



Submitted Via Washington State Department of Ecology Comment Submittal Form

August 31, 2022

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

**Re: Comments on Proposed Clean Fuels Program Rule and Air Quality Fee Rule**

Dear Ms. Assink:

On behalf of Diamond Alternative Energy and Valero Renewable Fuels (hereafter collectively and respectively “Valero”), I appreciate the opportunity to provide these comments regarding the proposed Clean Fuels Program Rule and Air Quality Fee Rule (“CFP”).

As one of the largest producers, importers, and sellers of transportation fuel in the United States, Valero is committed to lowering the carbon intensity of our fuels. Through its Diamond Green Diesel joint venture, Valero operates the largest renewable diesel plant in the United States, with an annual capacity of 690 million gallons in 2021 that will expand to 1.2 billion gallons annually, making it the predominant renewable diesel producer in the United States and the second largest in the world. Valero is North America’s largest renewable fuels producer and is the world’s second largest corn ethanol producer, with 12 ethanol plants in the U.S. and a total annual production capacity of 1.6 billion gallons per year. Valero is among the leading producers of ultra-low-carbon cellulosic ethanol and we are aggressively pursuing measures to reduce the carbon intensity of our ethanol production through carbon sequestration.

Based on the varied roles Valero plays in manufacturing and supplying both traditional and renewable fuels to existing low carbon markets, Valero is uniquely situated to identify programmatic developments aimed at ensuring Washington’s carbon reduction targets are met. With this in mind, Valero offers the following comments to improve Washington Department of Ecology’s (“Ecology”) proposed Clean Fuels Program.

**I. Funding**

Ecology has stated that program fees will be established for deficit generators and program participants in order to provide the same degree of administrative support and oversight as the California LCFS program. It is likely, however, that the burden of fully

supporting such a resource-intensive program among a relatively small pool of providers and credit generators will result in substantial fees. Participant fees will disincentivize renewable fuel producers sending product to Washington.

At the same time, failing to staff the program adequately could create regulatory impediments to supply and fuel shortages. To balance these competing considerations, Ecology should design the program to take full advantage of the research and review that has been done by entities such as Argonne National Laboratories and should prioritize administrative efficiency measures to minimize the staffing burden.

## **II. Renewable Naphtha should be considered consistently across the regulation**

Renewable Naphtha is included in the definitions and in *Table 3. Washington Energy Densities and Conversion Factors for Fuels and Blendstocks* of the CFP, but is not included in the body of the regulation. Ecology should consider including renewable naphtha consistently across the regulation, including, but not limited to, the following sections:

- WAC 173-424-120 (Applicability);
- Table 5. Washington Land Use Change CI Values for Biofuels CI Determination;
- Table 6. Washington Carbon Intensity Lookup Fuel Pathway Table;
- Table 7. Washington Substitute Fuel Pathway Codes; and
- Table 8. Washington Temporary Fuel Pathway Codes.

## **III. Establish a lookback period aligned with the statute of limitations**

Ecology should consider establishing a maximum lookback period for correction of historical CIs, credits, and deficits. Nothing in the CFP regulation explicitly prevents Ecology from going back to previous versions of the regulation or models. Therefore, if an error is discovered, it is unclear how far back Ecology can go to revise this error. Expressly limiting historical lookbacks to a period aligned with the applicable limitations period for bringing administrative enforcement actions would provide more stability and market certainty and would facilitate commercial agreements between producers and distributors. It would also reduce the resource demand on auditors and Ecology staff, which in turn would facilitate a more focused and in-depth review during the annual audits. Because audits are conducted annually, the risk that an issue would fail to be identified and addressed is minimal.

This type of lookback period is consistent with periods used by many agencies, including the Environmental Protection Agency (“EPA”), the Internal Revenue Service (“IRS”), and the Department of Health and Human Services (“HHS”). For example, EPA has multiple lookback periods aligned with the relevant enforcement limitations period, including ones for regional haze assessments and stationary source review.<sup>1</sup> Additionally,

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<sup>1</sup> 40 C.F.R. § 51.308(g)(3); 40 C.F.R. § 68.42(a).

the IRS has a defined lookback period for assessing tax-exempt entities during excess benefit transactions,<sup>2</sup> and HHS has a five-year lookback period for Medicaid eligibility.

