



Village of Cooperstown Installs State-of-the-Art UV Disinfection System at its Wastewater Treatment Facility

Otsego County

Background

Cooperstown, founded in the late 1700's, is the birthplace of one of America's greatest authors, James Fenimore Cooper, as well as home to the Baseball Hall of Fame, the Farmers Museum, and American astronaut Robert L. Gibson. Also known as the birthplace of the Susquehanna River, the Village has more than 2,000 residents.

During the summer months, as tourists flock to Cooperstown, the population increases. When this occurs, so does the strain on the Village's infrastructure. Simultaneously the Village's wastewater treatment plant is required to disinfect its effluent discharge. The plant is a 2.6 mgd fixed-film wastewater treatment plant that discharges treated effluent into the Susquehanna - one of the most endangered rivers in the United States. The wastewater treatment plant used chlorine gas to disinfect its wastewater, and, as the result of new environmental regulations, a de-chlorination process had to be implemented if the de-chlorination process was to continue.

Realizing the fragile environmental conditions of the Susquehanna River, and the need to comply with new wastewater regulations, Village officials contacted the New York State Energy Research and Development Authority (NYSERDA) for assistance in upgrading its wastewater treatment facility. As a result, the Village participated in NYSERDA's Municipal Water and Wastewater Technology Program.

Recommendations

Through participation in NYSERDA's program, the Village of Cooperstown evaluated and installed a UV Disinfection System using low-pressure, high-output lamps. This process is less energy intensive and less costly than chlorination followed by the de-chlorination process. It is unique in that the plant does not have tertiary treatment, generally considered a prerequisite for UV Disinfection.

Incentives and Results

The project involved the installation of the UV Disinfection System and subsequent testing. Following its first year of operation, the plant has been able to meet its effluent discharge requirements, demonstrating that UV Disinfection can be an effective means of treating discharge from secondary wastewater treatment plants.

NYSERDA provided a financial incentive of **\$123,820** towards this project.

