



**Board Operations and Engineering Committee
November 26, 2019**

SUBJECT:

Approve and Authorize Award of Contract with Hemet Manufacturing Company, Incorporated, dba Genesis Construction (\$869,777) for the Installation of Engineered Media for the Perris Valley Regional Water Reclamation Facility Biofilter Media Replacement Project

BACKGROUND:

The Perris Valley Regional Water Reclamation Facility (PVRWRF) utilizes a biofilter to capture and treat foul odors associated with the water reclamation process. The biofilter has a surface area of nearly 40,000 square feet, can treat up to 105,000 cubic feet per minute of foul air, and is critical for reducing nuisance odors from the facility. The biofilter is currently loaded with organic media (shredded wood) to facilitate the biological process of removing the odor from the air.

The shredded wood media was last replaced in 2016. Since that time, the wood media has degraded from large pieces of shredded wood to a consolidated, decayed material, which is impeding airflow through the filter and resulting in nuisance odors. Staff engaged the services of a consultant to evaluate alternatives to shredded wood media to improve performance and lower overall costs. The consultant identified engineered media as an alternative. The structure of engineered media is not based on organic materials and therefore does not degrade or compact. The lack of degradation and compaction will result in a more consistent airflow and improved performance. Further, engineered media is typically guaranteed for ten years or more, which results in a lower life cycle cost for operating and maintaining the biofilter. Considering the improved and consistent performance of engineered media as well as its lower life-cycle cost, staff recommends converting the biofilter to an engineered media.

In order to expedite the replacement of the media and mitigate odors as quickly as possible, staff brought the media purchase contract to the Board in October 2019. The Board authorized the purchase of the media, which has an approximate lead time of three months, and is currently expected to be delivered in early January 2020. In the meantime, a scope of work was developed to obtain services to remove the old organic media, clean the diffuser layer of the biofilter, and install the new engineered media. The scope of work was advertised to the District's on-call contractors. Two proposals were received from Hemet Manufacturing Company, Incorporated, dba Genesis Construction (Genesis Construction) and Schuler Constructors, Incorporated. As summarized in Exhibit A, the proposal submitted by Genesis Construction (Exhibit B) was the highest-rated and lowest cost proposal.

The current project was included in the 2019/2020 Operating Fixed Assets Budget in an amount of \$2,490,000. The total project cost is estimated at \$2,281,000 (Exhibit C), including

engineered media, removal and installation of media, staff labor, and contingencies. The installation of the media is expected to begin in the middle of January 2020 and be completed by early April 2020.

FINANCIAL IMPACT:

Funding for this item is provided for in the Biennial Budget for Fiscal Years 2019-20 and 2020-21.

STRATEGIC PLANNING GOAL/OBJECTIVE:

Maintenance: Implement and manage preventative and predictive maintenance programs that enable a highly reliable operation of EMWD's facilities and extend the useful life of assets.

ENVIRONMENTAL IMPACT:

None

RECOMMENDATION:

Approve and authorize execution by the General Manager, or his designee, of a contract with Hemet Manufacturing Company, Incorporated, dba Genesis Construction for the engineered media installation at the Perris Valley Regional Water Reclamation Facility in the amount of \$869,777.

SUBMITTED BY:


Paul D. Jones II, P.E., General Manager

11/25/2019


Jeff D. Wall, P.E., Assistant General Manager

11/18/2019

Attachment(s):

Exhibit A - Proposal Summary
Exhibit B - Genesis Construction Proposal
Exhibit C - Cost Estimate
Presentation

12/11/19 Board Meeting

Staff Contact: Matthew Melendrez