



*AFFILIATED AGENCIES*

*Orange County  
Transit District*

*Local Transportation  
Authority*

*Service Authority for  
Freeway Emergencies*

*Consolidated Transportation  
Service Agency*

*Congestion Management  
Agency*

*Service Authority for  
Abandoned Vehicles*

January 22, 2014

**Matt MacKenzie**  
**SCAQMD**  
**21865 East Copley Drive**  
**Diamond Bar, CA 91765**

**Subject: Fiscal Year 2012 #MS12059 Final Report**

Enclosed is the Fiscal Year 2012 Mobile Source Air Pollution Reduction Committee Contract #MS12059 Final Report.

If you have any questions or comments about this report, please feel free to contact me at (714) 560-5940, or by email at [jgarbowski@octa.net](mailto:jgarbowski@octa.net).

Sincerely,

John Garbowski  
Associate Financial Analyst  
Orange County Transportation Authority  
550 South Main Street  
Orange, CA 92863-1584

**Final Report**  
**Contract #MS12059**  
**Methane Detection Facility Upgrades**  
**Orange County Transportation Authority**  
**January 22, 2014**

“Prepared for the Mobile Source Air Pollution Review Committee (MSRC) under the AB 2766 Discretionary Fund Work Program.”

“The statement and conclusions in this report are those of the contractor and not necessarily those of the Mobile Source Air Pollution Reduction Review Committee (MSRC) or the South Coast Air Quality Management District (SCAQMD). The mention of commercial products, their sources or their uses in connection with material reported is not to be construed as either an actual or implied endorsement of such products.”



January 2, 2014

Project Manager Jim Kramer with the OCTA (Orange County Transportation Authority) certifies that the methane gas detection systems have been installed and are operational at the Anaheim Maintenance & Operations Base, located at 1717 E. Via Burton, Anaheim, California, 92806, and the Garden Grove Maintenance & Operations Base, located at 11790 Cardinal Circle, Garden Grove, California, 92643.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jim Kramer', written in a cursive style.

Jim Kramer  
Project Manager  
Orange County Transportation Authority  
550 South Main Street  
Orange, CA 92863-1584

**ORANGE COUNTY TRANSPORTATION AUTHORITY  
CONTRACT #MS12059  
Methane Detection  
FINAL REPORT**

**Project Description & Work Performed:** Replacement of existing methane gas detection equipment with new state of the art gas detection equipment at Anaheim and Garden Grove Bases.

**Detailed discussion of the results and conclusions of the project:**  
The existing equipment was generating numerous false alarms at the bus Bases. The contractor replaced the existing gas detection sensors and new main controller equipment to provide paging and remote viewing capabilities. All equipment installation was inspected, tested, and is operational as designed.

