



# Memorandum

## MONTEREY REGIONAL WASTE MANAGEMENT DISTRICT

Reviewed by: [Signature]  
General Manager

Date: 9/15/17

DATE: September 15, 2017  
 TO: General Manager  
 FROM: Director of Engineering & Compliance  
 SUBJECT: Scope of Work with Golder Associates for Gas Collection and Control System Operation & Maintenance Field Services

**RECOMMENDATION:** That the Board of Directors authorize scope of work with Golder Associates for Gas Collection and Control System Operation & Maintenance Field Services, on a Time and Materials Basis, at a Cost Not to Exceed \$75,000.

### BACKGROUND

The Monterey Peninsula Landfill (MPL) has a gas collection and control system (GCCS) that collects landfill gas (LFG) from the landfill and conveys it to the District's gas plant where it is combusted in LFG engines and the enclosed flare to destruct harmful constituents and mitigate emissions in compliance with air quality requirements. Both vertical and horizontal wells constructed in the landfill waste mass are used to collect the LFG. Each well has a control device, called a "wellhead", that is used to control how much vacuum is applied to the well by the LFG blower system. The amount of vacuum applied to a well affects both the volume of LFG collected and the flow rate of the LFG. The wells are monitored on a weekly to monthly basis to record the operational performance of the well at that time. The well monitoring data is used to tune the well and balance the wellfield. District staff from the Site Maintenance team typically perform the well monitoring on a monthly basis. From time to time, Golder Associates has assisted the District in reviewing the monitoring data and tuning of the wellfield.

### DISCUSSION

District staff has assessed the GCCS Operations and Maintenance (O&M) activities and has determined that improvements are needed to achieve the best management standard of practice desired by the District. As the landfill and wellfield continue to grow, and with the considerable increase in the magnitude of business activity in the landfill and onsite, the availability of staff to perform timely and more frequent well field monitoring has decreased. Additionally, the staff has not been formally trained in the breadth of responsibilities and practical theory associated with wellfield tuning and balancing.

Staff is pursuing a strategic realignment to associate the care and maintenance of the GCCS with the LFGTE Plant staff who utilize the LFG in the engine-generators and enclosed flare. The current recruitment of a senior technician in the LFGTE plant is seeking candidates with GCCS O&M experience, in addition to engine-generator experience, as it is included in the technician's job description. The senior technician is a higher skilled position that aligns with both the experience and skill needs of a GCCS O&M technician.

Staff solicited Golder Associates and SCS Engineers to provide proposals for the GCCS O&M services. Golder Associates provided the lowest cost for the scope of services. Staff recommends that Golder Associates be retained on an interim basis for the next six to eight months to provide the GCCS O&M services needed in the landfill and to assist in the field training and development of the senior technicians.

Staff envisions that SCS Engineers will assist on the formal classroom training of the theory and analytical practice of wellfield tuning and balancing. For the Board's awareness, both Golder Associates and SCS Engineers have historically been retained by the District to assist in Air Permit monitoring, reporting, compliance support, and permitting services. It is a common strategic decision in the solid waste industry to maintain the services of two qualified firms as it derives unique benefits not always attain from a single service provider.

### SCHEDULE

Golder Associates would commence their activities within 30-days following receipt of the signed contract from the District. Staff anticipates that Golder Associates would be retained for a period of six to eight months for the GCCS O&M services to complete training of District staff.

### FINANCIAL IMPACT

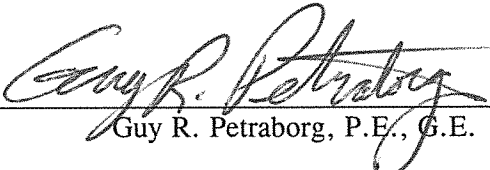
The \$75,000 cost for GCCS Operation & Maintenance Field Services will be expensed in FY 2017/18. The expense will be assigned to the approved budget item of "Professional Services" that was budgeted at \$75,000 for these services.

### STRATEGIC PLAN

GCCS O&M is crucial for the protection of Public Health, the Environment, and for compliant operations in accordance with State and Federal regulations defined in the District's permits (People, Community, and Environment pillars). It prevents LFG migration from the landfill which is the leading cause of ground water contamination in arid and semi-arid environments. It also maintains a healthy biological process of waste decomposition which is important to the health of the landfill and the quality of the LFG that is relied upon to produce renewable energy in the District's LFGTE Plant (Finance pillar).

### CONCLUSION

Staff recommends that the Board of Directors authorize scope of work with Golder Associates for Gas Collection and Control System Operation & Maintenance Field Services, on a Time and Materials Basis, at a Cost Not to Exceed \$75,000.

  
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Guy R. Petraborg, P.E., G.E.