

COMMISSION FILE NO: 19-021-2 **DATE INTRODUCED:** February 11, 2019

INTRODUCED BY: Executive Director (Signature on File in the Office of the Commission)

REFERRED BY COMMISSION CHAIRPERSON TO: Operations Committee

RELATING TO: Award of Contract S04031C04, 18-Inch Digester Gas Pipeline Replacement at South Shore Water Reclamation Facility

SUMMARY:

The Commission is requested to award and to direct the Executive Director to execute on behalf of the District Contract S04031C04, 18-Inch Digester Gas Pipeline Replacement at South Shore Water Reclamation Facility (SSWRF), with J.F. Ahern Co. in an amount of \$403,500. J.F. Ahern Co. was the lowest responsible, responsive bidder and the only bid received.

SSWRF currently operates anaerobic digesters to reduce primary sludge mass and produce digester gas. Digester gas is normally combusted in engine generators and/or boilers to produce electricity and heat for plant consumption. This reduces the District's energy costs, increases the use of digester gas, and contributes to the District's 2035 energy goals.

Part of the digester gas piping system that conveys raw digester gas from digesters includes approximately 550 feet of 18-inch diameter ductile iron pipeline buried 13 to 15 feet underground. The pipeline has been in service approximately 40 years. Over time, moisture from raw digester gas has pooled in the pipeline at locations where it does not drain through the condensate removal system. The minimal or lack of pipeline slope combined with pipeline settlement prevents water from draining. The water buildup has reduced the capacity of the pipeline to convey raw digester gas. Finally, wet conditions within the pipeline can lead to increased corrosion, decreasing the lifespan of the pipeline.

ATTACHMENTS: **BACKGROUND** ☐ **KEY ISSUES** ☐ **RESOLUTION** ☒
FISCAL NOTE ☒ **S/W/MBE** ☒ **OTHER** ☐ _____

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COMMITTEE ACTION: _____ **DATE:** _____

COMMISSION ACTION: _____ **DATE:** _____

SUMMARY (Cont'd)

Award of Contract S04031C04, 18-Inch Digester Gas Pipeline Replacement at South Shore Water Reclamation Facility

The District has been making system improvements to increase digester gas production, including digester mixing improvements and a high strength waste receiving facility. In addition, primary sludge loadings vary and could increase over time, resulting in additional digester gas production.

To assure pipeline capacity is adequate for conveying raw digester gas, staff recommends replacement of the buried 18-inch digester gas pipeline. The replacement pipeline will be high density polyethylene (HDPE), buried seven to 10 feet below grade. The slope of the new pipeline has been increased to ensure adequate drain condensation drainage. The overall scope of the proposed contract consists of constructing a new 500-foot-long, 18-inch HDPE pipeline to replace the existing pipeline.

The contract duration is 300 days.

RESOLUTION

Award of Contract S04031C04, 18-Inch Digester Gas Pipeline Replacement at South Shore Water Reclamation Facility

RESOLVED, by the Milwaukee Metropolitan Sewerage Commission, that Contract S04031C04, 18-Inch Digester Gas Pipeline Replacement at South Shore Water Reclamation Facility, is awarded to J.F. Ahern Co. in the amount of \$403,500, and that the Executive Director is directed to execute a contract on behalf of the District.