



Agenda Report

File #: 2021-1480, **Version:** 1

FROM: James D. Herberg, General Manager
Originator: Kathy Millea, Director of Engineering

SUBJECT:

DIGESTER FERRIC CHLORIDE PIPING REPLACEMENT AT PLANT NO. 1, PROJECT NO. P1-135

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION:

- A. Receive and file Bid Tabulation and Recommendation for Digester Ferric Chloride Piping Replacement at Plant No. 1, Project No. P1-135;
- B. Award a Construction Contract to Performance Plumbing & Mechanical Inc., dba PPM Contracting, for Digester Ferric Chloride Piping Replacement at Plant No. 1 for a total amount not to exceed \$515,000; and
- C. Approve a contingency of \$51,500 (10%).

BACKGROUND

Digester gas produced by digestion of wastewater sludge in anaerobic digesters contains mostly methane and carbon dioxide, but also hydrogen sulfide that must be limited in concentration to comply with South Coast Air Quality Management District permit conditions associated with the Central Generation co-generation facility. These facilities supply approximately two-thirds of the Orange County Sanitation District's (Sanitation District) power requirements.

Ferric chloride is added to anaerobic digesters to reduce the hydrogen sulfide concentration in the digester gas. To do this, small diameter piping is routed through utility tunnels from an existing digester ferric chloride facility to Anaerobic Digesters 7 through 16.

RELEVANT STANDARDS

- Comply with environmental permit requirements
- Comply with California Public Contract Code Section 20103.8, award construction contract to the lowest responsible bidder

PROBLEM

The existing digester ferric chloride piping is failing and has required repairs in numerous locations due to age and partial blockage.

PROPOSED SOLUTION

Award a Construction Contract for Digester Ferric Chloride Piping Replacement at Plant No. 1, Project No. P1-135. This contract will replace the deteriorated digester ferric chloride piping, valves, and appurtenances from the ferric chloride facility to each of the digesters to prevent periodic blockages and provide reliable injection of ferric chloride to digesters.

TIMING CONCERNS

A piping system failure preventing the addition of ferric chloride could result in a permit violation.

RAMIFICATIONS OF NOT TAKING ACTION

Without this project, the risk of pipe failure will continue to increase.

ADDITIONAL INFORMATION

The Sanitation District advertised for bids on October 27, 2020, and six sealed bids were received on December 8, 2020. A summary of the bids follows:

<u>Bidder</u>	<u>Amount of Bid</u>
Engineer's Estimate	\$ 532,000
Performance Plumbing & Mechanical Inc., dba PPM Contracting	\$ 515,000
Innovative Construction Solutions	\$ 540,000
Mehta Mechanical Co., dba MMC Inc.	\$ 584,280
Tharsos Inc.	\$ 595,000
Environmental Construction, Inc.	\$ 598,449
Houalla Enterprises, Ltd. dba Metro Builders & Engineers Group, Ltd.	\$ 771,173

The bids were evaluated in accordance with the Sanitation District policies and procedures. A notice was sent to all the bidders on January 8, 2021 informing them of the intent of the Sanitation District to recommend award of the construction contract to Performance Plumbing & Mechanical Inc., dba PPM Contracting.

Staff recommends awarding a Construction Contract to the lowest responsive bidder, PPM Contracting, for Digester Ferric Chloride Piping Replacement at Plant No.1, Project No. P1-135, for a total amount not to exceed \$515,000.

CEQA

The project is included in the Headworks Rehabilitation at Plant No.1, Project No. P1-105 Mitigated Negative Declaration (MND) State Clearinghouse Number 2019049152. This MND was certified by the Board of Directors and a Notice of Determination was filed on July 25, 2019.

FINANCIAL CONSIDERATIONS

This request complies with authority levels of the Sanitation District's Purchasing Ordinance. This item has been budgeted (Adopted Budget, Fiscal Years 2020-2021 and 2021-22, Section 8, Page 63, Digester Ferric Chloride Piping Replacement at Plant No. 1, Project No. P1-135) and the budget is sufficient for the recommended action.

ATTACHMENT

The following attachment(s) may be viewed on-line at the OC San website (www.ocsan.gov) with the complete agenda package:

- Construction Contract

GR:dm:gc