

**Project:**

Fish Hatchery Raceways

**Location:**

Juneau & Snettisham, AK

**Owner:**

Douglas Island Pink and  
Chum Hatcheries

**Applicator:**

HPC Urethane

**System:**

POLYSHIELD HT<sup>™</sup> with  
AE-4 (adhesion enhancer)

**Total Area:**

43,000 square feet

**Completion Date:**

1999

**PROBLEM:**

Bound for the Pacific Ocean, more than 126 million salmon pour out of the Douglas Island fish hatchery every year. In 1999, fish started dying of whirling disease, an illness that deforms the skeleton causing fish to swim in a corkscrew pattern. Fish at the hatchery live in chutes, and unfortunately for Douglas Island, the microscopic worm that causes whirling disease is small enough to wiggle through tiny cracks in the concrete walls. That put the entire crop at risk. Douglas Island needed a way to quarantine the infected fish.

**SOLUTION:**

Replacing the walls completely would cost too much time and money. Thanks to Specialty Products, that wasn't necessary. The hatchery sprayed the walls with Polyshield HT<sup>™</sup>, which is impermeable to water, keeping

the deadly worms from wriggling between chutes.

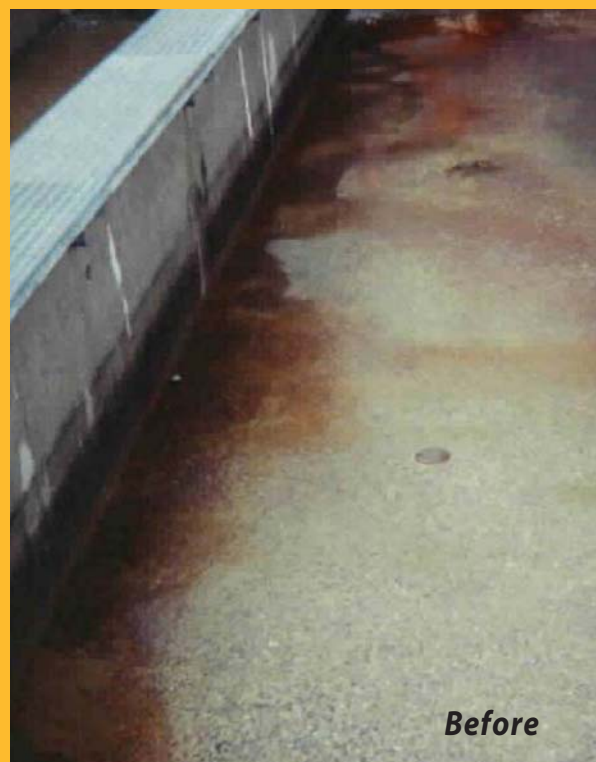
Prior to application of Polyshield HT<sup>™</sup>, the concrete was prepped with a high-pressure wash using a biodegradable soap, dried, and then vacuumed. In order to avoid the additional step and expense of applying a primer, AE-4 (adhesion enhancer) was added to Polyshield HT<sup>™</sup> which was applied directly to the concrete at 100-500 mils. The product's rapid curing properties allowed Douglas Island to quickly return to the business of raising fish.

**RESULTS:**

The owner was extremely pleased with the fast cure time, and the hatchery was able to put the raceways back to service immediately. The original contract was awarded for 8 raceways. Due to the excellent performance of Polyshield-HT<sup>™</sup>, the remaining 27 raceways were awarded to the contractor the following year.



**After**



**Before**