

BOARD MEETING DATE: October 6, 2017

AGENDA NO. 13

**PROPOSAL:** Authorize Purchase of Toxic Vapor Analyzers and Remove Various Fixed Assets from SCAQMD Inventory

**SYNOPSIS:** Toxic Vapor Analyzers (TVAs) are routinely used by SCAQMD compliance staff to monitor for hydrocarbons and verify compliance at refineries, landfills, oil/gas operations and to investigate complaints, where appropriate. The SCAQMD's current inventory of 26 TVAs dates back as early as 2002. Eight of these TVAs are in a state of disrepair and the remaining units are in use by field compliance staff and will only be supported by the manufacturer, Thermo Environmental Instruments, for another year. Funding for the purchase of eight new units is available in the FY 2017-18 Budget. Thermo Environmental Instruments has offered an \$8,000 trade-in allowance for the agency's existing eight inoperable TVAs, which would be applied towards the purchase of new TVA units. This action seeks approval for the sole source purchase of eight TVAs from Thermo Environmental Instruments and to authorize the removal of eight existing TVA units from the SCAQMD inventory. The TVA units will be surrendered to the manufacturer at the time of purchase.

**COMMITTEE:** Administrative, September 8, 2017; Recommended for Approval

**RECOMMENDED ACTIONS:**

1. Authorize the Procurement Manager to issue a sole source purchase order to Thermo Environmental Instruments in an amount not to exceed \$161,000 for the purchase of eight Toxic Vapor Analyzers Model 2020; and
2. Authorize the removal of existing inoperable fixed assets (TVA 1000B), as listed in Table 1, from the SCAQMD inventory and surrender to Thermo Environmental Instruments for an \$8,000 credit which is included in the \$161,000 purchase price of the new TVAs.

Wayne Nastri  
Executive Officer

## **Background**

A Toxic Vapor Analyzer (TVA) is a portable surface gas detection instrument used to monitor hydrocarbon gases during routine inspections and complaint investigations. SCAQMD field staff have employed TVAs since the late 1980s to verify compliance at approximately 80 active landfills, 700 inactive landfill sites, approximately 350 petroleum oil and gas facilities, approximately 80 bulk loading facilities, 7 off shore drilling platforms and 8 petroleum refineries. Additionally the TVA is used to monitor for volatile organic compound (VOC) contamination in soils. The SCAQMD receives approximately 2,000 notifications related to VOC soils (Rule 1166) annually. The TVA is used by SCAQMD compliance staff to verify compliance with the following rules:

- Rule 462 - Organic Liquid Loading
- Rule 463 - Organic Liquid Storage
- Rule 1148.1 - Oil and Gas Production Wells
- Rule 1150.1 - Control of Gaseous Emissions from Municipal Solid Waste Landfills
- Rule 1150.2 - Control of Gaseous Emissions From Inactive Landfills
- Rule 1166 - Volatile Organic Compounds Emissions from Decontamination of Soil
- Rule 1173 - Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants
- Rule 1176 - Sumps and Wastewater Separators
- Rule 1178 - Further Reductions of VOC Emissions from Storage Tanks at Petroleum Facilities

The SCAQMD's Compliance and Enforcement division currently has a total of 26 TVAs in inventory, all of which were manufactured by Thermo Scientific Instruments and date back to 2002. Eight of these TVAs are in a state of disrepair, which often hinders staff's ability to make timely compliance determinations because the remaining units are routinely shared by field compliance staff. This number is further reduced as units are routinely returned to the manufacturer for servicing and repair due to their age.

Thermo Scientific Instruments has announced that, within a year's time, the company will discontinue support (replacement parts and repair services) of the TVA 1000B, the unit currently in use by the SCAQMD. This prompted staff to include the purchase of 8 new TVAs as part of the approved FY 2017-18 Budget, with the plan of replacing all 26 units over the next three fiscal years.

## Proposal

Staff is seeking approval to purchase the newest model offered by Thermo Environmental Instruments (TVA 2020), which incorporates both Flame Ionization Detector (FID) and Photo Ionization Detector (PID) technology and is currently used by both CARB and U.S. EPA. The new TVAs include global positioning system (GPS) technology to pinpoint each sample location, which is necessary to comply with 40 CFR Part 60 requirements for sampling at landfills.

For each new TVA 2020 purchased, Thermo Scientific Instruments will provide the SCAQMD with a \$1,000 trade-in allowance for each existing TVA 1000B surrendered to the manufacturer at the time of purchase. The \$161,000 TVA purchase order will reflect an \$8,000 reduction in the total purchase price.

The current TVAs are listed as fixed assets, and thus require Board approval in order to remove the units from the SCAQMD inventory and appropriately dispose of this equipment.

Staff is requesting Board approval to retire the TVAs listed in Table 1 below, and to surrender these units to Thermo Scientific Instruments for which the SCAQMD would receive a total \$8,000 credit on the purchase of 8 new TVA 2020 units.

**Table 1**

Asset ID	Tag#	Description	Cost	Date Purchased	Net Book Value *	Disposition
00003049	0016500	Analyzer, Toxic Vapor, TVA1000B	\$7,985.00	03/21/02	0.00	Non-Operational
00003050	0016501	Analyzer, Toxic Vapor, TVA1000B	\$7,985.00	03/21/02	0.00	Non-Operational
000000003759	0016643	Analyzer, Toxic Vapor, TVA1000B	\$8,928.55	06/28/06	0.00	Non-Operational
000000003760	0016644	Analyzer, Toxic Vapor, TVA1000B	\$8,928.55	06/28/06	0.00	Non-Operational
000000003761	0016645	Analyzer, Toxic Vapor, TVA1000B	\$8,928.55	06/28/06	0.00	Non-Operational
000000003902	0016688	Analyzer, Toxic Vapor, TVA1000B	\$9,388.82	09/25/07	0.00	Non-Operational
000000003903	0016689	Analyzer, Toxic Vapor, TVA1000B	\$9,388.82	09/25/07	0.00	Non-Operational
000000003913	0016692	Analyzer, Toxic Vapor, TVA1000B	\$9,389.86	12/04/07	0.00	Non-Operational
Total Obsolete or Non-repairable Equipment			<b>\$70,923.15</b>		0.00	

\* Net Book Value represents historical cost reduced by estimated depreciation. It is expected that these units will be surrendered for a purchase credit.

## Sole Source Justification

A sole source award is authorized under Section VIII.B.2.c(1) of the Procurement Policy and Procedure when the item is available from one source due to the unique experience and capabilities of the proposed contractor. Thermo Environmental Instruments is the sales arm of Thermo Fischer Scientific, the manufacturer of the TVA 2020. The SCAQMD has used instruments manufactured by Thermo Fischer Scientific since the late 1990s. The TVA 2020 has been recommended by the California Air

Pollution Control Officers Association (CAPCOA) and CARB for use at landfills and is currently in use by CARB and U.S. EPA. SCAQMD staff have been unable to identify another similar product equipped with GPS, which is required by U.S. EPA for landfill monitoring or which is equipped with both FID and PID capability in the same unit. Additionally, Thermo Environmental Instruments is providing an \$8,000 trade-in allowance. Based on the information provided above, staff believes the TVA 2020 to be a unique product that is only available from a single source.

**Resource Impacts**

Funding for this purchase was approved as part of the FY 2017-18 Budget.