



Memorandum

MONTEREY REGIONAL WASTE MANAGEMENT DISTRICT

Reviewed by: [Signature]

General Manager

Date: 5.14.10

Date: May 14, 2010

To: General Manager

From: Site Manager

Subject: Purchase of Olympus IFLEX FX Videoscope (Borescope) for Use at the Landfill Gas to Energy Facility

RECOMMENDATION: That the Board of Directors approve the purchase of a landfill gas engine diagnostic instrument, an IFLEX FX Videoscope from Olympus NDT Inc., of Houston, Texas, for a total purchase price of \$41,135, including tax and freight. Funds for this purchase in the amount of \$40,000 were included in the Capital Outlay portion of the fiscal year (FY) 2009/10 budget.

BACKGROUND

The Landfill Gas (LFG) to Energy facility consists of four internal combustion engines that burn LFG to produce the electricity that the District uses onsite and sells. LFG is not as "clean" as natural gas and deposits build up on the internal components of the engines, such as the cylinders and cylinder heads, causing them to run less efficiently and with higher emissions. The engines operate 24 hours a day, 7 days a week, resulting in District staff having to inspect the internal components of these engines on a routine schedule.

DISCUSSION

The videoscope provides the ability to inspect the internal components of the engine while they are still "hot" and visually records and documents changes in the build up of contaminants on the cylinders and heads. The videoscope also provides the ability to inspect areas of the engine that routinely require dismantling, thus reducing down time and costs by allowing staff to locate and focus on problem areas as opposed to dismantling the entire engine. These inspections will provide staff with the information to schedule maintenance before failures and provide more accurate analysis for budget purposes, while maximizing profits from power sales.

When they are conducting on-site maintenance, District staff and contractors currently rent vidoscopes (when they are available) at a rental cost of approximately \$1,500. Various models have been utilized and the Olympus model allows for the most thorough inspections and documentation of changes. The difference between this model and other alternative models are as follows:

- The IFLEX can operate at higher operating temperatures which allows for the unit to be inserted without having to wait as long for the internal core temperature to cool.
- Its construction, (designed to a military application) is designed to work under more rigorous environmental conditions such as heat, dust, and moisture.
- It utilizes a patented, three-dimensional, defect measurement technology that allows for the most accurate imaging at any angle for a complete evaluation.

Staff estimates utilizing this instrument approximately sixty times a year and feels that having this tool will expedite inspections, limit engine down time, and reduce costs and air emissions at the LFG facility. The videoscope can also be utilized by District fleet maintenance staff.

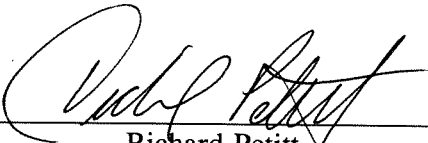
Staff evaluated other types of imaging tools from other companies such as General Electric, Snap-on, and Ferguson. Some of these models are less expensive than the IFLEX unit, but none of these other units had the complete application requirements the IFLEX has that staff believes will both improve our maintenance protocols (which are anticipated to provide long-term cost savings) and enhance our monitoring processes for environmental compliance purposes. While District staff carefully evaluated the lower cost of the other types of imaging equipment, on balance staffs opinion is that the product specific enhancements the IFLEX system offers far outweigh the cost-savings from the lesser imaging product types. Because of its unique construction, reliability, durability, and operating enhancements, staff has concluded that purchase of the IFLEX instrument would be in the best interest of the District and that competitive bidding would not produce an advantage to the public and would therefore not be in the public interest.

BUDGET

The Capital Outlay Budget for FY 2009/10 allocated \$40,000 for the purchase of a videoscope for use in the LFG facility. The additional \$1,135 for the purchase of the videoscope will come from other savings in the Capital Outlay portion of the budget.

CONCLUSION

Staff believes that purchase of this videoscope will allow for more efficient maintenance of the LFG engines and therefore requests that the Board of Directors approve the purchase of a landfill gas engine diagnostic instrument, an IFLEX FX Videoscope from Olympus NDT Inc., of Houston, Texas, for a total purchase price of \$41,135.


Richard Petitt