

PISCATAWAY BIOENERGY PROJECT UPDATE

SUMMER 2021 NEWSLETTER



Progress Taking Shape: Sidestream Deammonification Tanks Constructed

The sidestream deammonification tank is the next major concrete structure taking shape on the Piscataway Bio-Energy Project. Deammonification will be a critical component of the bio-energy process and treats ammonia-rich waste before it is returned to the head of the plant for further treatment.

Work on this tank began in January 2021 at the Dutchland's Gap, Pennsylvania facility where crews poured and cured precast panels for the tank. The panels were then trucked to WSSC Water's Piscataway Water Resource Recovery Facility (WRRF) for installation, after the base slabs were placed and cured on site.

Crews have been on site since late April 2021 constructing this tank. Here is a snapshot of their work:

APRIL 2021

Poured three base slabs, each sitting on a different elevation.

JUNE 2021

Began constructing the 89 wall panels that form the tank as well as the 30 additional beams, walkways, roofs and floor panels. Once all panels have been built, large steel tendons will be pulled through the panels and tensioned to ensure structural integrity and watertightness.

AUGUST 2021

The sidestream deammonification tank will be completed and ready for a watertightness test.



What is deammonification?

Deammonification is a nitrogen removal process that treats wastewater that has high levels of ammonia. A growing number of WRRFs are using deammonification because it is a more sustainable energy option. Ammonia is a form of nitrogen and can be introduced to wastewater through stormwater or agricultural runoff. Water quality suffers if ammonia is not removed from wastewater before it is cleaned and returned to a water body.





Since our last update:



Digester structures nearly fully completed



Yard and under-building piping installed



Digester domes cast and walls around roof perimeter are being finished

What's next at the Piscataway WRRF?

- Digester tank water test
- Installation of power and controls wiring in completed ductbanks
- Finish solids building structural walls and roof
- Start interior piping for chemicals and process support
- Start mechanical construction of tank, including piping equipment

PROJECT TIMELINE



PLANNING

Completed June 2018



DESIGN

Completed February 2020



DEMOLITION AND UTILITY RELOCATION

Completed December 2020



CONSTRUCTION

Underway – Began June 2020



TESTING

Summer 2023



COMPLETION

Late 2024

The Piscataway Bioenergy Team

Your WSSC Water Piscataway Bioenergy Team includes PC Construction, Design-Builder, Stantec/Hazen, Lead Engineers, and HDR Engineering, Program Managers.



OWNER
www.wsscwater.com



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