

Wastewater Treatment Plant Upgrades

Arrowhead Sewer Company, Inc
Coolbaugh Township, PA

Arrowhead Sewer Company, Inc. serves the Arrowhead Lake Community Association, a more than four thousand lot private Pocono residential community in Coolbaugh Township, Monroe County, Pennsylvania. Princeton Hydro was hired to modernize the existing wastewater treatment plant by replacing the failing 0.25 Million Gallons per Day (MGD) Rotating Biological Contactor plant in three phases. Princeton Hydro's work began in 2003 to install an inflow equalization tank.

Between 2004 and 2005, two 0.10 MGD Upflow Sludge Blanket Filtration (USBF) plants were installed to replace the lost capacity of the existing deteriorating plant and expand the combined capacity. The USBF process is an extended aeration activated sludge process and includes superactivation, nitrification, single sludge denitrification, phosphorus uptake, sludge thickening, and upflow sludge blanket filtration. The modules have low maintenance and operating costs. In 2007, two more package plants were installed for a total capacity of 0.40 MGD . Performance of the plant has been exceptional.

The Arrowhead Sewer Company is extending sewer throughout the community and is planning to install a fifth package plant for a total capacity of 0.50 MGD, just under the 0.525 MGD permitted discharge limit.

