

Challenge

Issue

Failed coal tar coating resulted in pitting corrosion on face of gate. Corrosion kept gates from actuating and sealing correctly. Leakage down spillway channel creates icing in winter months.

Goals

- Prevent further corrosion to gate
- Promote improved actuating and sealing

Root Cause

- Galvanic corrosion

Solution

Preparation

- Grit blast to Sa 2.5 with 3 mil (75 µm) angular profile

Application

1. Apply **ARC 858** to rebuild pitted areas
2. Top coat with 2 coats of **ARC S2** @ total DFT of 20 mils (500 µm) to provide smooth flow efficient surface

Results

Client Reported

- After 2 years in operation, no signs of corrosion and erosion
- After the ARC solution, the spillway gates opened and closed effectively
- Further icing issues reduced



Corrosion and pitting on the spillway gate



Pitting repaired using ARC 858



Gate top coated with 2 coats of ARC S2