This should be added to WAC 173-424-400(1) which requires records to be maintained for at least 10 years and the 10-year retention period should be adjusted to match the lookback period.

**IV. Production allocation should be based on monthly or quarterly yields based on operational data that corresponds to the reporting quarter**

WAC 173-424-400(8)(c)(xvii) and d(iii) require a methodology for allocating the produced fuel volumes to fuel pathway codes, “if not using a method prescribed by Ecology”. Ecology should consider as a prescribed method a mass-balance approach to production allocation that does not utilize a constant average production yield that corresponds to the pathway period. Renewable fuel producers are continuously striving to improve product yields through production efficiencies. In cases of production upsets, the yields will fall. As yields are not predictable and cannot be calculated in advance and in order to accurately assign fuel to feedstock, current yields should be used on a monthly or quarterly basis as determined by process information that will be included in the annual pathway report to be verified. Unless fuel producers are allowed to use actual yields, there is the potential for high-CI feedstocks to be unfairly categorized as low-CI feedstocks when assigning fuel volumes as well as the opposite. Requiring monthly or quarterly yields for determining production allocation based on production data will ensure that the fuel is appropriately assigned to the feedstock that was physically processed at the production facility.

**V. Allowance for claiming credits outside the reporting period**

WAC 173-424-510, and all sections that reference it, state that no credits may be claimed and no deficits may be eliminated retroactively. However, deficits may be added retroactively. This practice may distort the program’s actual impact in reducing carbon intensity and may disincentivize participation in the program. Also, this program structure may unfairly penalize producers for situations beyond their control – for example, if an emission factor is misstated in the Tier 1 calculator, the producer will be denied credits unfairly. The rule should provide Ecology staff with the flexibility to make case-by-case determinations to recognize credits and eliminate deficits retroactively under appropriate circumstances consistent with the objectives of the program. In addition, as Ecology updates carbon intensities, parent and child fuel pathway codes should be linked through in the system to recognize the fuel as a gain/loss of inventory rather than as a deficit creation on the entire volume of fuel held under a historical pathway.

**VI. Carbon Intensity of electricity should be on the same updated cycle as the GREET updates**

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<sup>2</sup> 26 U.S.C. § 4958.

Per WAC 173-424-600, Ecology intends to update the utility-specific and statewide average electricity carbon intensity (CI) annually. However, the GREET calculators, including the electricity emission factors, will be updated every three years. Valero requests that Ecology update the emission factors for grid electricity for all regions on the same schedule as Ecology updates the Washington CI for grid electricity. After establishing a cohesive timeline, Ecology should then update the associated GREET and Tier 1 models to account for the grid emission factor changes. This would ensure equity for renewable transportation fuels across geographic regions.

## **VII. Factors included in the GREET models that are determined to be in error should not be considered a Tier 2 pathway**

If a review of the GREET model finds that an emission factor or other standardized value included in any of the GREET models is determined to be in error, this should not result in an application being a Tier 2, if the application would otherwise have been a Tier 1 model. This should be stated in WAC 173-424-600(5).

## **VIII. Temporary Fuel Pathway Codes**

Per WAC 173-424-610(8), temporary fuel pathway codes must be requested by a regulated party or credit generator. Many renewable fuel producers do not operate in the state of Washington and may not be the importer of record of the fuel. However, these same facilities are the ones that must apply for a fuel pathway code for their customers to import fuel into the state. These fuel producers must supply documentation of the fuel, fuel pathway code, and other required information to the importers in order to meet the reporting and recordkeeping requirements proposed. Ecology should allow for renewable fuel producers to apply for temporary fuel pathway codes in addition to regulated parties and credit generators. In this way, renewable fuel producers will also hold responsibility for not importing fuel into the program without valid documentation.

## **IX. Completeness determination process**

Implementation of the CFP must be robust enough to ensure that Ecology is able to process applications in a timely manner and that reporting entities are not left waiting for agency action to continue operation. Prompt action on pathway applications allows low-carbon fuels to quickly reach the market and begin reducing carbon emissions. Delays in pathway application processing, on the other hand, can lead to significant issues for producers, including uncertainty around plant operation and the risk of enforcement related to action that is outside of the entity's control, as well as postponing the carbon reductions that would otherwise be achieved.

