Case Study

Account Name: ***Eastern Idaho Regional Wastewater Authority – Shelley, ID***
Location: ***Riverbend LS***
Installed System: ***FLD-60-15-H (Phantom II Omni)***

Issue

The Eastern Idaho Regional Wastewater Authority provides wastewater collection and treatment services to the City of Shelley, the City of Ammon, North Bingham County and South Bonneville County and owns, operates and has maintenance responsibility for the Oxbow Wastewater Treatment Plant. In mid-2013 the Authority was receiving a large volume of odor complaints from residents around the Riverbend lift station, located directly upstream from the plant, and was experiencing elevated odor levels in the plant as well. The Authority requested that Anue Water Technologies conduct a system demonstration in August of 2013 to determine if ozone & oxygen treatment at the Riverbend lift station could effectively treat the odor issues at the lift station and the plant.

Analysis

Pre-demonstration data collection showed that the odors at the Riverbend lift station were not being caused by aqueous or vapor phase sulfides but most likely due to elevated levels of mercaptans, sulfur-containing organic compounds that smell like rotting cabbage. Ozone & oxygen treatment was delivered through two Anue HydroSpear conditioning heads in the wet well at the Riverbend lift station from August 26-30. Soon after the beginning of the demonstration the local odors at the lift station vanished and complaints from local residents ceased – a marked decrease in odor at the plant occurred as well.

Solution

Based on the successful results of the system demonstration, Anue recommended the installation of a Phantom FLD-60-15-H wet well system at the Riverbend lift station to deliver continuous ozone and oxygen treatment to the effluent at its final stop before entering the treatment plant.

Results

The Anue Phantom system was installed in April 2014 and has been providing the same level of odor abatement as the demonstration system since startup. Another benefit of the decreased odor at the treatment plant is the reduced run time of the blowers, which has resulted in a savings of $2,000 to $3,000 per month in energy costs. The Agency was so impressed by the performance of the Anue Phantom that they have standardized on it as the odor control treatment system for all future lift station projects within their jurisdiction.