

Phillips 66

Phillips 66 comments on WAC 173-446 (attached file)



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Submitted Electronically via On-Line Public Comment Form

Phillips 66 Comments on Proposed Washington Department of Ecology Rulemaking - Chapter 173-446 WAC, Climate Commitment Act Program

Dear Mr. Grice:

Phillips 66 Company (Phillips 66) appreciates the opportunity to comment on the proposed regulations issued by Washington Department of Ecology (Ecology) on May 16, 2022, for Chapter 173-446 WAC, Climate Commitment Act Program, also called Washington's Cap and Invest program. Phillips 66 operates a petroleum refinery in Ferndale, Washington and is a major supplier of petroleum fuels in the State where we primarily market through the 76[®] brand. This rulemaking will directly impact our operations. Phillips 66 has experience with large Cap and Trade programs with our operations in California and Europe.

The program as proposed would require very aggressive GHG emission reductions from all sectors of Washington's economy. We understand it would start as a stand-alone Washington-only program not yet linked to the similar California/Quebec program, although linkage is a future goal. We are concerned that a shortage of allowances, especially for fuel suppliers, will render the program unstable and subject to volatility. Potential volatility would not be positive for the program, for Washington businesses, and certainly not for Washington consumers of gasoline, diesel, and natural gas.

Increased production and use of biofuels, by industrial users, and by fuel suppliers and their consumers, could prove to be a significant opportunity for Washington to reduce GHG emissions. We strongly encourage Ecology to embrace and support the production and use of biofuels in the Cap and Invest regulation and we highlight this in our below comments.



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This letter is in addition to comments we submitted on January 26, 2022. Also, we support and incorporate by reference the comments submitted by the Western States Petroleum Association (WSPA), dated July 14 or July 15, 2022. WSPA recommends specific amendments that could help ensure program stability and strengthen cost containment.

Biomass-Derived Fuels (Biofuels)

Refiners and fuel suppliers such as Phillips 66 have limited options to reduce GHG emissions and the associated compliance obligation under the proposed Cap-and-Invest program since demand for our fuels will continue. Among the options we do have, liquid fuel suppliers can reduce obligated GHG emissions by supplying biofuels such as renewable diesel to Washington consumers. Similarly, natural gas fuel suppliers can reduce their obligated GHG emissions by supplying biogenic-based (renewable) natural gas to Washington consumers.

We recommend that Ecology work to ensure that the following three regulations work together to embrace and support expanded production and use of biofuels in Washington:

- Chapter 173-441 WAC: Reporting of Emissions of Greenhouse Gases
- Chapter 173-446 WAC: Climate Commitment Act (Cap and Invest) (proposed)
- Chapter 173-424 WAC: Clean Fuel Program (proposed)

Rule 173-441 requires that facilities and fuel suppliers report use of fossil fuels and biofuels separately. This is important because fossil fuels and biofuels have different compliance obligations under Cap and Invest in Rule 173-446. Rule 173-446 when crafted properly should clearly and definitively place zero compliance obligation on any end-use combustion CO₂ emissions from biomass-derived fuels (biofuels). (The N₂O and CH₄ emissions from biofuels would still have obligation). The biofuel end-use could be industrial, home, commercial, or transportation. Rule 173-424 is more complex in that it addresses the full lifecycle GHG emissions of primarily transportation energy.

We have reviewed the entire proposed Cap and Invest regulation with a focus for how biofuels are addressed in Sections 173-446-020 (Definitions), Section 173-446-040 (covered emissions and exemptions) and Section 173-446-200 (Total Program Baseline). We provide recommendations to either clarify compliance and/or fully encourage expanded use of biofuels:

- **Section 173-446-020 Definition:** *“Biomass-derived fuels, biomass fuels, biofuels” means fuels derived from biomass that have at least 40 percent lower GHG emissions based on a full life-cycle analysis when compared to petroleum fuels for which biofuels are capable as serving as a substitute.”*

We recognize that this language is specified in Senate Bill 5126. The restriction narrows the subset of biofuels for what is exempt under Cap and Invest. However, this raises significant issues for how Ecology will 1) establish the Total Program Baseline in Section 173-446-200 and 2) establish what fuels are exempt for compliance purposes in Section 173-446-040.

