

Challenge

Issue

The delamination of ceramic tiles clog suction valve and thickener extraction pump, and require unscheduled draining at 12-18 months with associated maintenance costs. Attempted test repairs with rubber linings failed.

Goals

- Eliminate blockage of valve and pump
- Increase shut down cycle to >24 months

Root Cause

Discharge slurry wears grout lines (causing tile delamination) and tears rubber lining at seams.



Thickener discharge cone

Solution

Preparation

- Hydro-blast removal of rubber lining
- Grit blast to Sa 2.5 with 3 mil (75 µm) angular profile

Application

1. Apply **ARC MX1** @ 500-750 mil (12-18 mm)
2. Overcoat with **ARC 855** @ 15-20 mils (375-500 µm)



Application of ARC MX1

Results

Client Reported

- Service life extended to >24 months
- Unscheduled maintenance cost avoidance* \$50,000 per 18 month cycle
- Client specified **ARC MX1** for 16 additional CCD exit cones

*Cost avoidance: *cleanout, rubber lining, downtime*

\$=USD



ARC 855 over coat