

## Wastewater Fact Sheet

### Canyon Ridge

#### Proposed Wastewater Treatment Solution

- Every home built in the Canyon Ridge Property Development will be required, by restrictive covenant, to install an Orenco AdvanTex® on-site wastewater treatment unit as the sewer treatment solution. Conventional septic systems will not be allowed.
- This system has been selected because of its very high level (tertiary) treatment capabilities which will provide maximum protection of groundwater. The next level of treatment above this system's capability would have to meet drinking water standards.
- The system also contributes to water conservation because the treated wastewater can be reused for non-potable water needs. The treated effluent produced by the system is clear, odorless, inert water which will be used for drip irrigation in the landscape.

#### The AdvanTex® System Manufacturer

- The AdvanTex® system is manufactured by Orenco Systems Inc. ® based in Sutherlin, Oregon. The company has been designing, manufacturing, and distributing leading edge wastewater equipment since 1981. AdvanTex® systems are now in 41 countries with about 10,000 units operating in the US and Canada.
- Orenco's owners hold multiple U.S. and international patents. Their research is cited in numerous textbooks and publications, and Orenco's engineers are regularly asked to give workshops and presentations. Orenco maintains an environmental lab and invests time and money in a continuing research program, often in cooperation with universities. For more information, go to [www.orengo.com](http://www.orengo.com).
- Additional third-party testing/monitoring has been performed at a number of university and federal demonstration sites, including the University of California at Davis; University of Rhode Island; NERCC Test Facility, Minnesota (Natural Resources Research Institute); Clermont County, Ohio (EPA); LaPine, Oregon (Oregon DEQ); and Burnett, Washington (NODP)
- AdvanTex® gained New Mexico statewide approval in June 2001.

### AdvanTex® System Operation

- The system utilizes a recirculating “packed bed filter” technology that uses a highly efficient, engineered textile material for the treatment media. Evolved from sand filtration technology, The AdvanTex® system recirculates effluent from the processing tank through the treatment media multiple times. The AdvanTex® systems at the Canyon Ridge property will also include ultraviolet (UV) disinfection which treats the water to just less than drinking water standards. The control technology will include a telemetry-enabled control panel and a web-based monitoring system.
- Since the Canyon Ridge property will have seasonal occupancy AdvanTex's advanced control system will sense a low/no flow situation which will place the treatment process in a low maintenance mode, thereby keeping the bacteria alive in the treatment media until normal use is resumed. AdvanTex then resumes its normal process with no degradation to effluent quality.
- The Advantex® system will operate efficiently in cold climates. Approximately 2700 AdvanTex systems are successfully operating in the following cold weather climates: Alberta, Canada, Alaska, Arizona, Colorado, Massachusetts, Minnesota, Montana, Rhode Island, and Vermont.
- The systems operation is not affected by altitude. High altitude installations are currently operating in the Colorado Rocky Mountains and Flagstaff, AZ. at elevations excess of 9,000 feet.

### Advantex® System Monitoring Program

- Each Advantex® system installation will comply with the sampling and monitoring requirements set forth in the New Mexico Environment Department, Guidance Statement #6
- All AdvanTex® treatment systems at the Canyon Ridge property will be professionally managed by an authorized Orenco operator through an on-going management agreement. The authorized Orenco operator serving this property is located in Antonito, CO, approximately 45 minutes from the Canyon Ridge property.
- The operator can monitor every AdvanTex® Treatment system's performance remotely via the World Wide Web. A “smart” VeriComm® control panel automatically calls in system information once a month to a database that resides on the Internet.
- 24/7 monitoring of the systems will be accomplished using Orenco's VeriComm® telemetry-enabled control panels and web-based monitoring system which provides remote monitoring and control of every AdvanTex® unit on the

property. In the event of an alarm, an e-mail and pager alert is sent automatically and immediately to the authorized Orenco operator, who goes to a password-protected web site to find the location of the alarm and a description of the problem. The operator can control many system functions from his or her computer to correct the malfunction and then clear the alarm. If the problem cannot be corrected remotely the operator will dispatch a service technician to the site.