

Petrochemical Neutralization Basin

Chemical Processing — Effluent Processing **ARC CS4 Coating** Case Study 133

Challenge

Issue

Severe corrosion to failing acid brick lined concrete basin resulted in leaks and environmental fines

Goals

 Avoid future fines and return basin to chemical resistant status

Root Cause

Sulfuric and hydrochloric acids degrading mortar and grout lines

Solution

Preparation

- Old acid brick was removed as well as damaged concrete.
- Surfaces abrasive grit blasted and alkaline washed

Application

- Cementitious mortar used to re-surface damaged concrete
- All surfaces coated with 2 coats of ARC CS4 at 15-20 mil (375-500 µm)/coat

Results

Client Reported

- Repairs carried out over 2 week period
- Basin operated for 6+ years before repairs were required

Savings	\$ 103.000
ARC lining	\$ 47,000
Acid brick estimate	\$ 150,000

\$=USD



Basin in petrochemical complex



Surface preparation



ARC CS4 final application

07/14