WAC 173-424-610(10) limits the fuel pathway application process to 180 days of Ecology's receipt of the application. However, Ecology also has 30 days after the application is received to issue a completeness determination. If there are any further requests from Ecology, then Ecology has an additional 30 days to determine if the supplemental data is complete. After multiple back-and-forth communications, there will

be no time left in the 180 days allowed to complete the initial validation. This provision should be changed to allow the 180-day denial to be extended based on the fuel pathway applicant's responsiveness and for the process to continue to CI approval.

Additionally, Valero proposes that the 180-day timeframe to complete validation begin to run only after Ecology releases the pathway for validation. During that validation time period, reporting entities should be allowed to ask Ecology for a decision, and if Ecology does not provide an answer to complete the validation within one month, the validation time period should automatically be ex

tended without the petitioner needing to resubmit the pathway or without risk of pathway denial.

## X. Requests to postpone calibration

WAC 173-424-610(12)(b) requires approval from Ecology 30-days prior to missing a calibration. In the event of an upset or force majeure, or other unforeseen issue, fuel producers may not have 30-day's notice to request approval. Instead, Ecology should consider adding missed calibrations to section 13 missing data provisions. This would require full disclosure of any missed calibrations, with proper documentation of the circumstances and also correspond to any other missing data disclosures.

## XI. Indirect Land Use Change (ILUC) Factors

Many of the current ILUC factors proposed in Table 5 by Ecology, such as that for soybean oil used in renewable diesel production, are based on modeling that is several years old and out of date. Understanding that ILUC modeling is complex and the model inputs are not available in a world-wide, clear, standard, and concise format, Argonne National Laboratory has completed ILUC modeling for the feedstock/fuel combinations that Ecology is proposing to regulate. Ecology should adopt the ILUC factors in the Argonne GREET model for use in Table 5, and continue to update these Argonne ILUC factors as they are released.

The purpose of the Indirect Land Use Change (ILUC) factors used by Ecology are to account for the additional carbon impacts that crop-based fuels have, when compared to fuels made from other feedstocks (such as yellow grease, which is otherwise a waste). Alternatively, Ecology should give positive consideration for land that has been used to produce crops for transportation fuel for more than 15 years. Since ILUC is based on the idea that the biofuel crops are grown on acreage formerly devoted to food and livestock feed production, it should account for and give credit to the land that has for the past 15 plus years been used to produce crops for biofuels.

An example of another low carbon fuels program that is using this concept is Canada's Clean Fuel Regulations<sup>3</sup>. Paragraph 54 requires approval to use a feedstock originating from a country that has increased its agricultural land since July 1, 2020. This

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<sup>3</sup> Canada's Clean Fuel Regulations (SOR/2022-140). <https://pollution-waste.canada.ca/environmental-protection-registry/regulations/view?Id=1170>

concept should also be used by Ecology to ensure that deforestation and the loss of biodiversity are not incentivized.

ILUC is not a simple scientific concept and therefore should not be addressed with a simple, and in this case “global”, factor. In developing regional ILUC factors, Ecology has an opportunity to truly incentivize novel and responsible farming technologies.

### **Additional CFP Considerations**

Valero offers the following comments to improve the CFP. These changes would better encourage the use and production of low carbon fuels by providing sufficient regulatory certainty for participants to increase their investments and send long-term market signals to investors.

#### **I. Expand indirect accounting within the transportation sector**

The CFP currently allows reporting entities to use indirect accounting mechanisms for low-carbon intensity electricity supplied as either a transportation fuel or to produce hydrogen for transportation purposes. Ecology should extend indirect accounting to feedstocks such as low carbon electricity, low carbon hydrogen, or renewable natural gas utilized in the production of renewable transportation fuels such as renewable diesel and low CI ethanol as doing so would aid in further decarbonization of the grid and further encourage investment in low-CI fuels.