Ecology may not be currently equipped to address this issue for either the total program baseline or for 2023 biofuel compliance. Records do not exist for the baseline years on whether the fuels met the 40-percent threshold. Also, Rule 173-441 and the reporting tools are not set up to allow reporting of fuels as meeting the 40-percent threshold. With the reality of these issues, we recommend that Ecology take a simpler path at least for the first compliance period and exempt all fuels derived from biogenic sources for purposes of both the program baseline development and future compliance. This will give time for Ecology and obligated parties to develop credible baselines on which to set standards.

Recommendation: Ecology should revise Section 173-446-020 to state that for compliance period 1 (2023-2026), biofuels mean any fuel that is derived from biogenic sources. It should also state that the “40-percent lower GHG” criteria does not apply in compliance period 1.

- **Biofuel Supplier Compliance 2023+:** If Ecology accepts the recommendation proposed above for the first compliance period, then the compliance status for biofuels for compliance period 1 becomes clear under Section 173-446-040. If Ecology does not accept this recommendation, then Ecology will need to make unsupported assumptions on biofuel quality (regarding the 40 percent threshold issue) for the total program baseline and it will need to make changes to the reporting rule (173-441) regarding biofuels meeting the 40 percent threshold.
- **Biogas:** WAC 173-446-040(2)(a)(i) clarifies that exempt emissions include “carbon dioxide emissions from the combustion of biomass, renewable fuels of biogenic origin, or biofuels from any facility, supplier...”. This is a good clarification and builds on the definitions in Section 173-446-020. However, Section 173-446-040(3)(a)(i)(C) states that covered emissions from facilities include: “*Emissions from the on-site combustion of fuel product where the fuel product was generated or modified on-site and not purchased in its combusted form from a supplier. These fuel products may include, but are not limited to: Refinery gas, still gas, fuel gas, landfill gas, and **biogas***” (emphasis supplied). We do not understand the inclusion of “**biogas**” here. There is no definition of biogas in the regulation that would help clarify precisely what Ecology intends by use of “biogas” here, but we interpret the word “biogas” based on its common usage, which is any carbon molecule that is derived from biogenic sources such as, but not limited to, biogenic-sourced methane, ethane, propane, butane, pentane, and similar light carbon-based molecules. Biogas should be treated as exempt if used in facilities whether it is purchased or generated on-site due to its biogenic origin.

Entities may wish to utilize biogenic gases generated on-site in their processes. Examples of this include: 1) renewable fuel gas that is derived from onsite processing of biogenic-based agricultural oils and biogenic-based waste oils and pyrolysis oils, and is then used as



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fuel for refinery heaters and boilers, 2) renewable natural gas as fuel for refinery heaters and boilers and 3) renewable natural gas that is used to produce hydrogen.

The inclusion of the word “biogas” as a covered fuel threatens these positive uses of renewable gases.

Recommendation: Delete “biogas” from Section 173-446-040(3)d(a)(i)(C) as its inclusion contradicts the definitions and exclusions for biomass and biofuels.

- **Refinery Processing of Biogenic Materials:** As discussed earlier, Washington refineries could respond to the proposed regulations and process biogenic feedstocks to produce a range of liquid biofuels and byproducts. Each refinery has different technologies capable of processing different biogenic feedstocks to produce different biofuels. Some may “coprocess,” which means they will combine biogenic feedstocks with petroleum feedstocks in the reaction process. Others may do “dedicated” processing, which means they will dedicate part of the refinery to process only renewable feedstocks. The optimal solution for each refinery may be different. Our experience in California suggests that each Washington refinery will need to work with Ecology to establish unique measurement and reporting protocols for proper reporting of biogenic products and byproducts. Similar to our California experience, we are assuming that Ecology is agreeable to developing the necessary protocols with refineries. Based on this assumption, the existing language in Section 173-446-040(2) is adequate as written for now where it states: “Exemptions: Covered emissions do not include the following emissions reported under chapter 173-441 WAC: (i) carbon dioxide emissions from the combustion of biomass, renewable fuels of biogenic origin, or biofuels from any supplier or first jurisdictional deliverer”. If our assumption is incorrect, this language may need to be further clarified.

