

Contract Number ML06061

Funding for One Heavy-Duty CNG Vehicle

City of Chino Hills, contractor

July 6, 2009

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

Acknowledgements

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This report was submitted in fulfillment of ML06061 and Funding for One Heavy-Duty CNG Vehicle by The City of Chino Hills under the partial sponsorship of the Mobile Source Air Pollution Reduction Review Committee (MSRC). Work was completed as of July 6, 2009.

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 constructed as either an actual or implies endorsement of such products.

Project Description & Work Performed

The City of Chino Hills utilized MSRC grant funds to supplement its AB 2766 funds to purchase a CNG vehicle to pull the cities 'show trailer'. This trailer folds out into a stage platform, primarily for recreational program use such as a concert stage, for their recreation events. Other cities such as Highland, Cerritos, Lakewood and Downey, to name a few, have utilized the 'show trailer' over the years for their recreational events. The CNG truck eliminated the use of a gasoline dump truck to move the 'show trailer' to the various recreational events, as needed.

This truck has traveled over 4,828 miles within 208.2 hours of operation, to deliver the 'show trailer' around the Southern California area.

This truck was primarily design to move primarily the 'show trailer', however, the city can utilized it for the cities large equipment trailers towing, if needed.

Project Milestone

Vehicle went out to public bid with two cost breakdowns, for cost comparisons. The first cost breakdown was a truck with a diesel engine. The second cost breakdown was for a CNG engine.

The cost of the truck with a diesel engine was quoted at \$81,947.91. The cost of the truck with a CNG engine was quoted at \$156,134.87.

City of Chino Hills approved the Purchase of the CNG truck, at the September 26, 2006 Council meeting.

A purchase order # 07061 was issued on October 4, 2006 to Carmenita Truck Center, for the CNG truck.

Truck was received from Carmenita Truck Center on April 4, 2007.

Vehicle was placed in service on April 5, 2007.

Carmenita Truck Center check for payment was mailed out on May 30, 2007.

The submittal of the final report and request for reimbursement for \$25,000.00 is now being requested as of July 6, 2009.

Problems Encountered

No sufficient problems were encountered during this truck purchase, or with the operational use of it.

Emissions Benefits

Estimated emissions benefits are based on the 208 hours of total use of the CNG truck vs. a diesel engine are as follows:

Total NOx emission reduction to date is 5.2 kg NOx or .025 kg/hour of operation.

Total PM10 emission reduction to date is 416 kg PM10 or .002 kg/hour of operation.

The emission benefits are as expected. The benefits were identified in a report for a CMAQ project involving the installation of a time-filled CNG compressor station for the Chino Hills Public Works Yard.

Photographs & Outreach

Attached are pictures of the CNG truck with the show trailer, the truck by itself and the City of Chino Hills and MRSC logos, as placed on the unit.

Outreach has been informal with discussion with various homeowners as they inquire about the truck. Staff is able to identify the cost of the truck with a diesel engine vs. a CNG engine difference. Explain the benefits of a CNG truck alternative fuel, comparing the rate of fuel usage and the acceleration power, vs. a gasoline or diesel fueled vehicle.

Overall, the city staff can provide a good range of answers about the CNG vehicle and the homeowner can make a good assesment of the CNG vehicles use and costs.

Summary and Conclusions

The City has had a great experience with the alternative fueled CNG Truck. There were no problems with the purchase or operation to the truck unit over the last several years. The city is able to showcase the truck with its travel through out the southern California area, while pulling the 'show trailer'. The truck is operated by many city staff in its travels and no driver has complained about the truck or operation of the truck while driving on the freeways or on the City of Chino Hills streets.

It is nice to show the public what their tax dollars is supporting, from a portion of vehicle registration fees collected. The use of tax payer dollars to purchase clean air vehicles to reduce air pollution is important. The MSRC and the City of Chino Hills are trying to due their part in reducing air pollution. In this way, we and our children, can breathe easier and live a long and happy life.