Organic Waste Receiving Facility and Digester Gas Flare Upgrade, CWRP

Project Number: 11-240-3P

Service Area: Calumet

Location: Calumet WRP

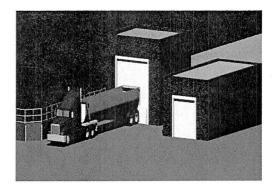
Engineering Consultant: In-house design

General Contractor: To be determined

Estimated Construction Cost: \$10,500,000

Contract Award Date: January 2017*

Substantial Completion Date: June 2018*



<u>Project Description</u>: The overall scope includes repurposing a decommissioned sludge screening building into an organic waste receiving and processing facility. Construction includes a receiving station for unloading two tanker trucks simultaneously, a receiving pit for high strength liquid waste and fats, oils, and greases, screens, transfer pumps, transfer piping, odor control, and site work for handling truck traffic. Due to the increase in digester gas production, two new digester gas flares must be added, and the existing flares in the flare house will be rebuilt.

Project Justification: Biogas, generated as a by-product of the anaerobic digestion process at the Calumet WRP, has value as a fuel. Currently, the biogas is used to produce steam in boilers for plant heating. There are periods of time in the year when the steam demand is low and not all of the biogas is fully utilized. This project will permit the increase in biogas production by approximately 70 percent over the current volume by utilizing excess capacity in the digesters to take in organic waste material from outside sources. All of the biogas produced by plant solids and organic feedstock will then be fully utilized as an energy source, as a step towards energy neutrality. The biogas utilization facilities will be constructed under a separate project. Liquid organic waste will be supplied by a single supply chain manager to provide consistency and certainty of volume. Organic wastes will include high strength liquid waste from industrial sources such as food processing plants, and fats, oils, and greases from grease traps and commercial waste. The liquid organics supply chain manager will be selected under a separate request for proposal process. The receiving station constructed under this project will handle up to 200,000 gallons of liquid organic wastes per day.

Project Status: This project is being designed.

^{*}Information shown is estimated.