

PISCATAWAY BIOENERGY PROJECT UPDATE

SUMMER 2023 NEWSLETTER



Site Progress: July 2023



Steam Boiler Installation on the Horizon

A major project milestone is on the horizon with the installation of the last major pieces of equipment, the steam boilers and the last of the gas upgrading system modules. In June the last two components of the Gas Upgrading system were delivered to the Piscataway Bioenergy Project site, the Compressor House and the Control House. These systems join the hydrogen sulfide and siloxane removal components, heat exchanger, dryer, and chilled water systems already in place. Work is currently underway to complete the interconnection of these system components and terminate all the electrical wiring. The Gas Upgrading system plays a critical role in the overall project by cleaning the methane gas mixture produced within the digesters to ensure it meets Washington Gas standards before it is supplied into its infrastructure.

By the fall the two additional 5,000 pound/hour steam boilers are expected to arrive. They will join the first boiler that was delivered earlier this summer. The team has been working to connect the first boiler to the exhaust from one of the three generator engines. Once each boiler is connected to its paired generator

engine, they will generate steam using exhaust heat and natural gas produced by the site. The steam produced from this Combined Heat and Power (CHP) system will be used to support the Cambi thermal hydrolysis process (THP) as well as heat water through the medium temperature hot water (MTHW) loop to maintain the Sidestream Deammonification process. The generators will also output electricity that will contribute to running the Bioenergy project equipment helping to offset electrical costs to the Plant.

The project team is working diligently to make the transition from major construction completion to functional testing and equipment startup. This has been a collaborative effort between all parties, including the plant operations team, to make sure that each piece of equipment and associated instruments have been properly installed, electrically connected and function as anticipated. This effort will continue for the next several months as we work toward the next major milestone in the project: seeding of the digesters to start the overall biological process.

Progress Since Last Update (Spring 2023)



Completed installation of the UV system



Completed installation of the Digested Sludge Storage Tank Cover



Inflate the Gas Storage Bubble



Set Gas Upgrading Compressor and Control Houses



Set first boiler in place



Demolition of Dewatering Building A



Install piping on the odor control system

Boiler in its Enclosure



CHP, gas upgrading, gas storage and flare



Upcoming Work

- Complete site paving
- Begin Operational Demonstration of the solids dewatering process
- Complete Functional Testing of the entire facility
- Installation of the final two boilers

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



CONSTRUCTION

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