

# Sealing Concrete Gypsum Holding Bays in the FGD Area of the Plant

Fossil Power Industry
ARC 797 and ARC CS2
ARC Case Study

# Challenge

#### Issue

Holding bays containing gypsum byproduct from the FGD process were leaking water into personnel areas, creating a slipping hazard.

#### Goals

Seal the concrete and prevent further leakage between bays. The solution had to incorporate a crack bridging process.

### **Root Cause**

Repeated freeze/thaw cycles led to expansive cracking of the concrete walls and subsequent leakage between bays.



Bays with cracking on walls before repairs.

# **Solution**

## **Preparation**

The cracks were "V" ground out and the surfaces were diamond ground to CSP 3 finish.

## **Application**

Chesterton® ARC 797 was applied to the walls and crack regions.

Fiberglass tape was applied over the cracks, pressing it into wet ARC 797.

Chesterton ARC CS2 was applied to the walls and sumps in two successive coats of 10 – 12 mils for a total DFT of 20 – 24 mils.



After diamond grinding, ARC 797 with fiberglass tape overlay was applied to the cracks.

# **Results**

## **Client Reported**

Three bays were treated in <3 days. Client appreciated 100% solids formulation which reduced worker exposures during installation.

Leaks between bays have been greatly reduced and the slipping issues have been improved.



After ARC 797 and tape repairs were completed, all surfaces received two 10 – 12 mils coats of ARC CS2.

