



North Huntingdon Wastewater Treatment Plant



2025

ABOUT THIS PROJECT:

Market Segment:
Wastewater Collection
& Treatment

Owner:
North Huntingdon
Sewage Municipal
Authority

Products Used:
Xypex Admix C-500 NF

Concrete Producer:
Stone Concrete

Engineer/Architect:
KLH Engineers

General Contractor:
Wayne Crouse

Location:
Irwin, Pennsylvania, USA

The North Huntingdon Sewage Municipal Authority completed upgrades at the North Huntingdon Wastewater Treatment Plant to support reliable treatment operations and improve the long-term durability of new treatment infrastructure. The project included the construction of a new headworks building and several cast-in-place concrete structures exposed to the continuous moisture conditions typical of wastewater facilities.

To enhance durability and protect the concrete against water ingress, approximately 1,500 cubic yards of concrete incorporating Xypex Admix C-500 NF crystalline waterproofing admixture were placed in the headworks building and associated structures.

Added during batching, Xypex crystalline admixture reacts with water and the by-products of cement hydration in the concrete. With water as the catalyst, it forms a non-soluble crystalline structure within the interconnected capillary pores and microcracks, blocking pathways for water and reducing permeability throughout the concrete matrix.

This integral approach provides permanent waterproofing protection without reliance on surface applied membrane systems. The use of Xypex Admix C-500 NF supports long term durability, reduced maintenance requirements, and extended service life for the wastewater treatment infrastructure serving the North Huntingdon community.

