

PROJECT:
Landfill Leachate Collection Boxes

LOCATION:
Morrisville, PA

OWNER:
Rust Engineering
Grows Landfill Waste Management

APPLICATOR:
Performance Foam & Coating

SYSTEM:
POLYSHIELD SS™ 100

TOTAL AREA:
3,300 square feet

COMPLETION DATE:
February 1994

PROBLEM:

The concrete leachate collection boxes at the Grows Landfill were deteriorating. The damage was being caused by bacteria growth feeding on the methane gas created by the landfill waste. The bacteria secretes acidic enzymes that breakdown silica & calcium in the concrete.

SOLUTION:

Grows Landfill Waste Management needed an interior lining to protect the leachate collection boxes from further damage. In order to prime the surface, the concrete was heated, which pushed the water vapor back, allowing the concrete primer to be properly applied and cured. Polyshield SS™ 100 was then applied over the prepared concrete at 250 mils.

RESULTS:

The Polyshield SS™ 100 polyurea coating created a seamless barrier that sealed off the concrete, protecting it from further bacteria damage.

The site was revisited in March 1998. Rust Engineering was very satisfied with the performance of the coating. There was no degradation noted in the Polyshield SS™ 100 coating.

