



Liberty Street Pump Station Rehabilitation



2025

ABOUT THIS PROJECT:

Market Segment:
Wastewater Collection & Treatment

Applicator:
Poly Coating Solutions

Location:
Charleston, West Virginia, USA

Engineer:
Howard K. Bell
Consulting Engineers

Owner:
South Charleston
Sanitary Board

Products Used:
Xypex Megamix II
with Bio-San

Contractor:
Orders Construction

The South Charleston Sanitary Board undertook rehabilitation of the Liberty Street Pump Station to address advanced concrete deterioration within the structure. Prolonged exposure to wastewater had resulted in extensive material loss, with reinforcing steel fully exposed in multiple areas. Maintaining continuous operation of the pump station was a critical requirement throughout the repair process.

Xypex Megamix II with Bio-San was selected to restore the deteriorated concrete surface and providing protection to the reinforced steel while providing resistance to microbial induced corrosion.

More than 40,000 lbs. of Megamix II with Bio-San were applied using a spray-on application method to rebuild damaged concrete surfaces and encapsulate exposed reinforcing steel.

The Xypex repair system allowed rehabilitation work to be completed while the pump station remained operational, eliminating the need for temporary bypass systems or full replacement. This approach extended the service life of the existing structure and provided a cost-effective alternative to constructing a new pump station, delivering long term durability and corrosion protection for critical wastewater infrastructure.

