



FINAL REPORT FOR AB 2766 DISCRETIONARY FUND

CONTRACT ML 18085

CITY OF ORANGE

May 20, 2020

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

Acknowledgements

The City of Orange would like to thank the following entities:

Clean Transportation Funding from MSRC

MSRC Staff for their assistance answering questions and providing grant procedures

South Coast Air Quality Management District

City of Orange Public Works Department

Maintenance and Fleet Divisions

MEMA Municipal Equipment Maintenance Association

Government Fleet Magazine

This report was submitted in partial fulfillment of ML 18085 and Cummins ISX-12N CNG Near Zero Emission Engine Trucks by the City of Orange under partial sponsorship of the Mobile Source Air Pollution Reduction Review Committee (MSRC). Work was completed on June 13, 2019.

Disclaimer

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.

Project Description & Work Performed

The City of Orange is replacing existing City vehicles with ultra-low or zero emission vehicles. At a minimum, new City vehicles shall be low emission vehicles as defined by the California Air Resource Board with vehicle types that are currently available in the marketplace. The scope of work included the purchase two on-road, heavy-duty near-zero emission

Unit / Department	Vehicle	Model Year	Delivered	Vendor	PO#	PO Date	Inv #	Inv Date	In Service Date
1802 - Water Division	10 Wheel CNG Power Dump Truck	2018	6/11/2019	Los Angeles Freightliner	110322	5/9/2018	W55358	6/10/2016	6/13/2019
1797 - DPW Sanitation	Class 8 CNG VacCon Sewer Cleaning	2020	3/4/2020	Atlantic Machinery Inc.	110798	7/1/2019	92867	3/3/2020	3/13/2020



The second project is the purchase of a VacCon CNG Sewer Cleaning Combo Truck was ordered on August 8, 2018 with an estimated delivery date of January 2020. This vehicle was received March 3, 2020 and placed in service after operator training was complete on 5/13/2020.



Problems Encountered

- Bridge Law Compliance required a design change to move weight off the front Axle
- Body Warranty issues on tank was resolved (lifetime)
- Locations for additional safety equipment (i.e. warning cone holders and tool boxes)

Note: All three of the above problems were solved.

Emissions Benefits

The City of Orange's commitment to reducing its carbon footprint as well as fiscally healthy community by protecting air, water and energy resources from pollution and overuse.

Photographs & Outreach

The outreach plan was put on the City of Orange's Public Facebook page.



A Greener Fleet

The City of Orange is always looking for ways to be environmentally responsible while still being good stewards of the public's tax dollars. In a City that encompasses over 25 square miles, the vehicles used by our City workers rack-up a lot of use. Recently, when we needed to replace some of them, we turned to alternative energy vehicles as a way to reduce our energy usage and carbon footprint.

Three all-electric Chevy Bolts have replaced traditional internal combustion vehicles in the Public Works fleet. These new cars emit no pollution, and are 100% clean air vehicles. There is no need to take these to the gas station, they recharge at stations that have been installed at City Hall and other City owned facilities.

Our Public Works Department recently retired two large-haul vehicles and replaced them with CNG powered trucks. The new dump truck and sewer equipment truck will be providing service to our residents and businesses for many years to come. Compressed Natural Gas, or CNG as it is more commonly known, releases less pollution than gasoline, including significantly less CO₂, carbon monoxide, sulfur oxides, and other harmful chemicals.

All five vehicles were funded via clean air grants from multiple agencies.



Summary and Conclusion

Provide for a safe community – Provide staffing and resources to deliver services that ensure public safety.

Provide and maintain infrastructure necessary to ensure public safety

Be a fiscally healthy community – Expend fiscal resources responsibly.

Protect air, water and energy resources from pollution and overuse.

Work toward replacing existing City vehicles with ultra-low or zero emission vehicles. At a minimum, new City vehicles shall be low emission vehicles as defined by the California Air Resources Board, except if certain vehicle types are not available in the marketplace. Public safety vehicles are exempted from this requirement.

Infrastructure goal: Ensure adequate maintenance of public rights-of-way to enhance public safety and improve circulation.

Public Safety Element Goal: Provide public safety services of the highest quality.