

Challenge

Issue

Contamination from aging rubber lining created water quality issues that impacted steam-generation equipment.

Goals

- Eliminate sulfur leaching into water
- Apply barrier coating that is resistant to demineralized water and regeneration chemicals

Root Cause

Aged vulcanized rubber lining leaches sulfur into demineralized water.



Removal of the rubber lining in progress. Blistering of the lining is visible

Solution

Preparation

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

Application

1. Apply **ARC 858** to restore and smooth surface
2. Apply 2 coats of **ARC S4+** @ total DFT 25-30 mils (630-750 µm)



External view of the tank

Results

Client Reported

- After coating, filled vessels require no flush or rinse to remove residual contamination
- In operation, the vessels showed sulfur levels not greater than 1 ppb
- Lining has been in service for >5 years



After proper surface preparation, ARC S4+ was applied in a two-coat system