

**CASE
STUDY**



**PROJECT
SNAPSHOT**

PROJECT OWNER

Private Beverage Company

CONTRACTOR

Vortex Services

PROBLEM

6300 LF of 6" to 36" process pipe lines were very old and clogging due to scale build-up. Time had weakened the pipes and manholes were beginning to degrade, as well as in need of structural restoration.

SOLUTION

Cured-In-Place Pipe (CIPP) was used for processing piping. GeoKrete® Geopolymer was spray-applied to the corroded manholes.

CIPP Lining and Manhole Restoration At Private Beverage Facility

AGING PROCESS PIPING AND SEWER MANHOLES WERE FAILING AND IN NEED OF STRUCTURAL RESTORATION

**VORTEX
PRODUCTS
USED**



GeoKrete®



United Felts CIPP Liner

THE CHALLENGE

In 2019, a private beverage company was experiencing issues with process piping at its facility. Over the years these lines' quality had deteriorated and become clogged with scale buildup. The company would risk potentially polluting public waterways with process waste if they did not take swift action. Having worked with Vortex Services multiple times in the past, the company selected the Vortex Services crew to rehabilitate these process lines and multiple of the campus' manholes. Along with cleaning and descaling services, the team would line the process piping using cured-in-place pipe (CIPP) and spray-applied geopolymer to restore the faulty manholes.

THE SOLUTION

Beginning in January 2020, the Vortex Services crew first tackled the damaged process lines, which varied from 6"-36" in diameter and together totaled around 6,300 linear feet. When it came time to rehabilitate the large, 36" diameter piping, the team had already set-up a bypass to handle roughly 10 MGD from the facility to the nearest wastewater treatment plant. The team installed the CIPP lining and then cured it using steam and water methods.

Once cured, the CIPP liner functions as a stand alone, pipe-within-a-pipe, while protecting the host pipe from further damage or deterioration.

After cleaning and descaling the facility's 36 manholes (total of 432 vertical feet), the crew spray-applied them with approximately 1" thick lining of Quadex® GeoKrete® geopolymer to restore the manholes to full structural integrity and help protect against corrosion and infiltration. Also involved in this wide-scale project were multiple internal excavations for other plumbing and site restoration work.

THE RESULTS

The Vortex Services squad finished the project on time in July 2020, effectively restoring these essential structures to their highest capacities. Due to the group's quality efforts, the beverage company added change orders to the original contract for additional lining work at the facility.