

Digestor Pipe Repair









PROBLEM

A Wastewater Treatment Facility was experiencing significant issues with digestor pipes clogging.

Over time, an 8-inch diameter pipe had become choked down to a 1-inch diameter due to buildup on the pipe walls. This buildup caused back pressure issues and placed a strain on the pumps.

Additionally, the customer was frustrated with the amount of time and labor required to clean the pipes every few months. The pipes were made of ductile iron and lined with concrete.

They contacted the USI Team for an unconventional, long-lasting solution to help the flow stay open for a longer period of time.

SUBSTRATE

Ductile Iron & Lined with Concrete

PRODUCTS USED

Resimetal 203 Super Flow Resimchem 503 SPEP Primer USI Universal Cleaner

SOLUTION

USI Groups devised a plan to address the issue using Resimetal 203 Super Flow with a primer to coat the interior of the pipes.

Resimetal 203 was chosen for its ability to create a surface 10 times smoother than bare steel, which improves fluid flow dynamics. Unlike the original concrete-lined pipes, Resimetal 203 eliminates edges and ridges, reducing the chance for future buildup.

The pipes were dismantled and taken to a facility where they were sandblasted to a profile of 2.5-4.5 mils and cleaned using <u>USI Universal Cleaner</u>. Once dry, a layer of <u>Resichem 503 SPEP primer</u> was applied to the interior of the pipes. As soon as the primer became tacky, one coat of <u>Resimetal 203</u> (red) was applied. After approximately two hours, when the first coat became tacky, a second coat of <u>Resimetal 203</u> (grey) was applied. The pipes were allowed to cure for two full days before being returned to the customer and reinstalled.