

Metropolitan Water Reclamation District of Greater Chicago

Calumet WRP's Goals and Objectives for 2015-2018

Goal – Usage of the Central Boiler Facility for heating digestion

Objective

Use the steam produced at the Central Boiler Facility for heating sludge in the anaerobic digesters.

Description

Currently, the digester facility has individual boilers for each cluster of digesters. Design a project to use steam from the recently constructed Central Boiler Facility to heat the sludge with better fuel economy and replace the aging hot water to sludge heat exchangers.

Measurability

Digester temperature variability, the quantity of natural gas purchased, and the operation and maintenance costs of sludge heating system. Baselines will be established for the following:

Post Construction: Compare measurability factors to baseline.

Affect to Biosolids Production

This system will assist anaerobic digester performance by stabilizing sludge temperatures and reduce operations and maintenance costs of the current sludge heating system.

Relevant EMS Outcomes

Increasing the use of the Central Boiler Facility's co-fired boilers will minimize the use of purchased natural gas for sludge heating.

Action Plan

2015: Begin tracking, on a monthly basis, the measurability factors to establish a baseline for each. Present contract 06-213-3M to the Vetting Panel. Continue cooperating with the Engineering Design division until completion of design of project 06-213-3M.

2016-2018: Complete the project and track measurability factors for a two year period.

Tracking Progress

The project will be vetted in the 3rd quarter of 2015. Once approved the contract schedule target dates will be added to the goal. The Engineering Department will track the progress of the project via CPM's and will provide quarterly reports upon request to the Calumet Plant Operations Manager, Managing Engineer. Track measurability factors on a monthly basis and submit in a quarterly progress report.

<u>Responsible Person(s)</u> Section 831 – Managing Engineer Section 545 – ME4

Funds/Resources

Funds for the project have been budgeted in the Engineering Department.

Target Date 12/31/2018



Metropolitan Water Reclamation District of Greater Chicago

Calumet WRP's Goals and Objectives for 2014-2016

Goal – Utilize All Biogas

<u>Objective</u> Improve Digester Performance.

Description

Determine the most cost effective method to achieve 100% utilization of digester gas.

Measurability

Monthly digester gas production and percentage used, the quantity of natural gas purchased, and the operation and maintenance costs of Central Boiler Facility and comparing data prior and post operation of the digester gas utilization RFP project.

Affect to Biosolids Production

Improve anaerobic digester performance and reduce operations and maintenance cost of the current digestion process.

Relevant EMS Outcomes

Better relations with interested Parties, Environmental Performance, Quality Management Practices.

Action Plan

Accept and review proposals and award of RFP during the first quarter of 2015. Create a baseline for measurability factors.

Tracking Progress

Monthly tracking of digester gas production and utilization for 2013-2015 to create a base-line to reflect future improvement. Create base-line for reducing operations and maintenance costs. Tracking will continue through 2015. Upon award, the Managing Engineer will attend Engineering progress meetings. Provide quarterly status via a Bar Graph for RFP.

Responsible Person(s) Section 831 – Managing Engineer Section 834 - COE1/ACOE

<u>Funds/Resources</u> Funds for the project have been budgeted in the Engineering Department.

Target Date 12/31/2016