

C A S E S T U D Y

An Affordable Wastewater Treatment Solution for Commercial Properties

SPACEPORT AMERICA, NEW MEXICO

Problem To meet its targeted opening in 2011, the world's first commercial spaceport needed a wastewater system capable of handling highly variable flows in a very remote location in the New Mexico desert.

Solution Spaceport America selected an AdvanTex® Treatment System to service its vertical launch pad, terminal/hangar facility, and maintenance building. The system will handle volumes ranging from a few hundred gallons per day during standard operations up to 30,000 gallons per day during large Spaceport events.

Built upon remote desert sands in New Mexico, the world's first commercial spaceport is scheduled to launch operations by late 2010. Space tourists and researchers will travel to the edge of space aboard a variety of commercial spacecraft.

The facility, called Spaceport America, boasts a 10,000-ft runway and a 110,000-ft² terminal/hangar. In 2009, Orenco was selected to provide wastewater equipment for the Welcome Center's utility system serving 4,000 expected daily visitors, as well as for the vertical launch pad and maintenance building.

In designing the system, engineers from Molzen-Corbin and Associates had to consider the highly variable expected flows. Under normal operations, the system will see just a few hundred gallons per day. But during occasional Spaceport events, the system would need to handle up to 30,000 gallons per day.

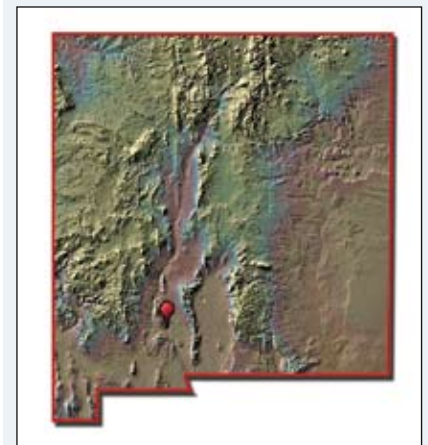
Orenco Dealer Roger Shafer, with SCG Enterprises in Colorado, worked with the engineers to put together a design that includes flow equalization, primary and recirculation tankage, and eight AX100 AdvanTex pods.



Commercial Market

Project Overview

SPACEPORT AMERICA, NEW MEXICO



Estimated Installation Date

- Fall 2011

Design Targets

- Up to 30,000 gallons/day
- As few as 300 gallons/day
- Up to 4,000 visitors/day
- LEED Gold Certification

Primary Treatment

- 60,000 gal primary tankage
- 10,000 gal equalization

Secondary Treatment

- 10,000 gal anoxic tank
- 20,000 gal recirc tank
- 8 AX100 AdvanTex pods
- TCOM telemetry controls

Dispersal

- 20,000 gal discharge tank
- Drip dispersal fields

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Effluent will be dispersed over a very large area to minimize nitrogen loading. Some of the clear, odorless effluent will even be re-used to control dust along the desert roads, offsetting the usage of potable water.

A TCOM telemetry control panel will be installed, allowing the operator to monitor and adjust the system remotely from office or home. The system can be configured to page the operator in the event of an alarm.

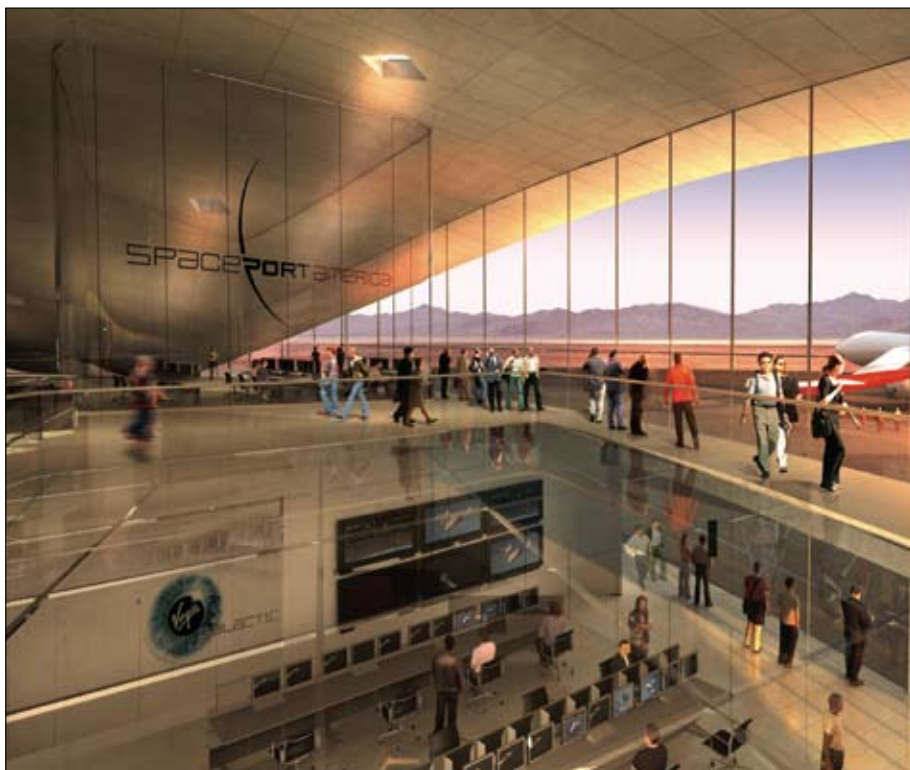
Spaceport America is aiming for LEED Gold Certification. Orenco is proud to be a part of another LEED project.

For more information about AdvanTex Treatment Systems or to discuss your project with our engineers, visit ...

www.orenco.com/systems



Commercial Market



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For more information about Orenco Effluent Sewers and AdvanTex® Treatment Systems, contact Orenco Systems®, Inc., at 800-348-9843.



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