

Tuesday, August 30, 2022

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

VIA ONLINE SUBMISSION

RE: *Formal Comments Regarding the Washington Department of Ecology's Proposed Rule for the State's Clean Fuels Program Rule, Chapter 173-424 WAC*

Dear Ms. Assink:

The Yale Carbon Containment Lab (CC Lab) appreciates this opportunity to comment on the Washington Department of Ecology's proposed final rule establishing a clean fuels program, Chapter 173-424 WAC. The CC Lab broadly supports Ecology's proposed final rule but recommends Ecology soon incorporates carbon capture, utilization, and sequestration (CCUS) and carbon dioxide removal (CDR) as a standalone credit-generating pathway in a subsequent rulemaking.

The CC Lab helps tackle the climate crisis by contributing to the evolution of carbon credit markets and by delivering innovative, low-cost, safe, scalable, and verifiable methods of atmospheric carbon reduction and containment. The CC Lab's efforts in Washington State include increasing and prolonging containment of carbon in woody biomass thereby mitigating the risk of severe wildfires, capturing carbon dioxide with enhanced mineral weathering, and geologically sequestering carbon dioxide into basalts from a range of emissions sources (including direct air carbon capture, direct emissions carbon capture, biomass-derived energy, and/or from industrial point sources of emissions in the region).

The Legislature has authorized Ecology to reduce GHG emissions per unit of fuel energy through numerous avenues. One of those is by promoting CCUS projects and acknowledging their benefit in the credit marketplace. For example, RCW 70A.535.030 directs Ecology to account for reductions in the carbon intensity of transportation fuels that are attributable to the permanent sequestration of GHGs:

The rules adopted by the department to achieve the [GHG] emissions reductions per unit of fuel energy specified in RCW 70A.535.025 *must include*, but are not limited to, the following:

(1) *Standards for [GHG] emissions attributable to the transportation fuels throughout their life cycles, including but not limited to emissions ... from changes in land use associated with transportation fuels and any permanent [GHG] sequestration activities....*

RCW 70A.535.030 also, along with RCW 70A.535.050, encourages Ecology to enable participants to comply with their carbon intensity reduction obligations by purchasing credits generated by CCUS projects. RCW 70A.535.030(2) directs Ecology to draft rules allowing participants to “demonstrate appropriate carbon intensity values” using “any combination of credit generating activities capable of meeting such standards,” including from “changes in land use and permanent GHG sequestration activities[.]” RCW 70A.535.050 explicitly encourages Ecology to include CCUS as a standalone credit-generating pathway.

To this end, RCW 70A.535.060 directs Ecology to consult an advisory panel “on how to best incentivize and allot credits for the sequestration of [GHG] through activities on agricultural and forestlands[.]” Yet, the proposed final rule does not include CCUS or CDR approaches. CCUS and CDR includes regionally relevant technologies such as enhanced mineral weathering, mineralization of CO<sub>2</sub> into basalt, mass timber, biochar, ocean carbon capture, and CO<sub>2</sub> cured-concrete, all of which have been demonstrated to safely sequester CO<sub>2</sub>; and which could be deployed in the State. Many other emerging CCUS and CDR technologies are also currently being tested and should be considered by the advisory panel when formed.

The CC Lab strongly supports including CCUS and CDR as a credit-generating pathway in a subsequent round of rulemaking. Doing so would invite projects to the State that decrease or remove GHG and conventional air pollutant emissions, enabling the State to meet its ambitious climate and environmental justice commitments. These projects would also contribute to the State’s economy by providing climate-positive jobs that those working in the fossil fuel and/or natural resource sector could transition into. CARB’s *Carbon Capture and Sequestration Protocol Under the Low Carbon Fuel Standard*, August 13, 2018, could serve as a starting point for Ecology’s rulemaking.

The CC Lab shares Washington State’s understanding that time is of the essence to stabilize the climate and hopes Ecology incorporates CCUS and CDR into its clean fuels program as soon as possible but at least by 2025, when Ecology adds programming for Tier 2 fuels.

Sincerely,



Dr. Anastasia O’Rourke  
Managing Director, Yale Carbon Containment Lab