



# FINAL REPORT

January 26, 2021

Contract # ML12043

**City of Hemet**

**Purchase of Heavy-Duty CNG Vehicle**

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

## Final Report

### Acknowledgements

The City of Hemet would like to thank the Mobile Source Air Pollution Reduction Review Committee (MSRC) for the opportunity that made the purchase of the New Heavy-Duty CNG Vehicle [CNG Dump Truck] possible.

This report is submitted in fulfillment of the ML12043, Purchase of a New Heavy-Duty CNG Vehicle [CNG Dump Truck] by the City of Hemet under the partial sponsorship of the Mobile Source Air Pollution Reduction Review Committee. Work was completed as of November 9, 2016.

### 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 here in is not to be construed as either an actual or implied endorsement of such products.

### Project Description and Work Performed

After evaluating department efficiency, City of Hemet staff determined that it would be in the City's best interest to purchase an additional heavy-duty dump truck. Prior to applying for MSRC funding the Streets and Parks department shared a 10-wheel dump truck to perform their daily program of work. Crews used the truck to haul sand, base, concrete, asphalt, large stumps and mulch. Sharing the 10-wheel dump truck meant that other crews had to wait until the truck was available or use much smaller trailers and make more trips. Adding another dump truck improves efficiency and quantity of work by enabling crews to haul material simultaneously and make fewer trips.

This project involved the purchase of natural gas heavy-duty vehicle, with gross vehicle weight rating greater than 14,000 pounds and equipped with dedicated compressed natural gas-fueled (CNG) engines. The vehicle was purchased from National Auto Fleet Group, 490 Auto Center Drive, Watsonville, CA 95076. MSRC funds were awarded in the amount of \$30,000 and used to offset the cost of purchasing the new Heavy-Duty CNG Vehicle.

<b>Vehicles Purchased</b>	<b>Total Cost</b>
(1) CNG Dump Truck	\$ 189,959.00

The CNG Dump Truck was delivered to the City on November 9, 2016, and placed into service shortly thereafter. The dump truck replaced a 1988 GMC 10-wheel dump truck that was surplus and sold at auction as it had exceeded its useful life.

## **Worked Performed**

The process of purchasing this CNG Dump Truck was started in June of 2016. The vehicle was placed in service in November of 2016.

Vehicle Procurement – CNG Dump truck specifications were prepared detailing vehicle requirements, performance parameters, technical quality assurance and warranty requirements.

Bid Process – Public Works staff coordinated with the City's Purchasing Administrator to obtain a bid for purchase of the CNG Dump Truck via the National Joint Powers Alliance (NJPA). NJPA establishes and provides nationally leveraged and competitively solicited purchasing contracts under the guidance of the Uniform Municipal Contracting Law.

Selection and Approval – Through the NJPA process City staff obtained a bid from National Auto Fleet Group of Watsonville, California, for the purchase of a 2017 CNG 10 Wheel Dump Truck. On June 14, 2016 the City Council approved the purchase of the unit in the amount of \$189,959.00.

Delivery of CNG Dump Truck – The CNG Dump Truck was delivered on November 9, 2016 and placed into service shortly thereafter.

## **Problems Encountered**

The purchase of the CNG Dump Truck was expected to take place in November of 2014, but was postponed until June of 2016 due to new requirements implemented by the City of Hemet's Finance Department, which slowed down the purchasing process. The requirements have been streamlined and the issues that delayed the purchasing process have been resolved.

## **Emissions Benefit**

The emission benefits from replacing diesel-powered heavy-duty trucks with CNG heavy-duty trucks was estimated using data from SCAQMD staff based on the types of engines used by these CNG vehicles and their hours of operation.

The CNG dump truck is a Freightliner 114SD CNG truck with Cummins ISL G natural gas engines. Per SCAQMD, a heavy duty CNG truck with a Cummins ISL G engine and an average use of 1,189 hours/year will generate 0.18 tons/year less oxides of nitrogen (NOx). Therefore, this CNG vehicle will eliminate the production of NOx by 0.36 tons during each year of operation.

## Photographs and Outreach

In January of 2021, a press release was submitted to the Press Enterprise to promote the partnership between the City and MSRC to provide information about the two entities co-funding the purchase of the CNG dump truck. Informational flyers about this purchase and the benefits of alternative fuel vehicles was also posted on the City's website (<https://www.hemetca.gov/>), the City's FaceBook page (<https://www.facebook.com/cityofhemet/>) and the City's Twitter account (<https://twitter.com/hemetgov>).

In addition, a decal of the MSRC logo was placed on the CNG dump truck and will remain on the vehicle as long as the vehicle is owned by the City.



## **Summary and Conclusion**

The City of Hemet was able to utilize the funding from the Mobile Source Air Pollution Review Committee to purchase a new CNG powered Dump Truck. This purchase has helped the City achieve its goal of being more efficient by allowing crews to work simultaneously and make fewer trips from the work site to the dumping area.

The City of Hemet is invested in the continuing efforts to improve the air quality in the South Coast Air Basin. As such, the City is appreciative of the on-going investments made by the Mobile Source Air Pollution Review Committee and the South Coast Air Quality Management District that contribute to funding the purchase of reduced emission vehicles.