PROBLEM: Anchorage International Airport was looking for a coating to prevent spilled fuel in the jet fueling pits from leaking into the ground. The coating had to be resistant to a variety of fuels and applied over potentially contaminated substrates. In addition, the coating needed to be flexible enough to resist cracking during Alaska's annual freeze/thaw cycles. Airport management needed a reliable solution, easily applied, with an immediate return to service.

SOLUTION: Polyshield SS™ 100 polyurea was chosen due to its corrosion resistant, high-elongation, and rapid cure properties. The coating will enable the owner to quickly return the fuel hydrant pits back to service, and will move with the substrate expansion and contraction during the freeze/thaw cycle.

RESULTS: Polyshield SS™ 100 is performing exceptionally well. These pits are continually exposed to water, anti-icing agents, and jet fuel. The coating has some color change, but no signs of deterioration.

PROJECT: Aviation Fuel Hydrant Pits
LOCATION: Anchorage, AK
OWNER: Signature Flight Service
APPLICATOR: H.P.C. Painting Company
SYSTEM: POLYSHIELD SS™ 100 Polyurea
TOTAL AREA: 200 Aviation Fuel Hydrant Pits
COMPLETION DATE: 1990-1994

The applicator spray-applied 80 mils of a translucent yellow Polyshield SS™ 100 polyurea. The color yellow was chosen to contrast the darker substrate, making it easy to visually determine the thickness of the coating. The polyurea coating was applied over various substrates (concrete, geo-textile fabric, and directly onto the ground).

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