

Glens Falls Wastewater Treatment Plant



Glens Falls Wastewater Treatment Plant Glens Falls, Warren County

Background

The Glens Falls Wastewater Treatment Plant provides primary and secondary wastewater treatment to the City of Glens Falls and the surrounding area. It also receives deliveries of septage and leachate, along with de-watered sludge from other municipalities, industries, and licensed haulers. When built in 1984, it was designed to handle effluent from a major industrial plant which has since closed. As a result, the Glens Falls Wastewater Treatment Plant was being operated at approximately 50% of its design capacity.



North Country Engineering, P.C. undertook a study to evaluate ways to reduce aeration cost at the plant, with NYSERDA providing half the study cost through its **New York Energy SmartSM** Technical Assistance Program. Application was also made to the **New York Energy SmartSM** Commercial and Industrial Performance Program which offers incentives to implement energy efficiency measures.

Recommendations

Through the technical assistance study, North Country Engineering found that the secondary aeration blowers constituted more than 40% of the annual energy consumption at the facility. It recommended the replacement of inefficient, aeration diffusers with new high efficiency ceramic disc diffusers. The study went on to recommend the plant reduce its blower horsepower from the three 600 hp blowers in operation to a single 200 hp, with one additional standby blower. The 200 hp blower is expected to be able to operate alone 90% of the time, with the standby blower on hand for periods of higher flow.



Incentives and Results

The City of Glens Falls received more than **\$10,400** through the Technical Assistance Program to cost-share the study. Through North Country Engineering, the City went on to receive **\$274,101** in incentives from the Commercial and Industrial Performance Program for energy savings associated with the aeration system upgrades. It is estimated the upgrades will save more than 2 million kWh annually. While the cost to make the upgrades was almost \$600,000, with the NYSERDA incentive and an annual energy savings of \$168,000, the upgrade will pay for itself in less than 2 years.



New York Energy SmartSM

All **New York Energy SmartSM** programs are funded by a System Benefits Charge (SBC) paid by electric distribution customers of Central Hudson, Con Edison, NYSEG, Niagara Mohawk, Orange and Rockland, and Rochester Gas and Electric. NYSERDA, a public benefit corporation established by law in 1975, administers SBC funds and programs under an agreement with the Public Service Commission.

New York Energy SmartSM programs are designed to lower electricity costs by encouraging energy efficiency as the State's electric utilities move to competition. The programs are available to electric distribution customers (residential, commercial, institutional, and industrial) who pay into the SBC.



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