

1200 Smith Street, Suite 730 Houston, TX 77002

Washington State Department of Ecology 300 Desmond Drive SE Lacey, WA 98503

## Re: Comments on Proposed Amendments to Chapter 173-424 WA, Clean Fuels Program Rule

Ladies and Gentlemen:

I am writing on behalf of TES US Development LLC ("TES") to share our company's perspective on key aspects of the Proposed Amendments to the Clean Fuel Standard ("CFS") regulation relevant to electrofuels (e-fuels) producers. We support the Department of Ecology's ("Ecology") CFS program, as it sends a market signal to decarbonize the transportation sector, is performance based, and provides long-term policy stability that supports investment. However, TES respectfully requests that Ecology clarify feedstock requirements for renewable resources to include captured CO2 and authorize facilities that produce e-fuels to source low-carbon intensity electricity via book-and-claim accounting.

TES is accelerating the energy transition and scaling up the hydrogen economy by developing a network of projects to produce electric natural gas (eNG). eNG is a synthetic gas produced by combining renewable hydrogen and captured CO2 through methanation. TES believes that e-NG is the smartest use of available technologies because it can be deployed immediately to displace fossil natural gas in existing gas networks and pipelines. Unlike other emission reduction technologies, e-NG can meet demand for green molecules and slash emissions without waiting for major grid infrastructure upgrades or facility conversion costs. Drop-in fuels, like e-NG, have an enormous opportunity to help Washington meet its emission reduction targets for transportation.

TES respectfully requests Ecology consider the following topics in the CFS update, to advance Washington's transition to cleaner transportation fuels and in furtherance of Washington's climate goals:

## 1) Definition of Biomethane and Synthetic Natural Gas:

The current and proposed amendments to the CFS define biomethane as "methane derived from biogas, or synthetic natural gas derived from renewable resources." As defined in RCW 19.405.020, "renewable resources" does not explicitly include renewable resources of non-biogenic origin (e.g., industrial waste stream or captured CO<sub>2</sub>). While biogenic carbon dioxide from DAC or qualified biomass facilities would qualify as renewable resources, Ecology should expand this definition to include unavoidable industrial emissions, including waste CO2.

The promotion of synthetic hydrocarbon fuels is a key contributor towards energy diversification and decarbonization of the transportation sector, especially for drop-in fuels that can significantly reduce emissions in the near future with existing fleet and infrastructure. In addition, such fuels contribute to the recycling of  $CO_2$  emitted to the atmosphere due to the use of waste streams of non-biogenic origin which are unavoidable and an unintentional consequence of industrial processes.

TES recommends that CFS include a standalone definition for "renewable resources" to clearly define the feedstocks that are allowed in low carbon fuel pathways and extend the scope to include a broader range of sources beyond the traditional



"biogenic sources," in accordance with established federal and international practices. As an example, the United States Department of Energy ("DOE") Office of Energy Efficiency & Renewable Energy defines renewable carbon resources as *"carbonbased resources that are regularly regenerated, either via photosynthesis (e.g., plants and algae), or through regular generation of carbon-based waste (e.g., the nonrecycled portion of municipal solid waste, biosolids, sludges, plastics, and CO<sub>2</sub> and industrial waste gases)." Also, the recently approved Green Hydrogen Standard defines eligible sources of CO2 to include <i>"biomass, biomass waste, and/or bioenergy, direct air capture, unavoidable industrial emissions, or emissions that have paid comprehensive compensation through a credible carbon price."* TES recommends expanding CFS to adopt a similar approach towards the applicability of synthetic natural gas and other e-fuels.

TES would like to highlight the state, federal, and international level recognition of the importance of carbon capture, utilization, and storage ("CCUS") strategies in achieving climate goals and urges Ecology to consider how limiting "renewable resources" to biogenic sources would exclude leveraging existing industrial waste streams via carbon capture to produce low carbon fuels.

## 2) Book-and-Claim

Ecology's proposed amendments do not adequately support the nascent e-fuel industry in that the proposed regulatory structure does not recognize the benefit of renewable hydrogen used as a feedstock for transportation fuel production. The current and proposed CFS only recognizes book-and-claim (B&C) accounting for renewable electricity or biomethane used as a transportation fuel. Given the overarching intent of CFS to support Washington's transition to low carbon fuels and drive GHG emissions reductions, TES recommends Ecology consider expanding B&C to explicitly include renewable hydrogen used as a transportation fuel or as a feedstock to produce e-fuels. Specifically, TES recommends Ecology confirm that Tier 2 pathways for e-fuels can apply B&C accounting for offsite renewable electricity used to produce renewable hydrogen as a feedstock. This could be achieved by adding renewable hydrogen produced using connected or offsite renewable electricity as a specified source feedstock under WAC 173-424-600 (6).

## 3) Availability of Fuel Pathways

TES would like to note that the current CFS regulation does not include any Tier 1 or Temporary fuel pathways specific to synthetic natural gas or other e-fuels with  $CO_2$  conversion. TES recommends Ecology develop either a Temporary or Tier 1 pathway for synthetic fuels or e-fuels that convert  $CO_2$  to common products (e.g., methane, methanol, liquid hydrocarbon fuels). This would help support technology developers and fuel producers to bring these low-CI, drop-in fuels to market, thereby accelerating Washington's transition away from fossil fuels while minimizing overall cost of infrastructure development.



We appreciate your review and consideration of our recommendations, and we are ready to provide assistance as needed to support the development of e-fuels and the decarbonization of the transportation sector.

Sincerely,

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Alexandra Pieton President TES US Development