

# Wastewater Plant History

The original treatment plant was constructed around 1906. It had limited treatment and consisted of septic tanks, sand beds & an incinerator. In 1931, the village realized that it needed a full treatment plant. One was designed by Glenn Holmes P.E. & Earl O'Brien P.E.. It consisted of a primary settling tank, aeration tanks & 2 final settling tanks. Sludge was dried using drying beds. Because of the abundance of clean drinking water, and good jobs, the village continued to expand. In 1956, under the direction of Superintendent of Public Works Leroy Wright, a primary digester was designed by Lozier Engineers.

In 1966, with William Smith as Chief Operator, the plant expanded. Engineered by William Cosulich, the old plant was decommissioned. In its place was built a new Influent channel, Raw Sewage pump station, Sludge pumping station and new Primary Settling tanks, Final Settling tanks, as well as new Aeration tanks. There was also a new Control building & solids dewatering. In 1972 Robert Young was the Chief Operator. The Influent channel, Sewage pump station & Sludge pump station were modified.

In 1985 the plant underwent its last major upgrade. It was designed by Jan Kem P.E. and consisted of a new Influent building, new Gas Compressor building, new Digester building & adding a 2nd Digester. The original Digester was also rehabilitated. The force main from the East Newark pump station was replaced.

From 1997 – 2007, with James Bower as Chief Operator, improvements made included, a new Influent Screening system, cleaning both digesters, rehabilitating the Aeration tanks, replacing the sludge centrifuges with a Plate & Frame press, installing a new Waste Gas Burner, installing a new Grit Removal system and replacing the Emergency Generator at the plant. In 2008, with Doug Alaimo as Chief Operator, a new Digester mixing system was installed, as well as modifications to digester gas equipment & piping.

The plant is currently staffed by 4 people, with John Reynolds the current Chief Operator, and is about to go through a \$23,000,000 expansion & upgrade. The plant is currently permitted by the NYS DEC to discharge 3.0 million gallons of treated effluent under the provisions of the State Pollution Discharge Elimination System (SPDES). Treated effluent from the plant is currently discharged to Garnagua Creek.

Initially, alarms were handled by an operator who lived next door to the plant and was alerted to problems by alarms wired into the operator's house. Later, leased phone lines were used to connect the pump stations to the treatment plant. Through the years, incremental improvements have been made and the system is now monitored using a SCADA, (Supervisory Control and Data Acquisition) program, and computers. Once the latest upgrade is complete,

everything at the plant will be monitored using state of the art instrumentation using fiber optic.

We feel these efforts will ensure that the Village of Newark will have a modern and reliable sewage treatment plant for many years to come.