

Chlorine Contact Tank Replacement

Borough of Bowmanstown | Carbon County, PA



Van Cleef provided design, permitting, bidding, and construction-phase services for the replacement of the Bowmanstown Borough Wastewater Treatment Plant's aging chlorine contact tank. The original underground steel tank, installed when the plant was first constructed, was approximately 29 years old and in very poor condition due to heavy rusting and long-term exposure to a corrosive chlorination environment. The project replaced this deteriorated asset with a modern, state-of-the-art system consisting of two redundant 8,163 gallon cast-in-place concrete chlorine contact basins designed to meet PADEP standards. Each basin was sized to independently handle peak flow so one basin can remain in service while the other is isolated for maintenance or cleaning. The new design incorporated serpentine baffling channels, inlet and outlet weirs, improved hydraulic performance, and supporting upgrades including a new distribution structure, dechlorination contact chamber, relocated analyzer equipment, and drainage features for easier operation and maintenance. Construction was completed, providing Bowmanstown Borough with a more reliable, durable, and maintainable disinfection system for long-term plant performance.

CLIENT CONTACT

Bowmanstown Borough, PA

PROJECT HIGHLIGHTS

- Chlorine Tank Replacement
- PA DCED Grant Funding
- Redundant Concrete Basin Construction
- Designed to meet PADEP Standards
- Supporting Improvements Added for Cleaning, Operations, monitoring, and De-chlorination
- Delivered a Modern, Durable Disinfection System for Long-Term Plant Performance