**Any media/outreach materials and news clippings generated by the project:**  
None

**Barriers encountered and solutions developed to overcome barriers:**  
None

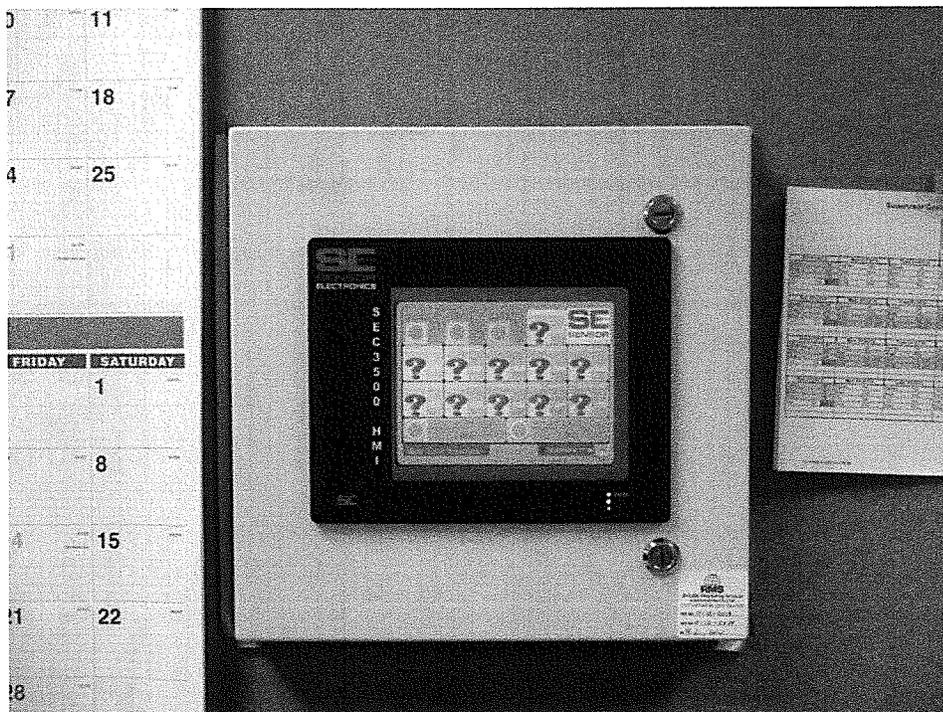
**Impact to near and long term related to project:**  
A reliable system that monitors the air for methane gas from leaking natural gas bus fueling systems.

**Summary and Conclusions:**  
The old, outdated methane gas detection system was replaced with a state of the art methane gas detection system that can be monitored from any computer within OCTA's network and is providing continuous air sampling for explosive levels of methane gas. The new system is working, as designed, without any false alarms. This upgrade results in increased productivity of the maintenance work force.

Anaheim – Ceiling Sensor



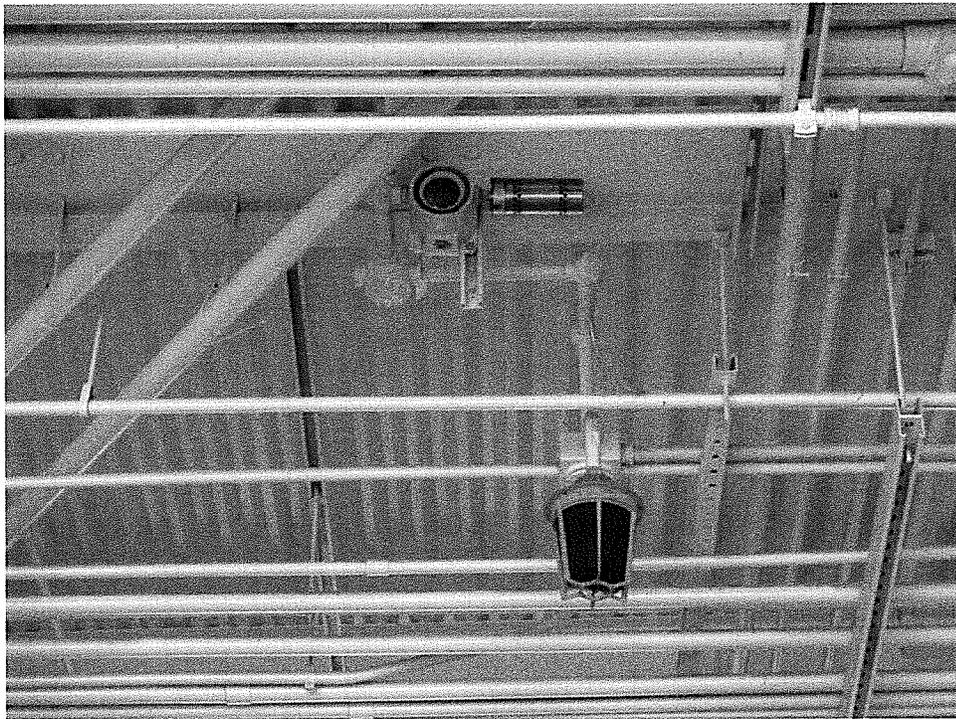
Anaheim – HMI Panel



Anaheim - Warning Lights



Garden Grove Base - High Methane Sensor and Indicator



Garden Grove Base – HMI Panel

