

## 19-542-3MR, Central Boiler Facility and Electrical Updates, Hanover Park WRP

Construction Contract 19-542-3MR Central Boiler Facility and Electrical Updates, Hanover Park WRP, is being financed by the Clean Water State Revolving Fund (SRF), SRF Loan No. L172742. The SRF program is administered by the Illinois Environmental Protection Agency and receives a portion of its money to fund these types of projects from the U.S. Environmental Protection Agency. SRF programs operate in each state to provide communities the resources necessary to build, maintain, and improve the infrastructure that protects one of our most valuable resources: water.

**Service Area:** North

**Location:** Hanover Park Water Reclamation Plant, 1200 E. Sycamore Ave., Hanover Park, IL

**Engineering Consultant:** In-house Design

**General Contractor:** IHC Construction Companies, L.L.C.

**Contract Award Amount:** \$13,760,000.00

**Award Date:** November 4, 2021

**Contract Duration:** 1,000 Calendar Days

**Project Description:** This project will remove two natural gas boilers and provide five new boilers (two natural gas and three digester gas/natural gas) boilers in the Pump and Blower Building. Five digester gas/natural gas boilers will be removed from the Digester Complex. All associated mechanical piping, electrical, control, civil and structural work needed to provide hot water for process and building heating demands will be completed. This project will also replace digester gas piping and remove and replace all electrical equipment, such as motor control center, motors, conduit, gas alarm system, fire alarm system, lighting, etc., with explosion proof equipment in the classified areas to meet National Fire Protection Association 820 requirements.

**Project Justification:** This project replaces the boilers in the Digester Complex, which are 10 to 20



years old and do not perform properly, as the control systems are not reliable (due to hydrogen sulfide gas related corrosion) and need to be removed to comply with National Fire Protection Association 820 requirements. Centralized boiler operation will maximize the use of available digester gas. Existing electrical equipment in the Digester Complex does not meet the National Fire Protection Association 820 requirement and needs to be replaced with explosion-proof rated equipment or relocated to unclassified location. The natural gas boilers in the Pump and Blower Building are more than 35 years old, parts are no longer supported by the original equipment manufacturer and procuring the

replacement parts has been increasingly difficult and costly. Also, the State of Illinois Boiler Inspector recommended the boilers be operated in low fire only, due to their poor conditions.