

FINAL REPORT

ML14033

Purchase of Two Heavy-Duty CNG Vehicles

City of Irvine

December 21, 2017

Prepared for the Mobile Source Air Pollution Review Committee (MSRC) under the AB2766 Discretionary Fund Work Program.

Acknowledgements:

The City of Irvine acknowledges the Mobile Source Air Pollution Reduction Review Committee (MSRC) for grant funding in the purchase of two heavy-duty CNG vehicles. One CNG Water Truck was obtained from Los Angeles Freightliner and one CNG Asphalt Patch Truck from Nixon-Egli Equipment Company.

This report was submitted in fulfillment of contract ML14033, Purchase of Two Heavy-Duty CNG Vehicles by the City of Irvine under the partial sponsorship of the Mobile Source Air Pollution Reduction Review Committee (MSRC). Work was completed as of September 30, 2017.

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:

City of Irvine staff issued a Request for Proposal (RFP) in Winter 2014 for procurement of a CNG Water Truck. The vehicle was ordered on 12/29/2014, delivered on 12/10/2015, and put into service on 12/19/2016.

City of Irvine staff issued a Request for Proposal (RFP) in Spring 2015 for procurement of a CNG Asphalt Patch Truck. The vehicle was ordered on 06/25/2015, delivered on 5/25/2016, and put into service on 06/13/2016.

Purchase of these CNG vehicles enables the City of Irvine to comply with AQMD requirements for alternative fuel heavy-duty vehicles and reinforces the City's commitment to clean energy.

Problems Encountered:

These two vehicles have experienced no problems. Operator training was provided by both dealerships on the operation of each vehicle.

Emissions Benefits:

According to the Alternative Fuel Life-Cycle Environmental and Economic Transportation (AFLEET) Tool provided by the Argonne National Laboratory of the U.S. Department of Energy, in comparison to diesel equivalents, these vehicles should result in the following estimated air quality benefits annually:

- 31 pounds of reduced oxides of nitrogen (NO_x)

Photographs and Outreach:

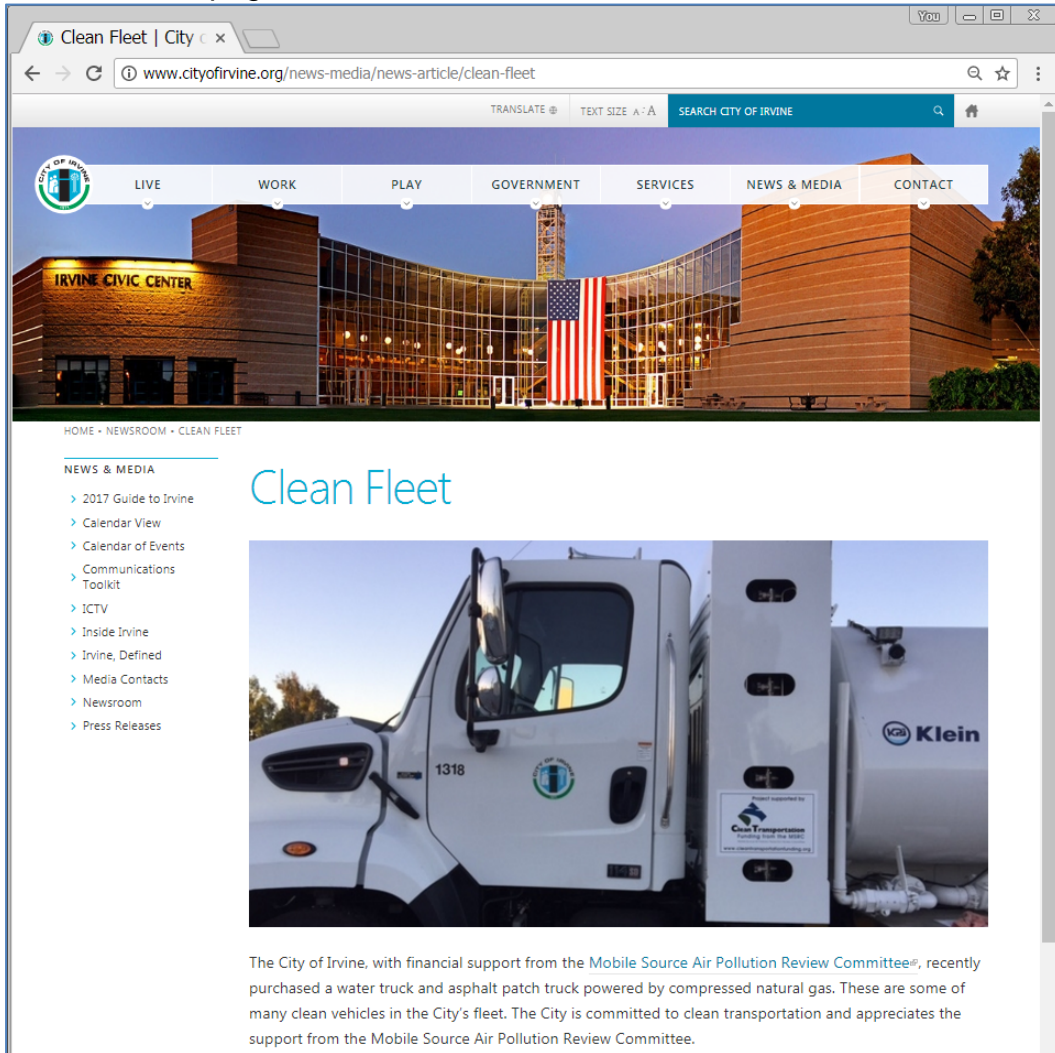
- A MSRC placard was permanently adhered to each vehicle as shown:
 - Asphalt Patch Truck



