



Santa Clara Valley Water District

File No.: 18-0253

Agenda Date: 5/8/2018

Item No.: 3.3.

BOARD AGENDA MEMORANDUM

SUBJECT:

Resolution Authorizing the Chief Executive Officer to Negotiate and Execute a Financial Assistance Planning Grant Agreement with the California State Water Resources Control Board for Reverse Osmosis Concentrate Management.

RECOMMENDATION:

Adopt the Resolution AUTHORIZING THE CHIEF EXECUTIVE OFFICER TO NEGOTIATE AND EXECUTE A FINANCIAL ASSISTANCE PLANNING GRANT AGREEMENT WITH THE CALIFORNIA STATE WATER RESOURCES CONTROL BOARD FOR REVERSE OSMOSIS CONCENTRATE MANAGEMENT.

SUMMARY:

On October 25, 2016, the Board approved Agreement No. A4034G with GHD, Inc. (GHD) for Consultant Services for the Reverse Osmosis Concentrate (ROC) Management Project, Project No. 91101004 (Consultant Agreement). The Project will develop ROC management plans that will provide recommendations for implementation of a county-wide solution to ROC management, taking into consideration the unique characteristics and limitations at potential advanced water purification facilities (AWPFs). The scope of work includes testing of contaminants of emerging concern (CECs) that may be present in ROC, as well as pilot treatment of identified CECs by advanced oxidation processes and engineered treatment cells. The testing and piloting portion of the project will be carried out in partnership with the San Francisco Estuary Institute (SFEI), University of California at Berkeley (UCB), and Stanford University.

A key study component includes the design, installation and operation of above-ground pilot-scale, engineered treatment cells to test the performance of wetland systems and oxidative pretreatment, and to evaluate their cost effectiveness and beneficial use. An important milestone was completed in May 2017 with the construction and subsequent seeding to produce a functioning pilot engineered treatment system. Research to date has included bench-scale studies to assess the dose of oxidants, oxidant efficacy in degrading targeted pollutants, photosynthetic respiration functionality, and algal growth and survival in ROC. Preliminary water quality monitoring of the operating wetland has occurred for a suite of CECs and other ancillary parameters including nutrients, metals, organic contaminants and toxicity.

District staff with assistance from GHD have been evaluating project deliverables, milestones, and

timelines; collaborative research efforts on Engineered Treatment Cells (ETC) with local universities; pilot system and modeling recommendations from regulatory agencies; and opportunities to consolidate and extend project deliverables, tasks and timelines. Staff has also coordinated the pilot study activities with municipal partners, academic researchers, and state and federal regulatory agencies to address their feedback, questions and recommendations for improvement to the ETC pilot. To achieve critical milestones and complete the pilot study efforts, the District is seeking to negotiate and execute Amendment No. 1 to the Consultant Agreement, which is currently pending. This amendment will increase the total not-to-exceed amount of the Consultant Agreement by \$842,000 and extend its term by 12-months to accommodate the time need to conduct further studies.

Since May 2016, staff have been working with the Regional Water Quality Control Board (RWQCB) and the SWRCB on a recycled water financial assistance planning grant that would offset study costs associated with the pilot system's scientific studies. Working in collaboration with the SFEI, Stanford University and UCB, staff have developed and submitted a draft research proposal to extend the pilot testing for an additional year. Since February 2018, staff have been meeting with the RWQCB and the SWRCB to finalize the grant application process. A formal decision on grant funding is expected in the near future, and it is anticipated that up to \$363,000 would be provided through this process. SWRCB staff have informed the District that funding agreements must be completed by July 1, 2018 to receive this funding opportunity.

BOARD RECYCLED WATER COMMITTEE INPUT:

On March 21, 2018 the Recycled Water Committee recommended that the Board of Directors authorize the Chief Executive Officer to negotiate and execute an Amendment and Time Extension to the Consultant Agreement with GHD Inc. to provide \$842,000 for reverse osmosis concentrate management for a new not-to-exceed fee of \$2,308,525.

Additionally, the Recycled Water Committee recommended that the Board of Directors adopt a resolution to authorize the CEO to prepare and submit a grant application to the State Water Resources Control Board to pursue partial funding for the reverse osmosis concentrate management studies.

FINANCIAL IMPACT:

Accepting the state grant will provide revenue potentially up to \$363,000 for planned academic research regarding the efficacy of utilizing engineered treatment wetlands to resolve ROC management issues at future water purification facilities constructed in Santa Clara County. Funds for the research are currently budgeted in Project No. 91101004 Recycled & Purified Water Program.

CEQA:

The recommended action does not constitute a project under CEQA because it does not have a potential for resulting in direct or reasonably foreseeable indirect physical change in the environment.

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ATTACHMENTS:

Attachment 1: Resolution

UNCLASSIFIED MANAGER:

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