

WEDECO TAK 55 in Seneca, MD

TAK Chosen as Disinfection Solution Because of Quality and Reliability

The Seneca Wastewater Treatment Plant (WWTP) receives wastewater from the greater Washington, DC area. Heightened security and concerns over the hazards of using chlorine gas had the Washington Suburban Sanitary Commission (WSSC) reconsidering their wastewater disinfection process equipment.

Solution

Working with the footprint available and designing a system to meet disinfection needs during the worst case scenarios, WEDECO developed a three channel TAK 55 design. One of the requirements of the WSSC was to have the most cost effective UV system possible for their disinfection, so the three channel TAK 55 design was chosen because of the OptiDose control system and modular design that could offer great system turndown and minimal cost of ownership. ECORAY® lamps used in the system have a 14000 hour warranty and up to a 20% better power profile than comparable LoHi UV lamps, and use 80% less mercury. These lamps not only are better for the environment, but contribute to the savings the new system. This design allows the wastewater system to operate only a single channel at flows up to 14 MGD. The entire installation is a total of 270 lamps.

In addition, an electrical building was placed adjacent to the UV disinfection channels to accommodate a clean, dry and safe place for the operators to access the electrical equipment. This system configuration is not only better for the equipment, but makes maintenance much easier and creates a safer environment for the operators.



END USER: Seneca, MD
CLIENT: Seneca, MD
ORDER DATE: 2013
COMPLETION: 2013

“The quality of the TAK 55 design and the reliability of the equipment have served the Seneca WWTP staff well.”

Result

Since the system started up there have been no permit violations of the 200 cfu/100 mL Fecal Coliform disinfection requirement and the electrical equipment has seen a long operational life with only a single ballast replaced since start-up. Lastly, the TAK 55 UV system has distinct advantages over chlorine gas including no more truck deliveries or chemical handling.

Along with the success of the TAK 55 at the Seneca WWTP, the WSSC also owns and operates TAK 55 systems at the Piscataway WWTP and Western Branch WWTP.



UV awning.



Effluent gates.

Xylem, Inc.
14125 South Bridge Circle
Charlotte, NC 28273
Tel 704.409.9700
Fax 704.295.9080
www.xyleminc.com

Flygt is a trademark of Xylem Inc. or one of its subsidiaries.
© 2013 Xylem, Inc. MAY 2013



www.youtube.com/wedecous