RESOLUTION - ACTION REQUESTED 2013-570

MEETING: December 17, 2013

TO: The Board of Supervisors

FROM: Peter Rei, Public Works Director

RE: Approve a Professional Services Agreement with Advanced Reliability Technologies

RECOMMENDATION AND JUSTIFICATION:
Approve a Professional Services Agreement with Advanced Reliability Technologies (ART) LLC for Consulting Services for the Yosemite West Wastewater Treatment Plant in the not-to-exceed of amount of $25,000 and authorize the Public Works Director to sign the Agreement.

Public Works staff have been working diligently to respond to a Notice of Violation (NOV) from the Regional Water Quality Control Board at the Yosemite West Wastewater Treatment Plant (YWWTP). The NOV requires the County to submit various reports, make improvements to the YWWTP and to monitor the performance of the Plant to ensure that the proper treatment of the sewage is actually occurring.

In doing research to resolve the issues with the YWWTP, Public Works staff learned that Advanced Reliability Technologies LLC has assisted several other small cities and counties in Northern California resolve problems with the performance of their wastewater treatment facilities. Staff invited them to visit the site at their expense and provide preliminary recommendations on what they observed.

Following their site visit ART staff spent an entire afternoon reviewing their findings with staff and explaining their opinion of what is causing the performance issues at the YWWTP. Their explanation was very thorough and informative. Based on that discussion Public Works staff believes that ART will be a very valuable in assisting the County in making cost-effective short term and long term improvements on how YWWTP is operated.

In the attached document from ART they believe the root cause of the majority of the performance problems at the YWWTP is due to the lack of healthy and vibrant bacteria in the treatment ponds. When the bacteria are not healthy the treatment of the sewage is not effective. Additionally, when the conditions are not right for bacteria to be healthy, algae blooms often form, which further inhibits effective treatment of the effluent. The quality of the sewage treatment is measured on a regular basis by sampling of the effluent for Total Suspended Solids, Biological Oxygen Demand and pH. It is from these readings that the Water Quality Control Board has cited as evidence that the YWWTP is not operating properly.
ART proposes that the real problem is the purity of the water in Yosemite West. Essentially, the water is so pure that it lacks some of the trace nutrients that bacteria need to survive and provide the sewage treatment. Their proposal is to develop a program to regularly add these needed nutrients to the effluent to stimulate better bacterial health. If the bacteria are better able to survive and flourish, the quality of the sewage treatment should improve and the sampling for Total Suspended Solids, Biological Oxygen Demand and pH should improve as well resulting in compliance with the Regional Water Quality Control Board requirements.

Public Works staff intend to utilize ART to not only assist in diagnosing and improving the immediate performance of the YWWTP, but to additionally coordinate with the County’s consultant engineers at Provost and Pritchard so that both the engineering and biological aspects of the YWWTP performance are considered in the upcoming improvements to the system. By combining these two perspectives the costs of needed improvements and the future cost of ongoing operations and maintenance may be able to be reduced.

Finally, Public Works staff also intends to utilize ART to prepare detailed operating manuals and maintenance plans for the YWWTP which will greatly assist staff in operating the Plant and keeping it compliant with all State regulations. They will be available for phone consultation to assist staff in the troubleshooting and resolution of any observed operational concerns.

BACKGROUND AND HISTORY OF BOARD ACTIONS:

ALTERNATIVES AND CONSEQUENCES OF NEGATIVE ACTION:
The Board could choose not to approve the Agreement. The result of this action would be to inhibit the ability to comply with Regional Water Quality Control Board mandated improvements unless another consultant is identified.

FINANCIAL IMPACT:
Funding is available in the Yosemite West Maintenance District Sewer budget 322-091-863-0418 (Professional Services)

ATTACHMENTS:
Advanced Reliability Technologies LLC, Agreement (PDF)

CAO RECOMMENDATION
Requested Action Recommended

[Signature]
Rick Benson, County Administrator
RESULT: ADOPTED [UNANIMOUS]
MOVER: Kevin Cann, District IV Supervisor
SECONDER: John Carrier, District V Supervisor
AYES: Lee Stetson, Janet Bibby, Kevin Cann, John Carrier
EXCUSED: Merlin Jones