ENCLOSURE 1

Los Angeles Department of Water and Power

Purchase of One Heavy-Duty CNG Vehicle
Contract No. ML06020A

FINAL REPORT

February 12, 2013

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

Clean Transportation
Funding from the MSRC

Acknowledgments

The following key personnel from the Los Angeles Department of Water and Power were involved with purchasing the CNG vehicles under this grant:

MSRC Grant Administrator: Stephen B. Gallie

Manager of Fleet Procurement: Fausto H. Cetina

This report was submitted in fulfillment of Contract No. ML06020A and the Purchase of one Heavy-Duty CNG Vehicle by the Los Angeles Department of Water and Power under the partial sponsorship of the MSRC. Work was completed as of January 29, 2009 when the vehicle was received.

Disclaimer

Project Description and Work Performed

This grant helped to fund the replacement of an existing diesel-powered vehicle with a CNG powered one, specifically an aerial boom truck.

Engine Specification is as follows (see attached CARB Executive Order):

- Make: Cummins-Westport
- Model: ISL-G
- Engine Year: 2008
- Fuel Type: CNG/LNG
- Engine Size: 8.9 Liters

Vehicles Replaced and Retired Vehicles:

The 1989 diesel-powered equivalent is still owned by LADWP, but is slated to be salvaged very soon. It was mostly parked and not used in 2012. It will be sold for use out of the state of California.

Procurement Schedule:

Ordered: Under LADWP Contract No. 9981, dated October 2007

Received: Received vehicle on January 29, 2009

Deployment: Deployed on April 15, 2009

Operational Experience and Problems Encourntered:

The users have not reported any problems with this vehicle, and it meets or exceeds manufacturer's expectations and the purpose for which it was purchased.

Emission Benefits

The emission benefits of replacing the older diesel-powered vehicle with a cleaner CNG powered one is calculated below, using the appropriate model year values from the Carl Moyer Program Guidelines, Table B-4.

The total emission reduction is as follows, assuming an annual mileage of 6,000:

PM (g/year) old vehicle (1989) = 0.504 x 6,000 = 3,024 g/year
PM (g/year) new vehicle (2008) = 0.024 x 6,000 = 144 g/year

NOx (g/year) old vehicle = 14.6 x 6,000 = 87,600
NOx (g/year) new vehicle = 2.79 x 6,000 = 16,740

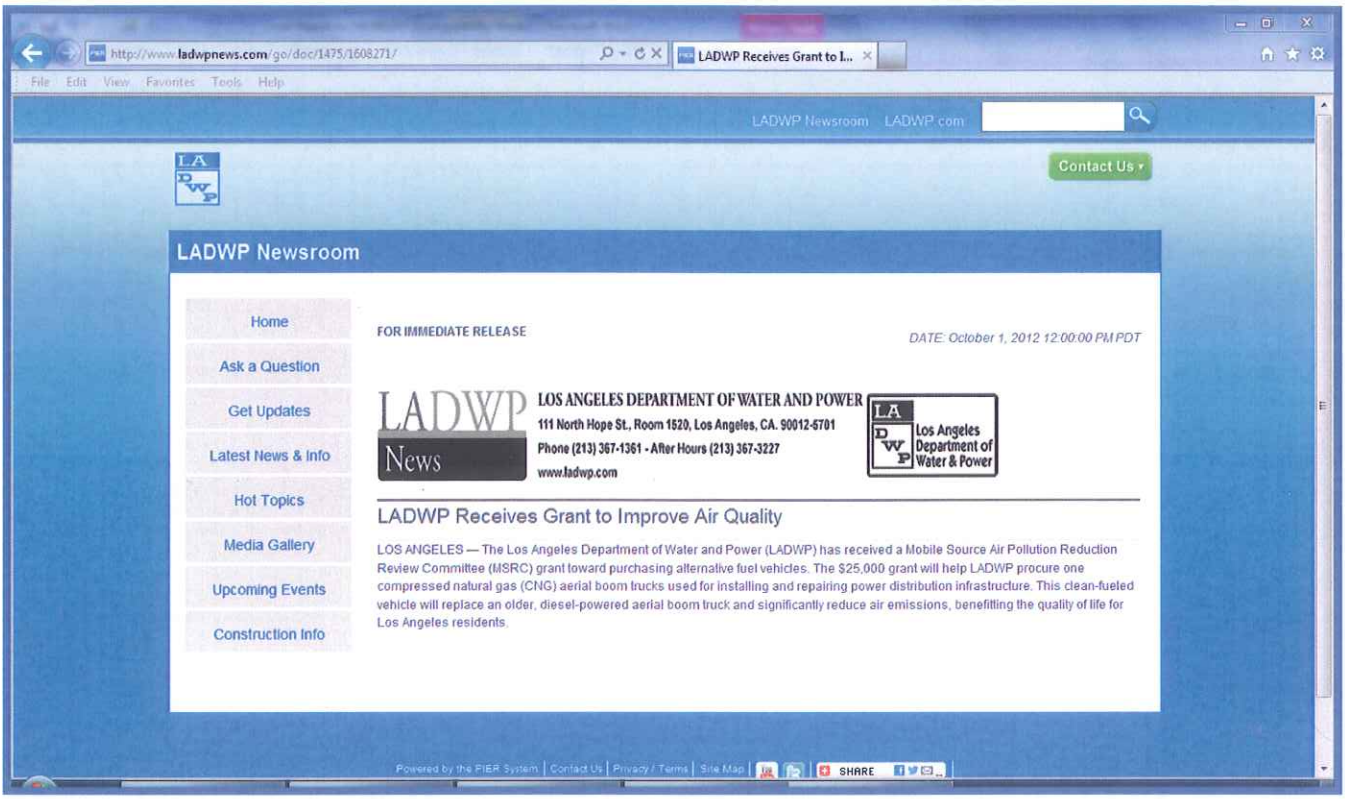
- PM (g/year) reduction from 3,024 to 144 (2,880 g/year)

- NOx (g/year) reduction from 87,600 to 16,740 (70,860 g/year)

Photographs and Outreach

Below are pictures of the aerial boom truck purchased under this grant:

In accordance with the Public Outreach Plan approved by your office, the following news bulleting was posted on the LADWP website.



Summary and Conclusions

In closing, this grant allowed for the purchase of one (1) aerial boom truck to replace an older, diesel-powered one. As a result the estimated total emission reduction for PM is 2,880 grams per year and for NOx is 70,860 grams per year. This grant was very beneficial in helping to offset the additional cost of purchasing a CNG powered vehicle, and has allowed LADWP to reduce its overall fleet emissions.