Ecology should also make considerations that best fit its market and the goals of the LCFS and look for specific opportunities to drive technological advancement in the transportation fuels sector. Valero requests that Ecology expand the permissibility of book-and-claim accounting for feedstocks or utility inputs for the production of biofuels, such as “dispatchable” low-CI electricity supplied to an independently-operated grid and low-CI hydrogen or renewable natural gas injected into regional pipeline networks. Additionally, indirect accounting should be available to low-CI electricity, low-CI hydrogen, and renewable natural gas used in the production of biofuels.

#### **II. Allow credit for displacement co-products not used for transportation fuel**

Valero requests that Ecology allow for credit for displacement co-products not used for transportation fuel. Co-products from the renewable transportation fuel process that are used outside of the transportation sector, such as renewable diesel sold as heating fuel, displace fossil fuels in various uses and should receive credit for doing so by accounting for this displacement in the fuel producer’s CI score. The inclusion of non-transportation uses for co-products would incentivize the use of these fuels, resulting in further carbon reductions, and would not take away from the goal to decarbonize the transportation sector. However, for co-products that are also a transportation fuel, whether sold in California or not, Ecology should continue to use the volumes as part of the allocation factor.

#### **III. Increase flexibility for operational CI calculations**

Valero recommends that Ecology enhance regulatory certainty for complying with, and clarify the enforceability of, the CFP program by adopting (1) a force majeure clause for operational CI calculations and (2) a de minimis threshold for variations in operational CI score.

First, Valero requests that Ecology include a force majeure clause to prevent punishing reporting entities in situations where operational CI scores are affected by emergency situations. For example, during a period where a production facility is forced to shut down due to extreme events such as earthquakes, fires, or hurricanes, the utility usage for subsequent start-up should be excluded from the annual pathway calculations. The start-up period should be measured as the time it takes to return daily production rates to the same rate immediately prior to the shutdown. To prevent any fraudulent claims, Ecology could require the reporting entity to provide documentation to support the force majeure event timeline.

Second, Valero proposes adding a de minimis threshold for operational CI score variations to encourage flexibility within the CFP program. Ecology should establish an acceptable threshold range for CI scores where an entity would not be considered out of compliance for a minor exceedance of the certified CI score for example, the lower of 0.2 gCO<sub>2</sub>e/MJ or 1.0%. This would add helpful flexibility both in force majeure circumstances and in other circumstances that result in insignificant variations.

#### **IV. Update the program elements to reflect technology and data advancements**

Valero supports updating program elements to reflect technological and other advancements, including:

*a. Update the electricity pathways to include a full lifecycle analysis of carbon emissions related to EV battery production and disposal.*

Electricity used as transportation fuel generates CFP credits based on either lookup table values or specific pathway approvals. However, neither the lookup table values nor the pathway review process properly accounts for the energy consumption and corresponding carbon emissions associated with mining the minerals used in electric vehicle battery production, mineral processing, battery assembly, or in disposal of spent batteries. This oversight is wholly at odds with the comprehensive lifecycle analysis conducted to determine the carbon intensity of other forms of transportation fuel, and it yields a distorted picture of the true carbon footprint of “fueling” electric vehicles (as does the use of the phrase “zero emission vehicles” to describe electric vehicles that rely on batteries containing minerals such as lithium, nickel, and cobalt that are produced and processed outside the United States in an energy-intensive manner). Data is available to support development of a fair and transparent assessment of these energy impacts, as shown in the Argonne GREET model. It is arbitrary to overlook these emissions for purposes of determining carbon intensity scores that result

in credit generation, and such omissions may result in misleading the public about the impacts of their transportation choices.

**b. Adopt administrative procedures to ensure transparency, fairness, and consistency**

Valero recommends that Ecology add administrative procedure language for staff practices that are not currently documented in the CFP regulation or guidance and to ensure transparency, fairness, and consistency. Specifically, guidance regarding Ecology's interpretation of regulatory provisions should be provided to the regulated community as well as to auditors. Officially outlining and cataloging the procedures behind implementation of the CFP program will not only aid in Ecology's ability to run the program smoothly, but will also assist other jurisdictions in using Washington's CFP program as a model.

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Valero appreciates the opportunity to provide feedback at this critical stage of the CFP amendments development. Should you have any questions, please contact me at 210-345-2181 or via email at [deepak.garg@valero.com](mailto:deepak.garg@valero.com).

Sincerely,



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Deepak Garg  
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