers with the U.S. Army Corps of Engineers (the Corps) needed to remediate or replace a failed sand filter, which treated wastewater at the site. The sand filter had been constructed using the wrong grade (size) of sand (which is not uncommon since it is sometimes difficult to obtain the proper grade of sand within a reasonable trucking distance).

The Corps needed a reliable wastewater treatment system that would work well, even with a wide variation in flows. Pointes West experiences highly variable seasonal flows, from around 4,000 gpd (15.1 m³/d) in winter, upwards of 50,000 gpd (189 m³/d) in July.



The U.S. Army Corps of Engineers was under time pressure to replace a wastewater treatment facility on Lake Thurmond.

Commercial — Government Market

Project Overview

POINTES WEST RECREATIONAL AREA, FORT GORDON, GEORGIA



Design Parameters

- Wastewater treatment for cabins, campsites, boating facilities, motel
- Variable flows:
 - ~ 4,000 gpd (15.1 m³/d) winter
 - ~ 50,000 gpd (189 m³/d) peak flows, summer

Installation and Start-up

- Spring 2009

Treatment

- Two 30,000-gal. primary tanks
- One 20,000-gal. recirculation tank
- 12 Orenco AdvanTex AX100 filter pods

Dispersal

- Onsite discharge to wetlands

Treatment Requirements

- 30 mg/L cBOD₅
- 30 mg/L TSS

Operation

- Maintained by Augusta Utilities

Controls

- Orenco TCOM™ remote telemetry control panel

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POINTES WEST RECREATIONAL AREA, GEORGIA

**Commercial —
Government Market**

The officers selected Orenco’s AdvanTex AX100 Treatment System for its reliability and outstanding wastewater treatment. The AX100 uses an engineered textile as the filter media, eliminating the need to source a particular grade of replacement sand. As an added benefit, the AX100 units could be installed directly on top of the sand filter, so it was not necessary to dispose of the existing sand.

The AX100 system was designed to handle an average of 30,000 gpd (113.6 m³/d) and peak flows of 60,000 gpd (227 m³/d). And it was designed so that half of the treatment could be taken off-line during the slower winter months, reducing the treatment capacity to 15,000 gpd (56.8 m³/d). Because it is a modular system, AdvanTex also allows the system to be easily expanded to handle peak flows of 100,000 gpd (378.5 m³/d), in the same space as the original sand filter.

Since the Corps decided that AdvanTex was the best solution for the situation, they chose to sole-source the technology. Construction was put out for competitive bid.

The system was professionally designed and constructed by Integrated Water Services, Inc. (IWS), a design-build firm with nationwide experience installing AdvanTex Treatment Systems. The project went from design to completion in just 120 days from Notice to Proceed, earning IWS an “outstanding” rating from the Army Corps of Engineers for being on time and on budget.



Whether for a permanent site or for a temporary camp, seasonal or year-round usage, AdvanTex is a versatile treatment solution.

For more information about effluent sewers, Orenco Sewers™ and AdvanTex® Treatment Systems, contact Orenco Systems®, Inc.

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Data used by Orenco to derive the representations and conclusions contained within this Project Profile were current as of March, 2011.