## MSDGC Muddy Creek WWTP Electrical Upgrades

ASE completed the detailed design for the Metropolitan Sewer District of Greater Cincinnati (MSDGC) Muddy Creek Electrical Upgrades Project in 2011. The project included the upgrade of the entire power distribution systems at Muddy Creek WWTP, including the replacement of the plant substation, main plant switchgear, and the replacement of seven (7) Motor



Control Centers (MCC) throughout the facility. New electrical rooms for the new switchgear and MCCs were also constructed.

## Services by ASE

ASE was responsible for the electrical and controls design. ASE is currently working with MSDGC during the Construction Administration phase and is providing PLC and SCADA system programming for the Automatic Transfer Switch PLC replacement and power monitoring systems for the project.



The biggest challenge with the project was keeping the plant running while switching out the entire electrical distribution system. ASE was able to design the system so that the new electrical equipment is installed in new locations. This allows the new system to be powered up and fully tested, before cutting over any of the plant loads to the new system. Once the system

is fully tested, then the loads can be cut over one at a time, resulting in minimal equipment downtime.

The detailed design for the new electrical rooms and associated HVAC systems was provided by a small architectural firm, Jim Johnson Architect. Mr. Johnson worked as a sub-consultant to ASE during the design and construction administration phase of the project.

The project is proceeding as planned and is scheduled for substantial completion of construction in June of 2014.

