

BOARD MEETING DATE: March 4, 2016

AGENDA NO. 11

**PROPOSAL:** Transfer and Appropriate Funds and Issue Purchase Order for Field Monitoring Equipment

**SYNOPSIS:** This action is to transfer and appropriate funding to Engineering & Compliance's FY 2015-16 Budget and to issue a purchase order for purchase of an infrared camera for monitoring and recording of hydrocarbon emissions from various processes, including but not limited to, refineries, oil and gas field production and storage sites and other petroleum related operations.

**COMMITTEE:** Administrative, February 12, 2016; Recommended for Approval

**RECOMMENDED ACTIONS:**

1. Transfer and appropriate funding of \$17,000 to the Engineering and Compliance FY 2015-16 Budget, Capital Outlays Major Object, and \$133,000 to Services and Supplies Major Object, Training Account from the AES Settlement Projects Fund (35).
2. Authorize the Procurement Manager to issue a purchase order to FLIR Commercial Systems for a GF320 FLIR camera for a not-to-exceed amount of \$150,000.

Barry R. Wallerstein, D.Env.  
Executive Officer

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**Background**

The SCAQMD Engineering and Compliance staff currently utilizes various field monitoring equipment to enhance their field inspection and better identify sources of emissions and types of emissions. One of the monitoring equipment used is an infrared camera.

SCAQMD currently utilizes a Forward Looking Infrared (FLIR) camera for the purposes of visually detecting leaks and fugitive hydrocarbon emissions which are not visible to the naked eye from various emission sources. The FLIR camera is an invaluable asset for compliance staff to locate leaks and fugitive emissions utilizing the

gas detection, imaging and recording features of the camera. The agency's current FLIR camera is a ThermoCAM™ and was obtained as part of a 10-year equipment lease agreement set forth in 2006 with Shell Oil Products. The current camera was modified in 2009 to be upgraded to meet the specifications of GasFindIR™ HSX. However, the lease agreement with Shell Oil will expire this year. Additionally, due to technological advancements, the newer models are smaller and lighter, and have more features.

A FLIR Camera is essential for field inspections because of the following features and benefits:

1. The FLIR camera utilizes proprietary telephoto lenses, infrared technology and thermal imaging to visually capture hydrocarbon emissions from oil refineries, oil and gas production and storage facilities, gasoline dispensing facilities and other petroleum sources as well as municipal landfills.
2. The newer FLIR cameras are portable and require minimal maintenance.
3. With the use of the FLIR camera, fugitive emissions are viewed in real time and can be recorded in the camera for easy archiving.
4. It is a quick non-contact measuring instrument and can be used in hard to access locations and also from a safe distance.
5. Using the camera saves inspection time using the camera as the inspector can identify areas that do not have any leaks or fugitive emissions from further action.

The Vendor offers and the SCAQMD has considered two different options (lease or purchase) for procuring the camera.

**Lease Option** - There is an option to lease/rent the camera from FLIR Commercial System and the costs associated are listed below:

<b>Equipment</b>	<b>Quantity</b>	<b>Estimated Cost</b>
Lease cost	<b>1</b>	
Twelve months @\$13,950/month (credit of half the rental amount is applied to the purchase of a new camera)		\$167,400 (Credit towards Purchase = \$83,700)
Twenty-four months @\$13,950/month (credit of half the rental amount is applied to the purchase of a new camera)		\$334,800 (Credit towards Purchase = \$167,400)
Training		\$17,000
Total Cost for 1-2 Years Lease		\$184,400 - \$351,800

**Purchase Option** – The purchase option is evaluated based on a straight purchase or an initial leasing of 1-2 years and then purchasing the camera.

<b>Equipment</b>	<b>Quantity</b>	<b>Estimated Cost</b>
Purchase cost, training, and warranty	<b>1</b>	\$150,000
Purchase cost after 1-2 years of leasing (credit of half the lease rental amount is applied to the purchase of a new camera)		\$223,800 - \$307,500

**Recommended Option** – Based on the above cost comparison for leasing vs. straight purchasing, or purchasing after 1-2 years of leasing, a straight purchase is most cost effective.

**Sole Source Justification**

The SCAQMD Procurement Policy and Procedure, Section VIII (B.2) provides for waiver of formal bidding procedures under certain circumstances based upon documentation justifying a sole-source award.

Specifically, due to the urgent need to deploy this camera to identify and monitor leaks of natural gas at the Southern California Gas Company’s Aliso Canyon underground natural gas storage facility, it is necessary that the procurement process be expedited in acquiring the GF320 Camera. Additionally, the GF320 is the only system that meets all of our application requirements for ease of use and seamless integration into our existing program. The GF320 model can detect the following gases at the minimum detected leak rates (MDLR) shown below:

<b>Compound</b>	<b>MDLR</b>		<b>Compound</b>	<b>MDLR</b>
Methane	0.8 gram/hr		Benzene	3.5 gram/hr
Butane	0.4 gram/hr		Ethane	0.6 gram/hr
Ethanol	0.7 gram/hr		Ethylbenzene	1.5 gram/hr
Ethylene	4.4 gram/hr		Heptane	1.8 gram/hr
Hexane	1.7 gram/hr		Isoprene	8.1 gram/hr
MEK	3.5 gram/hr		1-Pentene	5.6 gram/hr
Methanol	3.8 gram/hr		MIBK	2.1 gram/hr
Octane	1.2 gram/hr		Pentane	3.0 gram/hr

**Proposal**

SCAQMD staff seeks the approval of the Board to authorize the use of the AES Settlement Projects Fund (35) to purchase the following:

<b>Equipment</b>	<b>Quantity</b>	<b>Estimated Cost</b>
Purchase cost FLIR Model GF320 Camera with extended warranty and onsite training and certification	1	\$150,000
	<b>Total</b>	\$150,000

**Resource Impacts**

The amount of \$150,000 will be transferred from the AES Settlement Projects Fund (35), and appropriated to the Engineering & Compliance FY 2015-16 Budget.