

## Conversion of Two New GCTs to Primary Sludge Fermenters and Installation of a Gas Detection System in New GCT Building, SWRP

**Project Number:** 15-124-3P

**Service Area:** Stickney

**Location:** Stickney WRP

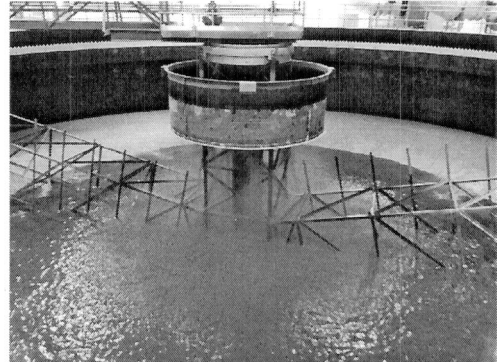
**Engineering Consultant:** In-house design

**General Contractor:** To be determined

**Estimated Construction Cost:** \$3,000,000

**Contract Award Date:** November 2016\*

**Substantial Completion Date:** February 2018\*



**Project Description:** This project will convert two of the new gravity concentration tanks into fermenters and install a pumping station to pump the fermentate directly into the West Side primary effluent conduit feeding the secondary aeration batteries. This project will also install a gas detection system for the new gravity concentration tank building.

**Project Justification:** The District is pursuing an Enhanced Biological Phosphorus Removal (EBPR) at the Stickney WRP for the recovery of phosphorus and meeting a new regulatory limit for phosphorus in the effluent. The fermentation of primary solids will result in an additional production of volatile fatty acids (VFAs) which will be fed directly in secondary treatment. The additional VFAs will be utilized in the EBPR process, resulting in a more stable and better performing process. Additionally, code requirements for an enclosed gravity concentration tank area requires the installation of a combustible gas detection system.

**Project Status:** This project is being designed.

\*Information shown is estimated.