



October 19, 2022

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Department of Ecology
Air Quality Program
P.O. Box 47600
Olympia, WA 98504-7600

Re: Rulemaking – Chapter 173-423 WAC, Clean Vehicles Program

COMMENTS OF THE PACIFIC PROPANE GAS ASSOCIATION

On behalf of the Pacific Propane Gas Association (PPGA), which represents propane marketers, suppliers and equipment manufacturers across Washington State, we appreciate the opportunity to provide comment on the Department of Ecology’s (Ecology) proposed Chapter 173-423 WAC, Clean Vehicles Program. Our members provide clean-burning and critical energy to transportation, residential, commercial and agricultural customers in the state. Washington’s propane industry generates more than \$658 million in economic activity annually.¹

The PPGA acknowledges that Ecology’s proposed implementation of CARB’s Omnibus Regulations is dictated by state statute – specifically, RCW 70A.30.010. While Ecology may have limited leeway in amending or adopting these rules, the PPGA believes expressing concerns with these proposals is important.

I. Clean American Energy

Propane can play an important role in Washington’s clean energy transition and future. It can help the state achieve many of its near- and long-term environmental and climate health goals. Propane burns cleanly, efficiently and has a low-carbon content.² As a less carbon intensive fuel, the state could achieve immediate greenhouse gas (GHG) reductions in the transportation sector by substituting propane for other fuels such as gasoline and diesel. Propane can reduce the GHG emissions, including carbon dioxide, and air pollutants like carbon monoxide and nitrogen oxide.

Propane’s environmentally friendly attributes have long been recognized by the federal government and states around the country. It is nontoxic and vaporizes the moment it is released from a pressurized cylinder. As such, and unlike other energy sources, propane presents no threat to soil, surface water or ground water.³ This helps preserve and protect Washington’s critical land and water resources, including our environmentally sensitive waterways.

¹ https://www.npga.org/wp-content/uploads/2020/07/WASHINGTON_Propane-1-Page_2020-3.pdf

² https://www.eia.gov/environment/emissions/co2_vol_mass.php

³ https://afdc.energy.gov/fuels/propane_basics.html

II. Renewable Propane

Beyond conventional propane, the industry is also actively promoting the use of renewable propane as another means to reduce GHG emissions. Renewable propane is a by-product of renewable diesel production, and can be derived from a variety of sustainable sources, such as biomass, animal fats and vegetable oils.⁴ Renewable propane can safely be used in vehicle engines, including those certified to the California Air Resources Board's (CARB) ultra-low NOx standard.⁵ And, in addition to retaining all of the same environmentally friendly attributes as traditional propane, it is less carbon intensive.⁶ In California, renewable propane being used as a vehicle fuel has a carbon intensity score as low as 20.5, far less than other energy sources.⁷

Renewable propane is also an approved pathway for compliance under the federal Renewable Fuel Standard (RFS), a law that was enacted to reduce GHG emissions from vehicles.⁸ Beyond transportation, energy molecules produced from sustainable feedstocks, like renewable propane, can also drastically reduce GHG emissions from the buildings and thermal sectors as well.

III. Propane Autogas

While not typically thought of as a transportation fuel propane autogas is the world's third most common transportation fuel, behind gasoline and diesel, and is considered an alternative fuel under the Energy Policy Act of 1992.⁹

Propane autogas is powering a variety of light- and medium-duty fleets, including taxicabs, law enforcement agencies, transit, paratransit and other governmental organizations. Light- and medium-duty fleet vehicles are available from major manufacturers — as both OEM-dedicated vehicles and EPA/CARB-certified aftermarket conversions.

IV. Performance & Operation

Propane is an excellent vehicle fuel because it is noncorrosive, has a high-octane rating (104 to 112) and low oil-contamination characteristics, which reduce maintenance costs and prolong the life of an engine.¹⁰ Propane engines are quiet and greatly reduce noise pollution, creating a safer, more comfortable cabin experience for drivers and passengers.¹¹ They reliably crank in cold temperatures and quickly warm up the interior cabin.¹² These attributes are extremely valuable in a place like Oregon that regularly experiences cold winter temperatures.

⁴ https://afdc.energy.gov/fuels/propane_production.html

⁵ <https://www.roushcleantech.com/roush-cleantech-launches-first-available-near-zero-emissions-engines-fueled-by-renewable-propane/>

⁶ https://ww2.arb.ca.gov/sites/default/files/classic/fuels/lcfs/fuelpathways/comments/tier2/b0189_summary.pdf

⁷ *Id.*

⁸ <https://www.epa.gov/renewable-fuel-standard-program/approved-pathways-renewable-fuel>

⁹ *Supra* 3.

¹⁰ <https://www.nrcan.gc.ca/energy-efficiency/transportation-alternative-fuels/alternative-fuels/propane/21611>

¹¹ <https://afdc.energy.gov/case/3075>

¹² <https://afdc.energy.gov/case/2327>

V. Energy Reliability & Resilience

American propane production is at record levels.¹³ As a result, clean and reliable domestic energy is readily available to consumers. A mandatory one fuel fits all approach is bad for Washington. Fleet owners know best what type of fuels works for them and their business.

Propane's fueling infrastructure is nimble, scalable and easily deployable. It is also extremely cost-effective. All propane vehicles now utilize the K15 quick-connect nozzle. This nozzle reduces fugitive emissions and creates a refueling experience that closely mirrors gasoline and diesel but provides additional safety features the latter two fuels lack.¹⁴ Site preparation for a propane station is quick and easy given the nominal amount of electricity needed to operate the pump and dispenser. This stands in stark contrast to a direct current fast charger (DCFC), which often requires the host site to make additional investments in electric equipment and service before a station can become operational.¹⁵

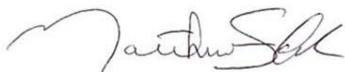
Many fleets have invested in onsite fueling infrastructure for autogas. This infrastructure is substantially cheaper than the electric infrastructure upgrades required for onsite fueling. Autogas refueling stations – which can be public, private, or even temporary stations – are a fraction of the cost of tying a new charging station into the electric grid.

VI. Conclusion

The PPGA believes supporting all clean alternative vehicle fuels will have a more meaningful impact on greenhouse gas reductions than a one size fits all approach. Mandating one fuel source and accepting the premise that there is no future for other sources will limit investments and innovation in decarbonization efforts by current participants in the energy markets. If the assumptions of electrification falter at any point, then critical opportunities to decarbonize other energy sectors may have been lost because those sectors did not feel those investments were worth making in Washington.

Thank you for allowing us to share our feedback.

Sincerely,



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¹³ https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=M_EPLLPA_FPF_NUS_MBBL&f=M

¹⁴ https://afdc.energy.gov/fuels/propane_infrastructure.html

¹⁵ <https://avt.inl.gov/sites/default/files/pdf/reports/DCFCChargingComplexSystemDesign.pdf>