

CASE STUDY



When it absolutely, positively must last.



BEFORE



AFTER



PROJECT SNAPSHOT

NAME:

VIRGIL GRISSOM MIDDLE SCHOOL PACKAGE PLANT LINING

LOCATION:

Virgil Grissom, IN

DIMENSIONS:

25' in diameter and 17' deep with 4 different chambers

OVERVIEW:

In order to prevent spending millions of dollars to replace the aging steel package plant structure located behind the school, OBIC products were used to line and stop the active inflow and infiltration.

OBIC PRODUCTS USED:

- Concrete Primer
- OBIC Armor Lining System

CERTIFIED INSTALLER:

Advanced Rehabilitation Technology

JOB COMPLETION:

Summer 2023

CASE STUDY



SITUATION

Groundwater was leaking into the aging steel package plant structure used to treat the middle school's wastewater. The customer was facing a situation where if they had to replace it with a new one, they would have to acquire land and the relevant permits for it, build a new package plant, dig out a place for the new structure, and pour concrete, with the total replacement cost rising upwards to millions of dollars. The customer sought a solution that would prevent the heavy cost and time expense of replacement.

In the summer of 2023, Advanced Rehabilitation Technology (ART) was selected to stop the I&I of the package plant and return it to like-new, all before the start of the school season.



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SOLUTION

ART started the prep work with sandblasting the package plant. Since it was located right beside the school, they opted to use a wet blast using glass media with a rust inhibitor to decrease the amount of debris coming from the sandblasting. To stop the active leaks, they drilled holes in the steel and injected OBIC's chemical grout 2262. They also installed steel plate patches on some of the larger holes while lining the structure. After the package plant interior was rinsed, they removed all liquids and media with a VAC truck and primed it with OBIC 1503.

The OBIC Armor system was then carefully applied in a grey color to closely match the steel underneath. OBIC's three-layer system known as OBIC Armor is composed of a 50-mil thick first adhesion layer of OBIC 1000 polyurea, a 400-mil thick layer of OBIC 1306 high-density polyurethane foam, and a 50-mil thick moisture barrier layer of OBIC 1000. This creates a 500-mil thick coating that provides chemical protection, leak protection, and structural support.

BENEFITS

The most impressive benefit of this 2.5 week project was the long-term cost-savings advantage as the customer did not have to purchase land or spend millions of dollars in replacement costs. The project was completed before the new school session began. In addition, the customer saw less run time on lift station hours due to the elimination of I&I issues.

OBIC lining systems are designed to extend the life of the structure by 50 years or longer, and all ART-installed multi-layered systems and OBIC Armor systems include a 10-year labor and material warranty.

