In May 2010, Evoqua Water Technologies was contacted by a leading global engineering, consulting and construction company, to provide wastewater treatment assistance during the final stages of commissioning at a power generation facility located in the southeast US.

The station is a 665 megawatt generator which utilizes pulverized coal boiler technology along with advanced emission controls, thereby making it one of the cleanest coal-fired plants in the U.S. During the final steps of transitioning the new plant to its owners, the site experienced unusually heavy amounts of rain. As a result, the coal-pile run-off pond became full and was in danger of overflowing into the surrounding area, including the nearby river.

The plant’s existing wastewater treatment system for the coal-pile run-off pond was designed for a rate of approximately 100 gpm. The increased volume posed a problem for the existing system and its ability to maintain and/or lower the pond level. Further, significant concerns were raised regarding total suspended solids (TSS) which were measured to be over 1000 ppm versus a discharge limit of 50 ppm.

In order to meet the customer’s commissioning schedule, while also delivering a compliant solution, Evoqua’s response was to use our mobile clarification system. Evoqua’s mobile clarification is a self-contained, trailer mounted system which features Actiflo® system and is capable of treating highly turbid water (up to 1000 NTU). The patented Actiflo® system uses microsand as a seed to enhance floc formation and increase settling rate. The microsand promotes production of higher quality effluent than other types of clarification systems, and is ideally suited for treatment of difficult raw waters.

Based on a verbal release from the consulting engineer on May 12, Evoqua was able to deliver the mobile clarification equipment to the site by May 14 and to complete the ancillary equipment assembly by May 17. The solution allowed a rapid reduction in pond level in a manner that maintained compliance with discharge permit levels, achieving water quality of <20 NTU and ~10 ppm TSS. Flow rates were increased to 300-500 gpm and the pond level was safely reduced to an acceptable operating level over a 4 week period.

**SIGNIFICANT ACCOMPLISHMENTS**

The availability of Evoqua’s mobile clarification treatment system and the ability to deliver the equipment quickly allowed the customer to meet their commissioning schedule.

Evoqua’s mobile treatment services provided a temporary solution which permitted the customer to resolve the challenge quickly and without the requirement of additional capital investment. Providing service from over 85 branch locations across North America, Evoqua provides mobile assets for clarification, filtration, reverse osmosis and deionization to meet temporary and emergency water needs.

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NORTH AMERICA SERVICE NETWORK

Our North America service network is backed by more than 80 offices staffed with certified technicians and applications experts who can solve your problems. In addition, Evoqua Water Technologies provides response flexibility through either a lease or capital purchase option, and the company offers assured liability protection through environmentally safe waste destruction.

SERVICES AVAILABLE

- Activated carbon supply, removal and reactivation services
- Filter media supply and removal
- Ion exchange resin supply
- Membrane supply and cleaning programs
- Parts and expendables
- Service contracts
- Temporary/emergency water systems

TECHNOLOGIES AVAILABLE

- Reverse Osmosis (RO) membrane filtration
- Conventional clarification and filtration
- Oil/Water separation
- Granular activated carbon adsorption
- Demineralization
- Inorganic metals removal
- Chemical addition

Evoqua Water Technologies delivers cost-effective, reliable systems guaranteed for quality, safety, and compliance. Our trained service staff is available to make sure your systems is running at peak performance and to your specification. For your water treatment system, choose the partner that is committed to taking care of the world’s water…and yours.