

## *Water Reclamation Plant Turns Heads, Not Noses!*

The Town of Breckenridge and the surrounding area are the proud beneficiaries of a new water reclamation facility. The *Iowa Hill* Water Reclamation facility is state-of-the-art, and has been toured by water and wastewater representatives from around the world. *Iowa Hill* facility tours inform visitors about plant process, odor control, and technological advances that help to monitor and control all of the District's processes.

In the 1990's, Breckenridge experienced rapid growth as it continued to prosper as a world-class resort. To accommodate the resultant increase in the wastewater stream and to keep the Blue River in good condition, it became apparent that a high-quality, tertiary waste treatment process was needed. The goal was not only to protect the Blue River but also to protect Dillon reservoir, which is a major source of drinking water for residents on the Eastern Slope of Colorado.

In choosing the type of treatment process many factors were taken under consideration such as: odor production, physical size, the impact on the surrounding neighbors, and most importantly, cost of operation. Of course, the ultimate goal was to create a facility that produced high quality effluent. To meet these diverse criteria, District personnel and consultants reviewed and toured available technologies in the United States and Europe.

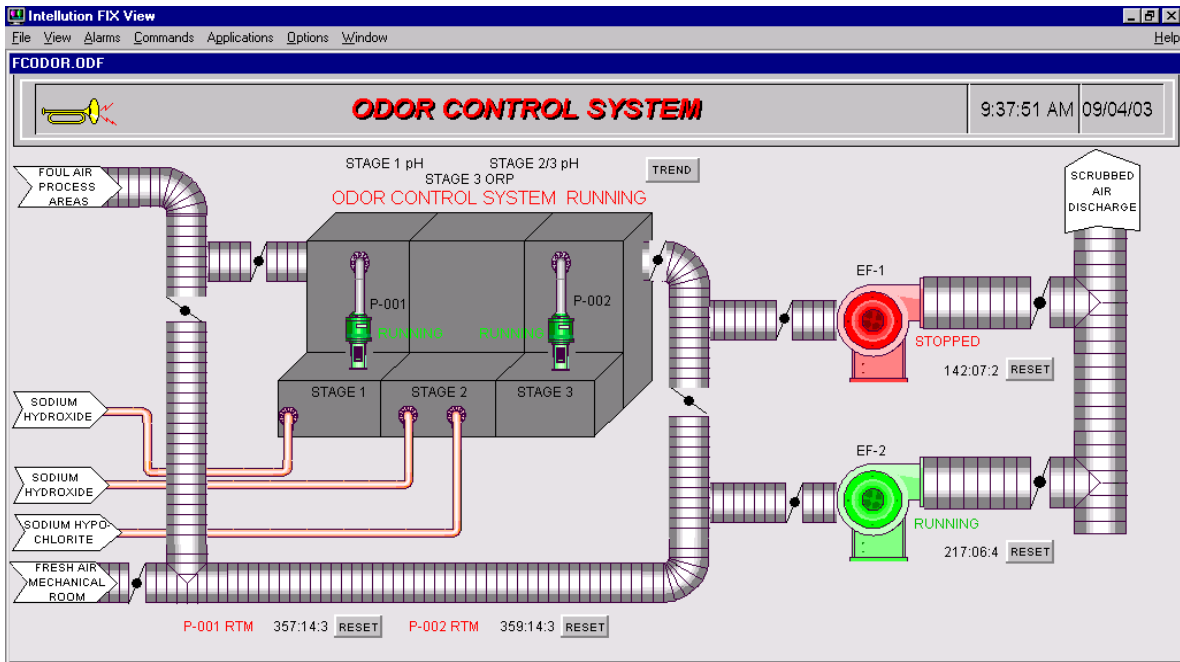
The end result is a beautiful building that compliments the mountain environment. As international visitors from as far away as China and Argentina enter the *Iowa Hill* Water Reclamation building, they are treated to an airy office grouping with soaring windows. Down a few steps is the computerized central that looks out on a below-grade operations area. Large sliding glass panels isolate the plant processes, while allowing visibility and odor

control. The lower levels consist of the chemical storage, mechanical services, piping, odor control and an air-scrubbing unit that cleans the air from the entire facility. The lowest level is nearly 30 feet below grade!

The computerized central utilizes Intellution control software to supervise and control the plant process and remote facilities. Within the plant, a large Allen Bradley SLC 504 PLC with racks of I/O modules handles the processing of hundreds of signals to and from the process equipment. Remotely, Motorola Moscad radio telemetry units efficiently process data from 16 lift stations and three process facilities. Andrew Carlberg, the District Manager, says "The telemetry and computerized central permits



the District's operators to focus more on improving treatment processes and preventive maintenance. The computerized graphics showing real-time data have reduced the need to visually or manually monitor the equipment scattered over 36 square miles."



After the *Iowa Hill* plant had been on-line for a few months, Carlberg saw the potential for remotely monitoring the much older *Farmers Korner* WWTP. Scott Coulson from Timber Line Electric and Control, the Moscad integrator, notes that "by using the Moscad radio telemetry to monitor the most important status and alarm points from the *Farmers Korner* plant, the district saves time and money by avoiding frequent operator trips to the site. Combined with the computerized alarm dialer, the radio telemetry gives them advance warning about potential problems."

The Breckenridge Sanitation District employees and the customers they serve are justifiably proud of the *Iowa Hill* Water Reclamation Facility. The high-tech approach will serve the District's needs well into the future.