

Rehabilitation of Carneys Point Primary and Secondary Digesters



Design Data

Owner

Carneys Point
Township Sewerage
Authority, New Jersey

■ **Location**

Carneys Point
Township, New Jersey

■ **Total Project Cost**

\$694,000.00



Professional Consulting, Inc. assisted Carneys Point Township Sewerage Authority in seeking treatment works approval by the Department to upgrade the mixer in the primary anaerobic digester. PCI proposed to replace the two former mixers with one central mixer. The modifications to the treatment plant did not result in a direct discharge to receiving waters or impact the flow quantity or quality.

Treatment of the biosolids that are collected by the primary and secondary clarifiers is by an anaerobic process in one primary and one secondary digester. The primary digester was offline due to the failure of a pressure relief valve installed on the digester cover. As a result of the failed valve, built up pressure caused an uplift of the cover which compromised the airtight seal and dislodged the seat of the two mixers. In preparation for replacing the cover and mixers the digester were drained and cleaned and two existing mixers had been removed.

This project involved the design documentation and specifications to Clean and rehabilitate the interior of two digester tanks, removing all residual sludge, grit, scum, rags, mopheads, struvite and other miscellaneous debris. Wash down the interior walls, ceiling, floor, and internal components of the digesters. PCI oversaw surface preparation, metal repair, and painting of the tanks interior walls, ceiling, floor and internal components. Additionally, there were miscellaneous modifications includes sludge heater and heat exchanger and draft tube mixer rehabilitation.

PCI
Professional Consulting, Inc.

Consulting Engineers