CASE STUDY









PROJECT SNAPSHOT

NAME:

HANNIBAL & NIXA CLARIFIER REHABILITATION PROJECTS

LOCATION:

Hannibal, Missouri & Nixa, Missouri

OVERVIEW:

Midwest Infrastructure Coatings (MIC), an OBIC-certified installer, completed two major clarifier rehabilitation projects across Missouri: one restoring a severely corroded 30-year-old structure and the other setting a record as the largest exterior clarifier coated in OBIC's history.

OBIC PRODUCTS USED:

• OBIC Armor Multi-Layer System (OBIC 1000 + OBIC 1306)

CERTIFIED INSTALLER:

Midwest Infrastructure Coatings (MIC)

JOB COMPLETION:

2024



CASE STUDY







SITUATION

Aging wastewater infrastructure is a growing challenge for municipalities across the country. In Hannibal and Nixa, Missouri, two wastewater clarifiers, vital components of each city's treatment system, were showing signs of severe deterioration.

In Hannibal, the 7,000-square-foot clarifier had been in continuous service for over 30 years, with hydrogen sulfide (H2S) corrosion eroding the concrete to the point that the aggregate was exposed.

In Nixa, a 20-year-old clarifier needed rehabilitation before more serious structural issues developed. The structure, spanning 16,700 square feet, represented the largest exterior clarifier ever coated with OBIC, a milestone for both OBIC and MIC.

Both cities needed a solution that could extend the lifespan of their systems without costly reconstruction, and they turned to Midwest Infrastructure Coatings to deliver.



When it absolutely, positively must last.

SOLUTION

As a trusted OBIC-certified installer, Midwest Infrastructure Coatings (MIC) applied the OBIC Armor Multi-Layer System, a proven solution for stopping corrosion, sealing leaks, and reinforcing concrete.

The MIC crew began by having the clarifier surface sandblasted to remove decades of buildup and prepare for coating. Then, they applied OBIC 1000 polyurea at 100 mils thick to the clarifier walls and launder section, using OBIC 1306 structural foam to fill and stabilize a damaged area near the launder.

The project was completed efficiently despite unpredictable weather, allowing the clarifier to return to service quickly.

In Nixa, the team faced a much larger challenge: coating a 16,700-square-foot exterior clarifier. After four weeks of sandblasting and painting the steel rotation assembly, MIC applied OBIC 1000 polyurea to the floor and launder and finished the walls with OBIC Armor in gray.

The entire coating process took just 12 days, even with fluctuating weather conditions. Nixa's Public Works Department has taken a proactive approach to infrastructure management, requiring all new wastewater structures to be lined with OBIC products prior to acceptance.

BENEFITS

Both clarifier projects were completed successfully, demonstrating the strength and versatility of OBIC's protective systems and MIC's expert installation.

Project Results:

- Clarifier lifespan extended for decades
- Rapid return to service despite weather challenges
- Enhanced resistance to H2S corrosion and chemical exposure
- Reduced long-term maintenance costs infrastructure overhaul.