

## Challenge

### Issue

Original coating limited to shop application only, making field repairs difficult. Lead times required 3-6 weeks for repairs.

### Goals

- Provide potable-water-certified coating that can be field applied
- Reduce lead times associated with shipping pumps off site for repair

### Root Cause

The previous fusion-bonded epoxy coating required preheating to 450°F (220°C).

## Solution

### Preparation

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

### Application

1. Apply two coats **ARC S2** @ 20 mil (500 µm) to pump internals
2. Apply one coat **ARC S1** @ 10 mil (250 µm) to outside surface

\*ARC S2 has WRAS potable cold water approval for UK

## Results

### Client Reported

- **ARC S2** provided not only better erosion protection but also pump efficiency increased a few points compared to FBE
- Repairs are easy to perform on-site or at nearby shop
- Over 200 pumps coated in 4 years with optimum results



Pumps being delivered for coating



Pumps blasted and awaiting coating



Coated pumps with ARC S2 inside and ARC S1 outside with UV resistant top coat