



**City of Azusa Light & Water Department**

“Purchase of one heavy-duty compressed natural gas (CNG) vehicle”

Contract #ML08030

5/23/16

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

## **Acknowledgements**

N/A

*This report was submitted in fulfillment of ML08030 and purchase of one heavy-duty compressed natural gas (CNG) vehicle by The City of Azusa Light & Water Department under the partial sponsorship of the Mobile Source Air Pollution Reduction Review Committee (MSRC). Work was completed as of [date].*

## **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**

Pursuant to the City of Azusa Light & Water Department's desire to purchase a Fifty-five foot Insulating Aerial Truck, an invitation to bid was presented and received for bids in response. It was recommended to the Azusa Utility Board/City Council, the approval of purchase of a fifty-five foot insulating aerial truck and issuance of a purchase order to *Truck Hydraulic Equipment Company (THE Company)* of Fontana, California. Per the approval of the Azusa Utility Board/City Council, a purchase order was issued on March 31, 2009.

Truck Hydraulic Equipment Company delivered the 2009 Autocar ACX42 aerial truck on December 31, 2009. It was placed into service, by the Light and Water Department – Electrical Division, on January 12, 2010.

## **Problems Encountered**

Delivery lead time promised of 18 weeks was not met. Actual delivery time was approximately 40 weeks.

1/25/10 – 1/26/10: Truck was out of service for warranty work

1/26/10 – 5/10/10: Truck was out of service for repairs to main cylinder

7/16/10 – 7/26/10: Truck was out of service for repairs to driver front outrigger and belt tensioner

*\*For reference, see manufacturer service repairs performed on CNG truck.*

## **Emissions Benefits**

This project will reduce oxides of nitrogen (NO<sub>x</sub>) emissions by approximately 54.2 pounds per year. This equates to approximately 488 pounds of NO<sub>x</sub> reduced over the vehicle's projected nine year life.

## Photographs & Outreach

Our project was recently included in the City of Azusa's monthly newsletter, "**Azusa Tomorrow**", which was mailed out to residents during the month of May 2016:

### **AZUSA L&W RECEIVES GRANT FOR CLEAN-AIR WORK TRUCK**

With grant support by Clean Transportation Funding from the Mobile Source Air Pollution Reduction Review Committee (MSRC), Azusa Light & Water's Electric Division is eligible to receive \$25,000 for the purchase of one heavy-duty compressed natural gas (CNG) vehicle.

A fifty-five foot insulating aerial electric bucket truck was purchased from Truck Hydraulic Equipment Company of Fontana, California. It was put into service in January 2010 by the Electric Division. This aerial bucket truck is crucial for the operations of the Electric Division for working on high voltage lines and equipment mounted on power poles. The most important function of the CNG bucket truck is responding to emergencies such as downed power lines or any other disturbances on power lines, which can cause power outages.

The South Coast Air Quality Management District (SCAQMD) is the air pollution control agency for all of Orange County and the urban portions of Los Angeles, Riverside and San Bernardino counties. The MSRC is the Mobile Source Air Pollution Reduction Review Committee, established under state law (AB 2766) whose sole mission is to fund projects that reduce air pollution from motor vehicles within the South Coast Air District in Southern California.



Current and past editions (as well as Spanish language versions) of **Azusa Tomorrow** can be found at the cities websites: [City of Azusa: Azusa Tomorrow newsletter archive](#)

## Summary and Conclusions

The CNG bucket truck has been and will continue to be a major asset in the Electric Division's fleet. Despite the truck's dependability while on the job, refueling the vehicle has been a cumbersome process. This is due to extended wait time while in queue in addition to the slower rate of refueling due to the nature of CNG fuel.

With this experience and the necessity to acquire a new aerial bucket truck, the City of Azusa Light & Water Department has recommended the purchase of a hybrid vehicle for use in the Electric Division, as part of the City of Azusa's on-going efforts to operate a cleaner fleet of vehicles. The proposed benefits of the hybrid truck include: the current benefits of a CNG engine while the truck is being driven, as well as quieter and cleaner (reduced emissions) performance while operating the truck's boom and bucket(s). This reduction of noise and emissions will be huge benefit to the Electric Division's linemen who will work with the vehicle on a daily basis.