Holding Limits and Auction Purchase Limits

- **Holding Limit:** A company with a large compliance obligation must manage their holding account and compliance account to meet the combined limit defined in Section 173-446-150(2). The mathematical limit in (2)(a), which we calculate to be roughly 3.5 million tonnes in the early years, is constraining for a company that may have an annual compliance obligation of above 3.5 million tonnes.

However, we note that (2)(c) states that the holding limit in (2)(a) of roughly 3.5 million tonnes “do not apply to the allowances held in the compliance accountthat are needed to cover estimated GHG emissions for the current year or emissions for preceding years.” We interpret this to mean that the holding limit excludes the volume of allowances needed for eventual surrender to Ecology for compliance. This is the only feasible way we could comply with the holding limit in



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Section 173-446-150. Please confirm that our interpretation is correct. If incorrect, increases to the holding limit in (2)(a) would be required to allow compliance.

- **Purchase Limit:** In our January 26, 2022, letter we communicated our concern about the proposed limit in chapter 173-446-330 that covered entities shall not purchase more than 10 percent of the allowances available at each auction. It is possible that our requirement for compliance may exceed the 10 percent limit. As a result, the purchase limit could force Phillips 66 and other entities to purchase allowances in the external markets just to ensure compliance.

Recommendation: We recommend expanding the purchase limit to 25 percent of allowances at each auction, or Ecology should interpret the statute’s direction for “available allowances” to include allowances allocated to the APCR plus those provided at no cost to electricity and natural gas providers and EITE industry. In parallel with this, we do recommend that Ecology evaluate the obligation of larger obligated parties and their ability to purchase sufficient allowances at auction, and recommend future legislative changes where needed.

Phillips 66 Ferndale Refinery

Our Ferndale, Washington refinery has been producing fuels for Washington and Oregon consumers since 1954. It has benefitted from many major improvements in its six decades of operation including continuous improvement in energy efficiency and reduction of GHG emissions. We are proud that Ferndale has been certified by the US Environmental Protection Agency (EPA) as an “Energy Star” facility in seven of the last eight certification years.

These comments have stressed that Ecology should ensure that the three key carbon regulations (Chapters 173-441, 446 and 424) work together to encourage production and use of biofuels in Washington, and that this could prove to be one of the largest GHG-reducing actions that Washington can pursue.

Phillips 66 did pursue adding major new renewable fuels facilities at Ferndale in 2018-2020 and reached an advanced stage of project engineering. The project unfortunately did not advance due in part to uncertainties on environmental permitting. State and County/local support is absolutely necessary as Phillips 66 and others consider future biofuels and/or other clean energy initiatives at Ferndale or elsewhere in the State.

Project Development

Washington law, supported by the Cap and Invest regulation, requires that Washington reduce statewide GHG emissions by 45% by 2030, with even more stringent goals in 2040 and 2050. This

progress cannot happen without combined effort from government and industry to successfully plan, design, permit, built and operate new technologies to reduce statewide GHG.

Projects that reduce or enable GHG reductions should receive proper environmental and permitting review but may deserve an expedited process to secure GHG reductions as soon as possible. The State and companies must invest billions of dollars in the next 20 years to achieve the future goals. Project developers must have confidence that projects will be approved and can be built within a reasonable period of time. Projects that reduce GHG emissions sooner result in lower cumulative GHG in the atmosphere. We support Ecology efforts to streamline project review and permitting.

Thank you for this opportunity to submit comments. You can reach me at 832-765-1779 or steven.d.smith@p66.com, or Sourabh Pansare at 832-865-1274, or Lester Keel at our Ferndale Refinery at 360-384-8375.

Best Regards,

Steven D. Smith



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