CITY OF LAREDO CNG VEHICLES

APRIL 17, 2014

04/17/2014

CNG-COMPRESSED NATURAL GAS

The City of Laredo CNG Fleet consists of fifty three CNG Vehicles. Seventeen are 1997 to 2004 Fords. We have retired eight. Current units:

1997's: 1 F150 PU, 1 Explorer.

1998's: 4 F150 PU, 2 F250 PU, 1 ½ Ton Van 1 ¾ Ton Van.

2004's: 7 F150 PU.

Thirty-Six units have been converted or purchased new since late 2012 to the present.

Twenty-one converted units are:

2011's: Ford- 5 F150 PU, 1 F250, Chevrolet-2 Silverado 2500 HD. 2012's: 1 F150, 5 F250, 2 F350. 2013: 3 F150, 2 F250.

Purchased new: 15 2013's: Chevrolet 2500HD

All units are bi-fuel. (Gasoline/CNG)

General information:

Monies for the Conversion/Purchase of the twenty-five units were obtained from the Railroad Commission secured by Riazul Mia,

Environmental Director. The City of Laredo was eligible due to the available Public CNG Pump owned by the City. The price of the CNG portion of the vehicles averages $8500 to $11,000 and is covered mostly by the grant money.

CHRYSLER (RAM), GENERAL MOTORS and FORD, offer Factory equipped trucks and this facilitates warranty. All of these units are Bi-fuel versions. Other manufactures offer CNG units, cars, etc. The City is concentrating on Trucks since, theoretically, this is where the bigger savings in fuel would be. Current price

for Natural Gas averages $1.00, internal cost, for the equivalent gallon of gasoline.

CNG and SAFETY:

Please note that the following information was obtained from wisegasinc.com

"CNG (COMPRESSED NATURAL GAS), has the unfortunate tendency to still inspire fear in those who are not familiar with it." CNG is safer than gasoline or diesel. The physical properties of natural gas have a limited range of flammability requiring a specific mixture of air and gas to burn. The range is 5 to 15% requiring an ignition temperature of approximately 1100 degrees F. Gasoline and diesel have lower concentrations of flammability and lower temperatures of ignition, thus, are far more likely to ignite than natural gas. In the event of a leak, the gas would rise and disperse through the atmosphere, since it is lighter than air.

Gasoline and diesel are dense liquid fuels, pooling during a leak and are easily ignitable.

Natural gas is odorless, so a distinctive strong sulfur smell is added so it can be easily detected. Natural gas replaces Oxygen in the atmosphere and it would take a 25% concentration for there to be insufficient Oxygen for Human respiration. Because of the smell, a leak can easily be detected before a serious problem can occur.

Natural gas is non-toxic and non-corrosive, thus adding to its safe and clean properties. When an engine is run on CNG, the oil stays much cleaner, reducing maintenance intervals, which is an environmental and economic benefit.

The following was obtained from www.cng.com

CNG is contained in much safer cylinders than the containers of gasoline and diesel which are

usually 'plastic' tanks. CNG gas cylinders are built with special materials designed for the highest safety specifications and are the most solid component in a vehicle.

IN CONCLUSION:

Before we went with this new, latest CNG technology, the comfort level was somewhat apprehensive due to some issues with the older systems, but this current version of Bi-Fuel Trucks are quite superior both in ease of use and performance. As a Fleet Manager, I am quite impressed with these new versions and I especially like the fact that Chrysler (Ram), GM, and Ford have bought in to this and now offer units direct from the factory and will warranty these units through their Dealership network. There is a little catching up to do as far as the infrastructure available for CNG, but I am

confident that once it does, CNG use will increase since Natural Gas is quite abundant nationwide, especially in Texas.

The City of Laredo, with the support of City Management and Staff, is fully committed to continue the use of vehicles that are safe, economical to operate, and Eco friendly as well.

Jack Dunn, Jr.

Fleet Management General Manager