BURRTEC
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# Burrtec Waste & Recycling Services

## CNG Fuel Station Installation

## Contract #MS16087

## Final Report

## Date Prepared: October 3, 2018

By Joseph Kaye

**This report was prepared for the Mobile Source Air Pollution Review Committee (MSRC) under the AB 2766 Discretionary Fund Work Program.**

## Acknowledgements

Burrtec Waste & Recycling Services would like to acknowledge several key personnel and organizations that were associated with this project. They include:

**Mobile Source Air Pollution Review Committee (MSRC)-** Partnered with Burrtec in the funding of the project with a generous financial grant.

**Gary Koontz-** Lead Project Manager for Burrtec Waste & Recycling Services

**Allan Williams-** Program Administrator for Burrtec Waste & Recycling Services

**Clean Energy-** General Contractor for the project

**Fastech-** Primary Subcontractor for the project

**City of Coachella-** for cooperation throughout the project

This report was submitted in fulfillment of Contract # MS16087 titled CNG Fuel Station Installation by Burrtec Waste & Recycling Services under the partial sponsorship of the Mobile Source Air Pollution Reduction Review Committee (MSRC). Work was completed as of September 25, 2018.

## 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 implied endorsement of such products.

## Project Description and Work Performed

### *Purpose*

The project site is located at 53600 Polk Street, Coachella, CA, 92236. The site encompasses an office, a maintenance shop, a recycle transfer facility and parking for (65) solid waste collection and support vehicles.

The majority of collection vehicles parked on site are fueled with Compressed Natural Gas (CNG). The nearest CNG fuel station is located over six miles away in Indio, CA. The station is not equipped for high volume use and extended wait times are frequent. The average time to travel to and from the facility and fuel is over thirty-five minutes.

The purpose of adding an onsite fuel station to the Burrtec facility was to decrease emissions and traffic congestion to and from the Indio fuel site. It also decreased overcrowding at the public fuel station.

### *Planning*

Burrtec worked with Clean Energy to plan, design and install the fueling station and nozzles. Burrtec, Clean Energy, and the primary subcontractor Fastech maintained a regular schedule of meetings to discuss progress updates, changes and challenges during the process. Other entities such as government agencies and utilities were also included in the planning of the facility as needed.

### *Design*

It was determined that the fuel station would be installed in the south-west portion of the property. The system would encompass approximately 2,200 square feet. Clean Energy was responsible for planning the fuel station and fuel delivery nozzle layout. The design included (2) IMV 150hp compressors, a storage vessel, a PSB 10-3 dryer, (2) MCC and (1) MCP panels and (50) fuel delivery hoses. The fuel system is protected and enclosed by a chain link fence as well as (50) six inch diameter bollards. All required permits were obtained. All local and state codes and standards were adhered to throughout the installation.

### *Construction*

Construction began on August 2017. Clean Energy's main subcontractor Fastech completed the majority of the work. The construction included earth work and new concrete. It also included the installation of new electrical panels, conduit and wiring. Underground CNG pipes had to be brought to the site and connected to the system. Cable internet service was also brought to the site and connected to the system. System and equipment installation was completed on

September 2018. After installation, the compression and electrical systems were thoroughly tested and found to be ready for operation on September 7, 2018.

### *Opening and Operation*

The facility was opened and began full operation on September 10, 2018. The system is capable of fueling (50) vehicles at one time using a slow fill process. The fueling process is designed to fuel the entire fleet at the same time, overnight. The fueling process takes several hours.

## Problems Encountered

The project required the involvement of several different entities and agencies. These include The Southern California Gas Company which supplies the CNG fuel to the site, Imperial Irrigation District which supplies electrical power to the site, Frontier Communications which supplies internet service to the site, and the City of Coachella which supplied the necessary permits and completed regular inspections on the work progress. In addition to these, the original plan included obtaining an easement from the Union Pacific Railroad Company which owns a railway near the project site as well as an easement from the Coachella Valley Water District which runs water and sewer lines near the project.

Coordinating logistics and changes between the different agencies proved to be difficult and time consuming. Due to this, the project encountered significant delays. In addition to this, the project was not able to obtain the needed easement from the railroad company. An alternative proposal needed to be introduced and approved by all parties. After all of the delays, the project was completed almost (1) year after the scheduled completion date.

## Emissions Benefits

The installation of this system has reduced on road fleet hours by an average of 346 hours per month. This has significantly decreased traffic congestion on the route to and near the public fuel station. It has also alleviated overcrowding and wait times at the public fuel station.

## Photographs and Outreach

Below is a copy of the press release that was released on September 25, 2018.

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Investing in Clean Air
MSRC

**Coachella California, September 25, 2018** – Burrtec Waste & Recycling Services is opening a new Compressed Natural Gas (CNG) fueling station at their Coachella site. This is one of many for Burrtec and will service approximately 60 trash trucks per day from this location. These CNG trucks serve the communities of La Quinta, Indio, Coachella, Thermal, Mecca, Oasis, Salton Sea, and areas of unincorporated Riverside County.

Quality of air is an everyday concern for all of our communities. Converting just one trash truck from diesel to natural gas is the pollution reduction equivalent of taking 325 cars off the road. Clean air is very important for long-term sustainability and the quality of life for everyone. Environmentally friendly; CNG is the cleanest burning transportation fuel on the market today. They produce 20-29% fewer greenhouse gas emissions than comparable gasoline or diesel fueled vehicles. Additional benefits include longer vehicle life and less noise pollution.

A significant financial contribution for the project was provided by a grant from the Mobile Source Air Pollution Reduction Review Committee (MSRC) through the Clean Transportation Funding program.

Below are photos of the completed project:


Project supported by
Clean Transportation
Funding from the MSRC
www.cleantransportationfunding.org


Clean CNG

## Summary and Conclusions

A CNG fueling station was installed at the project location of 53600 Polk Street, Coachella, Ca. The system is capable of fueling up to (50) vehicles at a time. The system will support a fleet of solid waste disposal units that service more than 74,000 customers.

The system, now in full operation, has decreased on-road fleet hours by more than 346 hours per month and more than 4,100 hours per year. The emissions benefit is furthered by the decrease in traffic congestion on major roadways in Indio and Coachella, California.