

REFUEL: SAN DIEGO REGIONAL ALTERNATIVE FUEL COORDINATING COUNCIL

PROPANE SUBCOMMITTEE MEETING

JANUARY 15, 2015

JANUARY 8, 2015 MEETING SUMMARY

File number 3200900

1. WELCOME AND INTRODUCTIONS

The meeting began with introductions and an overview of the San Diego Regional Alternative Fuel Coordinating Council (Refuel) and the goal of the Propane Subcommittee. Refuel will help guide and shape the products of this project, and each alternative fuel subcommittees will devote further attention to each fuel.

2. BACKGROUND ON PROPANE

There are many propane applications and an increasing number of vehicles available that use propane. General information about propane:

- Over 17 million vehicles in the world use “Propane Autogas” – it is the world’s most widely used alternative fuel.
- Examples of Propane Autogas users in the region:
 - San Diego Old Town Trolley Tours
 - San Diego Airport shuttles
 - UPS
- Propane is nontoxic and does not pollute groundwater
- Propane is domestically-produced
- Propane is excellent for light- to medium-duty trucks and is a common fuel for forklifts and provides a clean energy option for landscaping equipment. There are engines that can power vehicles up to 33,000 lbs. (school buses, beverage trucks, etc.)
- There are systems that will blend diesel and 20-25% propane for off-road purposes: helps reduce emissions.

How to Buy Propane

There are four ways to buy propane and over 15,000 places to buy it. However, most places don’t fuel vehicles.

1. Service station or U-Haul or RV place
2. Propane bulk plant
3. Station like EXPO propane that is open 24 hours (public station)
4. Own private station (fleet use)

Propane Stations

Propane stations come in two sizes: small and large. General station information:

- Propane tanks are above ground, held horizontally or vertically
- New nozzles allow for smooth connection and disconnection; stops automatically when vehicle is full
- Tank is approximately 25 ft. from a building
- Propane Autogas is a liquid sold by the gallon
- Propane tank pressure is about 109 psi

Station Specs by Size	Small Stations	Large Stations
Size of Tank (Gallons)	2,000	18,000 – 30,000
Vehicles Serviced	25 – 50	50+
Filling Dispensers	1 – 2	2 – 4

Permitting Process

The following are some of the issues, challenges, and variables that may arise when trying to permit a propane station as described by propane industry representatives:

- Biggest concern about the permitting process is its variability city to city.
- Some planners have expressed concerns over the aesthetics of a propane tank. Mostly urged to hide the propane tanks, which is not practical in most cases.
- Usually it takes about 2-3 months to get a tank installed and operating.
- The pumping mechanism for propane autogas tank is more powerful than the propane tank found at most gas stations (for filling up BBQ tanks) and is optimized for liquids; therefore a propane station for BBQs cannot easily accommodate vehicles.
- Often cannot include propane autogas tank at a gas station because many service stations do not offer the proper setbacks for the tanks (usually not designed for a 2,000 gallon tank).
- Cost of all permits is over \$5,000:
 - Fire Department Permit (\$1,000)
 - Building Department Permit (\$1000-2000)
 - Hazmat fire permit from County, separate from Fire Department permit (\$500-1000)
 - State Department of Safety and Health – Pressure Vessel Section. Inspection required. (\$250)
- San Diego APCD does not require any extra permits for a propane station; however, some air districts such as South Coast AQMD does require an extra permit.

Questions/Comments

- Ms. Lowe asked if the County had explored propane landscaping equipment for agricultural activity in the region (namely, the unincorporated parts).
- Nick Cormier, San Diego APCD, notes that there has been interest about converting irrigation engines to be running on propane. APCD might be able to offer something through the Carl Moyer program.

- Mr. Cormier discovered that the CARB website, driveclean.ca.gov does not mention the option of Propane as an alternative fuel vehicle.
- Mike Rivers, County of San Diego, noted that it is very hard to get a propane autogas station installed in rural areas of the County to support a propane fleet; therefore, the County has not been able to deploy propane vehicles as part of the County's fleet. The County already has a policy with language allowing for clean vehicle purchases but in order to get propane vehicles, they need to have the infrastructure. Mr. Rivers identified the most important step as identifying available vehicle types, the purpose they serve as in relation to the fleet needs of the County, and how to justify the cost.

3. NEXT STEPS

The following are next steps identified by the propane subcommittee:

- Create a flowchart on processes; catalyst to standardized more permitting suggestions, education (safety, efficiencies)
- CSE to put together a factsheet and toolkit
- Michelle Heaton, AmeriGas, to send factsheet and stats to County Fleet and to the committee for inclusion in toolkit. Ms. Lowe informed the propane subcommittee that materials from the meeting will be sent by email and posted onto the Refuel websites between meetings. A general assessment and survey will be created in December, and be distributed to cities soon after.

The next Refuel Coordinating Council will be held on Thursday, January 15, 2015 from 1:00-3:00 pm.

Attendees / Call-in Participates

- Nick Cormier – San Diego Air Pollution Control District (SD APCD)
- Steve Moore – EXPO Propane
- Nilmini Silva-Send – University of San Diego, Energy Policy Initiatives Center
- Mike Rivers – County of San Diego, Fleet Services
- Michelle Heaton – AmeriGas Propane
- Anna Lowe – San Diego Association of Governments (SANDAG)
- Michelle Martinez - SANDAG
- Kevin Wood – Center for Sustainable Energy (CSE)
- Jessica Jinn – CSE