

# PISCATAWAY BIOENERGY PROJECT UPDATE

FALL 2023 NEWSLETTER



## Project Overview



## Start of Commissioning Activity Marks Steps Toward Full Facility Operation

The Piscataway Bioenergy Project has seen a flurry of activity in construction, testing and commissioning the plant. Major construction highlights include the delivery of the second of three 5,000 lb/hr steam boilers, the construction of the Cake Receiving Facility and the completion of the digested sludge storage tank.

The steam boiler arrived at the site in early September. It is part of a trio of boilers that will capture heat from the generators and produce steam to run the thermal hydrolysis process, which is the heart of the project. The boiler was set on a concrete pad and the piping and wiring of the boiler to one of the generators is now complete.

A key component of the Piscataway site is the Cake Receiving Facility, where trucks will deliver biosolids from WSSC Water's four other water resource recovery facilities. The facility consists of two large storage bins, two hoppers that hold the solids as they are transferred from the trucks and several pumps that transfer the biosolids. A pre-engineered metal building encloses

the hoppers to reduce any potential odors caused by dumping the biosolids into the hopper. As trucks approach the building a large door opens allowing the truck to dump material into the hopper. Once the truck is empty, the door closes.

The digested sludge storage tank is a converted 55-foot gravity thickening tank that was no longer needed as a thickener. A cover consisting of 12 steel wedges was assembled, welded and painted on site. The assembled cover was then lifted and placed on the digested sludge storage tank. The tank provides additional storage for sludge before it is sent to the post-dewatering belt filter presses. This additional storage provides plant operators flexibility in managing the overall flow of the plant.

The commissioning team is continuing to examine the equipment to ensure it is properly installed, operates as intended and is correctly programmed. This process will continue throughout the fall and is one of the final steps required to begin operation of the facility.



## Progress Since Last Update (Summer 2023)



Paving around the site



Media installation in the Odor Control System



Completed piping on the generators in preparation for start-up



Filled the Medium Temperature Hot Water loop with glycol



Continued plant operations staff training



Testing and balancing various HVAC systems

Cake Receiving Building



Steam Boilers and Engines



### Upcoming Work

- Continued start-up and commissioning work
- Complete installation of gas odorizer
- Nitrogen purge of digesters in preparation for seeding

### PROJECT TIMELINE



#### PLANNING

Completed June 2018



#### DESIGN

Completed February 2020



#### DEMOLITION AND UTILITY RELOCATION

Completed December 2020



#### CONSTRUCTION

Underway  
Began June 2020



#### TESTING

Spring 2022



#### COMPLETION

Late 2024

## The Piscataway Bioenergy Team

Your WSSC Water Piscataway Bioenergy Team includes:



#### OWNER

[www.wsscwater.com](http://www.wsscwater.com)



#### DESIGN-BUILDER

[www.pcconstruction.com](http://www.pcconstruction.com)



#### LEAD ENGINEER

[www.stantec.com](http://www.stantec.com)  
[www.hazenandsawyer.com](http://www.hazenandsawyer.com)



#### PROGRAM MANAGER

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