

Challenge

Issue

The previous coating, a 3-layer system, was providing 6 – 8 years of service. As failure progressed, staining and algae growth accelerated on the internals of the tank, which impacted performance and required regular cleaning.

Goals

To increase the life expectancy of the clarifier protective coating systems to 10+ years.

Root Cause

Primary wastewater with corrosive off gases and erosive flows.



Condition of 1st tank coated with ARC 858 and ARC S1PW after 11 years in service.

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 S1PW were applied by airless spray.



ARC S1PW blue being applied over ARC S1PW white.

Results

Client Reported

The first tank coated has now been in service for 11+ years with very few signs of failure. Two additional tanks were coated in 2016 and 2021.

The client feels that the lining has provided 2X the service life over their prior option with little required maintenance.



ARC S1PW can be applied by brush, roller, or spray.