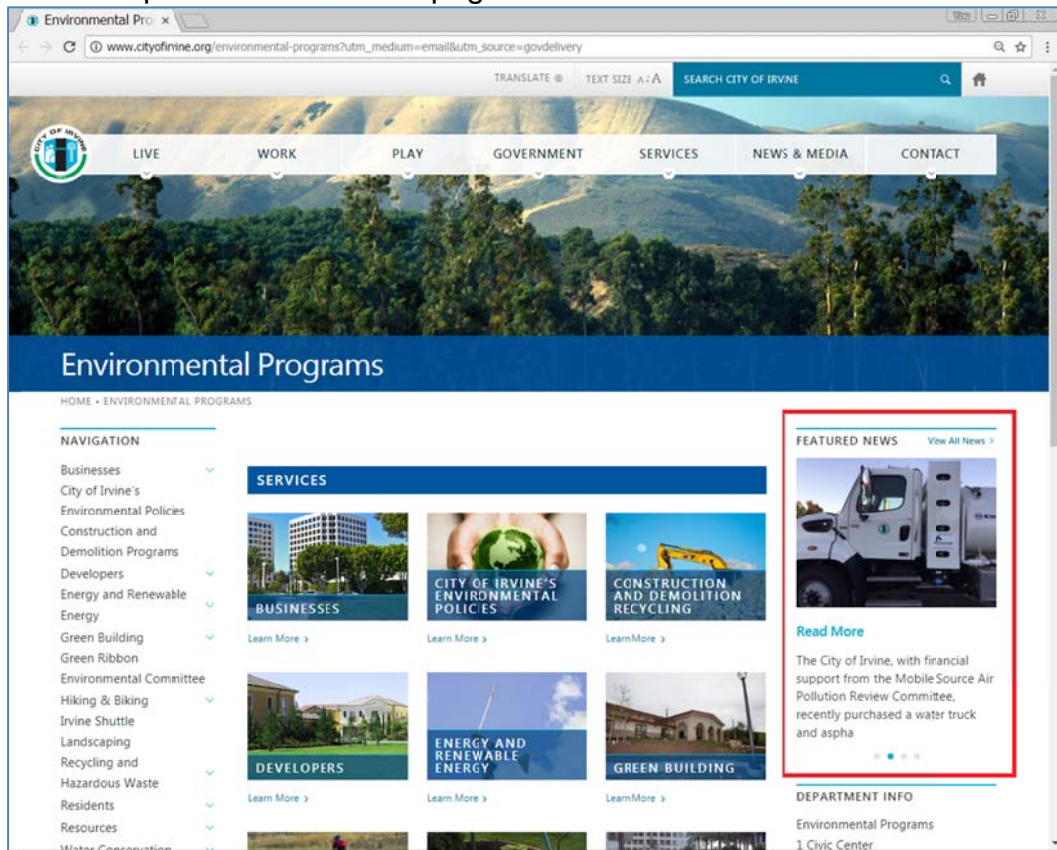
- Water Truck



- The vehicles were promoted on the City's website at www.cityofirvine.org/news-media/news-article/clean-fleet, but is no longer active. Here is a screen capture of the website page:



- The vehicles were promoted on the City's environmental website at www.cityofirvine.org/environmental-programs, but is no longer active. Here is a screen capture of the website page:



- The vehicles were promoted in the City's quarterly newsletter both online and in print of the [Fall 2017 edition](#) of *Inside Irvine* as seen here:



Summary and Conclusions

The purchase of these CNG vehicles has greater enable the City of Irvine to comply with the South Coast Air Quality Management District (AQMD) requirements for alternative fuel heavy-duty vehicles and further reinforces the City's commitment to clean energy.