

WWTP Effluent Outfall Emergency Replacement

Borough of Portland | Northampton County, PA



Van Cleef provided emergency investigation, design, permitting, construction administration, and field coordination for replacement of the Portland Borough Wastewater Treatment Plant's obstructed effluent outfall. The failed existing 12-inch outfall caused treated effluent to back up and overflow at an upstream manhole, creating an immediate operational and environmental concern for the Borough. The replacement included approximately 83 linear feet of 12-inch C900 PVC outfall piping from the existing manhole to a new precast Type I DW endwall, a 12-inch flap valve, an anti-float collar and supporting footer, concrete encasement of the downstream piping, riprap stabilization, and a corrugated HDPE-lined swale that conveys and disperses flow toward the Delaware River. VCEA obtained an Emergency PADEP Chapter 105 authorization for work within the Delaware River floodway and the required PADEP Water Quality Management Permit. Construction and the final cutover were carefully sequenced so the WWTP remained operational throughout the emergency work. The replacement restored a reliable permitted discharge and providing a more stable, erosion-resistant outfall.

CLIENT CONTACT

Borough of Portland, PA

PROJECT HIGHLIGHTS

- Designed and Installed C900 PVC Effluent Outfall Piping
- Added a Precast Endwall, Flap Valve, Anti-Float Support, Concrete Encasement & Riprap
- Obtained an Emergency PADEP Chapter 105 Authorization
- Obtained PADEP Water Quality Management Permit
- Restored a Reliable, Maintainable, and Environmentally Protective Discharge for the Community's Wastewater Treatment System