Planning and Sustainability Commission Meeting – Portland, Oregon

January 13, 2015

Testimony of Michael Haynes

AmeriGas Propane

AmeriGas Propane supports the Pembina Pipeline Corp.'s proposed project at the Port of Portland. We are members of the Pacific Propane Gas Association. Please allow me to share some facts about propane uses, greenhouse gas, and safety. Please see attachments for complete information.

Propane Uses:

Urban-Residential

- Heating
- Cooktops
- Ranges
- Fireplace
- Pools/Spas
- Patio Heaters
- Generators
- Dryers
- Water heaters
- Grillers

Commercial

- Motor fuel
- Shop Heaters
- Crop Drying
- Wineries
- Crematoriums
- Temp Heat
- Restaurants
- Hotels
- Schools
- Lawn equipment

Rural

Propane can be delivered to areas inaccessible by other energy sources such as Electric or Natural Gas.

Propane Makes Environmental Sense

Propane is an approved, clean fuel listed in the 1990 Clean Air Act as well as the National Energy Policy Act of 1992. Propane has always been a "green" fuel: far ahead of today's trends.

Propane is one of the lightest, simplest hydrocarbons in existence, and, as a result, is one of the cleanest burning of all fossil fuels. New propane-fueled vehicles can meet the very tough Ultra-Low Emission Vehicle (ULEV) standards, and one model even meets the Super Ultra-Low Emission Vehicle (SULEV) standards.

Propane gas is not harmful to soil and water and the placement of propane tanks either above or below ground is not regulated by the Environmental Protection Agency (EPA).

According to the EPA, much of the sulfur dioxide in the atmosphere, which produces acid rain, is attributable to coal-fired, electricity-generating facilities. In contrast, neither the process by which propane is produced nor the combustion of propane gas produces significant acid rain contaminants.

Propane is non-toxic, non-caustic and will not create an environmental hazard if released as a liquid or vapor into water or soil. If spilled in large quantity, the only environmental damage that may occur is freezing any organism or plant life in the immediate area. Propane liquid and vapor are environmentally sound and friendly in their unused states (prior to combustion) if released.

- Propane is not considered a greenhouse gas.
- Propane is not damaging to freshwater or saltwater ecosystems, underwater plant or marine life.
- Propane is not harmful to soil if spilled on the ground. Propane will not cause harm to drinking water supplies.
- Propane vapor will not cause air pollution. Propane vapor is not considered air pollution.
- Propane vapor is not harmful if accidentally inhaled by birds, animals or people.

Propane is classified as an alternative fuel for vehicles and exemplifies clean burning characteristics with harmful emissions and toxins at minimal levels. Where environmental impact is concerned propane is an environmentally friendly fuel

Propane will not harm people or the environment and its harmless attributes are eco-friendly. In fact, propane is listed as an approved clean fuel by U.S. Government energy policy makers and energy administrative bodies.

Environmental Impact of Propane Vs. Natural Gas

See attachment **Propane Reduces Greenhouse Gas Emissions: A comparative Analysis 2009**. *Note Chapter 2, Page 5, Paragraph 1.*
http://www.propanecouncil.org/uploadedFiles/REP_15964%20Propane%20Reduces%20GHG%20Emissions%202009.pdf

Natural gas, when discharged into the environment is a greenhouse gas whereas propane is not classified as such. Propane is not toxic or damaging and will not harm the environment if it is released into the atmosphere, which is why it is not labeled as a greenhouse gas. Therefore, while propane will not contribute to pollution in its unused state if released, natural gas will. Propane is a green-fuel before combustion and remains environmentally friendly even after it is used, as described below.

Realistic Propane Safety Statistics

Accidents do occur with and around propane as well as other energy sources. While some may have consumers believe is that propane is an unsafe fuel, in reality, LP Gas usage statistics combined with accident statistics tell a much different story. The statistics provided below are based on information collected and provided by the NFPA between 2000 and 2004 listing LP Gas as the first material ignited in home structure fires. In other words, propane (LP Gas) was the fuel that "started" the fire. In 2001, 9.4 million homes used LP Gas.

2000-2004 LP Gas Home Structure Fires
Statistics

Average Annual Home Structure Fires: 1,390
Average Annual Civilian Fire Deaths: 23
Average Annual Civilian Fire Injuries: 193

Based on these numbers provided by the NFPA, let's calculate the real value in statements such as "propane is a very dangerous fuel" or "propane burns houses down all the time."

- .000148 residential structures burned every time LP Gas was the first material ignited
- .0000025 people died in every incident of LP Gas being the first material ignited
- .000021 people were injured in every incident where LP Gas was the first material ignited

In other words,

- 1 in 6,762 homes experienced a fire
- 1 in 48,704 people were injured
- 1 in 408,695 people were killed

Food for thought....

- Around 100 people die annually as a result of being struck by lightning
- About 7,000 people die annually resulting from prescription drug filling errors
- 90 to 100 people die each year from bee or wasp stings
- Around 200 people die each year in floods

Propane is a safe, true green, environmentally friendly energy source that will help reduce the Carbon foot print In Oregon as well as Internationally.

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