

New York City Department of Environmental Protection
Boiler Energy Assessments

Project Name:

- NYCDEP – Boiler Energy Assessments

Project Address:

- Citywide Wastewater Treatment Plants and CSOs

Project Owner:

- NYCDEP

Owner Representative:

- D&B Engineers and Architects, P.C



Project Description:

As part of rules promulgated by EPA, NYCDEP was required to conduct a one-time energy assessment on all boilers facilities with existing oil, biomass, or coal-fired boilers with a design heat-input capacity of 10 MMBtu/hr or greater. In total, NYCDEP had 8 facilities and 29 boilers that were affected by these rules.

The evaluations focused on visual inspections, operation and maintenance procedures, and capital improvements. Based on the evaluations, Energy Conservation Measures (ECMs) were identified and analyzed for cost and payback periods. Generally, the ECMs identified had short payback periods (less than 15 years) and included Chemical Treatment Systems, Boiler Maintenance, Sludge Heating Controllability, Boiler Controls and Burners, Steam and Condensate Leaks, and Steam Trap Replacement and Maintenance Program. In total, 21 ECMs were identified across 8 facilities with an estimated implementation cost of \$2.25 million dollars and a payback period of 5.9 years.

Project Start:

- May, 2014

Project Completion:

- December, 2014

Estimated Project Cost:

- \$230,000

