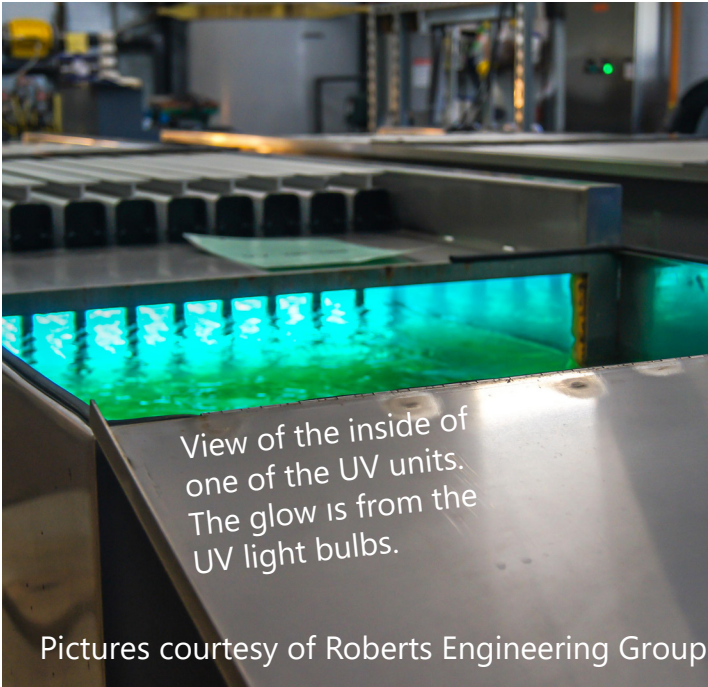


Hightstown Borough UV Disinfection System

NJ I-Bank and NJDEP Helping to Improve New Jersey's Infrastructure, One Project at a Time



NJ I-Bank Project of the Week: Hightstown Borough Ultraviolet Disinfection System. Community receives \$1.3 Million in Water Bank Loans. Estimated savings to rate payers of \$526,545.

The Borough of Hightstown recently completed wastewater treatment plant improvements that are being funded with approximately \$1.3 million in loans from the NJ Water Bank, a joint low-rate funding program of the DEP and the NJ I-Bank. Total savings for this project are estimated to be \$526,545 over the 30-year term of the loan or 40% of the total project cost. In addition, this project created an estimated 15 direct construction jobs.

The project replaced the Advanced Wastewater Treatment Plant's (AWWTP) existing chlorination, dichlorination, and sand filter systems with new state-of-the-art Ultra Violet (UV) Disinfection and Disk Filter systems in half the space.

The project removed and replaced two large sand filters with two UV disinfection units and two disk filters within the same footprint. The installation of two units for each process ensures constant disinfection of wastewater when one unit requires maintenance. The new disk filters and UV Disinfection system are easier to maintain and eliminate the need for hazardous chemicals such as chlorine. The replacement of the chlorine disinfection system with UV eliminated the discharge of chlorine produced oxidants (CPOs), specifically high levels of

Bromodichloromethane. The elimination of chlorine gas and sodium hydroxide creates a safer work environment and a healthier effluent for plant and wildlife in Rocky Brook into which the AWWTP ultimately discharges.

The new Disk Filters and UV Disinfection systems are also more reliable for ensuring safe effluent quality, easier to operate and maintain, and more efficient in the process. The project received a second-place award for the Project of the Year from the NJ Society of Municipal Engineers (NJSME) for work designed for a municipality with a population under 20,000.

Lawrence D. Quattrone, Mayor of Hightstown Borough, declared the project a success. "Our water department is dedicated to managing our wastewater and reducing risks to public health.

The UV disinfection system represents an excellent upgrade to our system as it kills bacteria, viruses and yeasts without impairing the taste or odor of the water. This project is a great example of our water department implementing best practices at the lowest prices which we can pass on to our residents."

This project was designed by Roberts Engineering Group and constructed by Quad Construction.

For more information regarding borrowing through the NJ Water Bank, visit www.njib.gov