

Sand Filter Vessel

Water & Wastewater — Preliminary Treatment
ARC S1PW Coating
Case Study 131

Challenge

Issue

Exposed aggregate in sand filter was promoting algae growth leading to increased vessel draining and cleaning

Goal

 Seal surface and apply coating to reduce algae growth

Root Cause

Exposed aggregate promotes algae retention

Solution

Preparation

Surfaces grit blasted to CSP3 finish

Application

- Skim coat of cementitious mortar applied to resurface concrete
- Two coats of ARC S1PW applied at 15-20 mil (375-500 μm) in alternating colors

Results

Client Reported

- Vessel has been in continuous service for over 7 years
- Algae cleaning can be easily done with low pressure hoses

Cleaning time reduced from 2-month to 3-year saving over 200 man-hours per year



Drained sand filter vessel



Installing ARC S1PW coating



Sand filter in service

