



Memorandum

MONTEREY REGIONAL WASTE MANAGEMENT DISTRICT

Reviewed by [Signature] Date 12/10/09
General Manager

DATE: December 11, 2009
TO: General Manager
FROM: Information Systems Manager
SUBJECT: Authorize Purchase of Siemens Continuous Methane (Landfill Gas) Monitoring Unit

RECOMMENDATION: That the Board authorize the purchase of a Siemens Continuous Methane (Landfill Gas) Monitoring Unit at a cost not to exceed \$50,000. This is an unanticipated, but necessary purchase. Funds are available in the Miscellaneous Equipment portion under the Capital Outlay section of the budget.

DISCUSSION

Currently the District measures the methane content of its landfill gas at the gas skid every weekday morning using a portable measuring device. The measurements are manually recorded to a daily log before being entered into a spreadsheet. This process is time consuming and prone to errors. The device is expensive to maintain and requires frequent calibrations. It is best used in the field at the landfill gas wells and for measuring for the presence of gas in confined spaces before access.

In November the District's Landfill Gas (LFG) to Energy Project became listed with the Climate Action Reserve (CAR). A major factor in determining carbon emission reductions is the percentage of the methane (CH₄) in the landfill gas being captured and destroyed. CAR permits landfills to use portable devices such as the District uses, but discounts 10% of the emissions calculated to account for errors. Installing a continuous monitoring unit eliminates the discount and potentially earns the District an additional \$70,000 over three years of CAR participation. This revenue will more than pay for the unit.

District staff has had discussions with consultants Golder Associates, SCS Engineers, and TerraPass along with several landfill power plant operators. While there are a number of continuous methane monitoring devices available, the consensus recommendation is to purchase the Siemens Ultramat 23 model. The unit requires less maintenance than the portable units and the data will be fed directly to a computer database.

Staff is still working with the Siemens representatives on the final configuration of the unit before receiving a purchase quote. However, the unit's cost will not exceed the \$50,000 staff is requesting in authorization. Staff hopes to have the quote available on the day of the Board meeting.

This unit is not specified in the budget documents, funds in the amount of \$50,000 are available in the Miscellaneous Equipment portion of the budget under the Capital Outlay section.

[Signature]
Don Prescott