

Challenge

Issue

Corrosion of exposed metal in ash dewatering bins was weakening the structure.

Goals

To help prevent further metal loss and help to improve lining performance from 1 – 3 year service life to >7 years service life.

Root Cause

Ash/water mix had low pH and high chlorides which accelerated corrosion losses to >60 mils/year.

Solution

Preparation

All surfaces were HP water washed, tested for chlorides, and then grit blasted to Sa 2.5 – 3 cleanliness with 3 – 5 mil profile.

Application

Chesterton® ARC 858 was applied to the heavily pitted regions and weld zones where the corrosion was most severe.

Two successive 10 – 12 mil coats of Chesterton ARC SD4i were applied by brush/roller.

Results

Client Reported

The first two tanks bins were coated in 2019. After the one-year inspection (2020), it was decided to line two additional bins.

The lining still has high gloss in immersed areas and shows little sign of failure after 3+ years.



Severe corrosion inside tank [or] the bin.



Blasted surfaces being repaired with ARC 858.



Second of two coats of ARC SD4i after application.