

City of San Bernardino



September 1, 2020

City of San Bernardino Fuel Station Upgrade at City Yard (GB 19-005)

GRANT # MS18117

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

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 and Work Performed:

The City of San Bernardino has upgraded its fuel station located at 187 S. Pershing Avenue (City Yard). The original station received liquid natural gas (LNG) which was converted to compressed natural gas (CNG) before being delivered to customers via a single dispenser. The process of converting LNG to CNG resulted in excess gas that was unable to be captured for use due lack of dispensing and storage capabilities. The new upgrades have fully converted the fuel station to directly accept and dispense CNG, eliminating the waste of any fuel through processing. The upgrade also added three new dispensers with six hoses protected by weather with a lighted canopy, added six storage tanks. Lights were installed around the entire area of the fueling station. An electric vehicle recharging station was also included in the design.

The fuel station is designed to be used for City vehicles, San Bernardino School District Buses, Burrtec Waste refuse trucks, and is open to the public for CNG fuel purchases. This station is designed using a fast-fill model that facilitates fueling of light-duty natural gas vehicles and medium and heavy-duty natural gas vehicles.

The construction cost for this project was \$2,400,000 which was funded through the City of San Bernardino Integrated Waste Funds, and grant funding awarded by Southern California Air Quality Management District's (SCAQMD) through the Mobile Source Air Pollution Reduction Review Committee (MSRC) Natural Gas Infrastructure Program. The CNG station contains the following equipment:

- (2) ANGI 200 HP Compressors: 461 scfm each
- (1) Dual 200 HP motor start panel
- (1) Cascade priority panel
- (1) Communication panel allowing remote monitoring
- (1) ANGI Gas Dryer single GS-030-S-M-460-150-3
- (3) 23' long storage tanks rated at 4000 psi
- (3) 23' long storage tanks rated at 5500 psi
- (1) Comdata fuel management system
- (1) 24' x 60' Canopy
- (3) ANGI series II Dual High/Low Flow Dispenser
- (1) ChargePoint Electric Vehicle Charger.

Problems Encountered:

The City did encounter some scheduling issues with upgrading the gas line and electrical the facility. These setbacks were due to utility scheduling issues with Southern California Edison (electrical upgrade) and Southern California Gas Company (gas line upgrades).

The project was also hampered during commissioning process due to equipment issues which were resolved later..

Emissions Benefits:

The newly expanded facility is averaging a monthly throughput of 12,000 GGE of CNG. This equates to approximately 240,000 lbs. of CO2 diverted from the atmosphere

Photographs and Outreach:

The project has been presented in the City Council meeting which was televised on a local television channel. A newsletter, attached to this report, was posted on the City website to inform public about the opening of the CNG Station. The same letter was sent to the residents with Waste Management bill.





