



Pendleton– Clemson Regional Wastewater Treatment Plant Expansion



2025

ABOUT THIS PROJECT:

Market Segment:
Wastewater Collection
& Treatment

Owner/Developer:
Town of Pendleton

Products Used:
Xypex Bio-San

Location:
Pendleton, South
Carolina, USA

Engineer:
Goodwyn Mills Cawood –
Greenville, South Carolina

General Contractor:
Harper General
Contractors

Concrete Producer:
Thomas Concrete

**Concrete Placement
Contractor:**
Donley's Inc.

The Town of Pendleton undertook the expansion of the Pendleton–Clemson Regional Wastewater Treatment Plant to increase treatment capacity and improve long-term system reliability for the surrounding service area. The project included construction of a new coarse screening structure and influent pump station, both of which operate under continuous exposure to wastewater, hydrogen sulfide, and aggressive microbial conditions.

To address the risk of microbial induced corrosion (MIC) and ensure long-term concrete durability, Xypex Bio-San was incorporated directly into the concrete mix supplied by Thomas Concrete and placed by Donley's Inc.

Bio-San's integral crystalline waterproofing technology permanently seals capillaries and micro-cracks while its antimicrobial component inhibits the growth of acid producing bacteria commonly found in wastewater environments.

By integrating Xypex Bio-San into the new process structures, the project team eliminated the need for external linings or coatings while achieving long-term protection against water ingress and corrosion. The Xypex crystalline system provides a permanent and low-maintenance solution supporting investment from the Town of Pendleton in durable, resilient wastewater infrastructure designed to serve the region for decades.

