

Rulemaking Action Item B Clean Fuels Program 2024 Rulemaking

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DEQ recommendation to the EQC

DEQ recommends that the Environmental Quality Commission adopt the proposed rules in Attachment A as part of Chapter 340 of the Oregon Administrative Rules.

Language of Proposed EQC Motion:

"I move that the Environmental Quality Commission adopt the proposed rule amendments in Attachment A as part of chapter 340 of the Oregon Administrative Rules."

Introduction

DEQ invited public input on a proposed permanent rule amendments to chapter 340, divisions 253 and 272 of the Oregon Administrative Rules to update calculations of greenhouse gas emissions, fuel pathway approval requirements, and requirements for credits awarded to carbon capture and sequestration projects in order to safeguard the program's environmental integrity. Those divisions respectively govern the Clean Fuels Program and Third-Party Verification programs.

Overview

Background and summary

This rulemaking is being undertaken to make needed updates to the requirements and tools used by the Clean Fuels Program to calculate greenhouse gas emissions in order to safeguard the program's environmental integrity. This includes updating the full well-to-wheels OR-GREET fuel carbon intensity model to version 4.0 and updating and adding simplified calculators for Tier 1 fuels.

This rulemaking also adds requirements to high-risk pathways using specified source feedstocks to better ensure the environmental integrity of those fuels. It adds requirements around how the program handles fuel pathways with carbon capture and sequestration projects to set aside credits into a reserve account for environmental integrity reasons. This rulemaking also adds requirements for the validation of fuel pathway applications and the third-party verification of electricity reporting.

DEQ held two workshops and two rulemaking advisory committee meetings for this rulemaking earlier this year. During each of those meetings, DEQ took comment on the proposed updates to the OR-GREET model and the other proposed rule changes.

Statement of need

Statement of need by topic

Proposed rule or topic	Discussion				
OR-GREET 4.0					
What need would the proposed rule address?	The OR-GREET model and calculators have not been updated since 2018, and in the intervening years there have been significant updates to the GREET and OPGEE models used to calculate the carbon intensity of fossil and low-carbon fuels.				
How would the proposed rule address the need?	This rulemaking updates the OR-GREET model in concert with updates to CA- GREET and requires fuel producers to transition their fuel pathways to the new model and receive updated and more accurate carbon intensity scores.				
How will DEQ know the rule addressed the need?	By monitoring ongoing updates to GREET and other fuel lifecycle analysis models and the scientific literature to ensure efficacy of these rules.				
Verification of fuel pathway appl	lications and electricity reporting				
What need would the proposed rule address?	DEQ has become aware of issues with fuel pathway applications and electricity reporting that have led to illegitimate credits being generated due to errors in reporting and pathway applications.				
How would the proposed rule address the need?	By requiring third-party verification of fuel pathway applications and electricity reporting.				
How will DEQ know the rule addressed the need?	By monitoring the implementation of the third-party verification of the applications and reporting and tracking the errors discovered by verifiers over time.				
Carbon capture and sequestration reserve account					

Proposed rule or topic	Discussion
What need would the proposed rule address?	Carbon capture and sequestration projects pose a unique risk to crediting under the Clean Fuels Program as the carbon intensity score reflects carbon that is stored geologically and there is a risk that the stored carbon may be emitted in future years.
How would the proposed rule address the need?	By requiring fuel pathways with carbon capture and sequestration to set aside some of the credits they would otherwise generate into the reserve account in case of carbon leaking into the atmosphere in future years.
How will DEQ know the rule addressed the need?	By monitoring carbon capture and sequestration projects for leakage and reviewing the efficacy of this provision in future years.
Other rul	e updates
What need would the proposed rule address?	DEQ's experience in implementing the program has shown that there are several areas where the environmental integrity of the program can be improved by clarifying existing and adding additional requirements. That includes requiring attestations for specified source feedstocks, requiring public comment for Tier 2 pathways, and other changes.
How would the proposed rule address the need?	By clarifying the rules and adding additional provisions to safeguard the environmental integrity of the program.
How will DEQ know the rule addressed the need?	CFP staff will provide technical assistance to registered parties and fuel producers on the changes, and then monitor the ongoing implementation of the program and these provisions to determine if they were sufficient.

Rules affected, authorities, supporting documents

Lead division

Office of Greenhouse Gas Programs

Program or activity

Clean Fuels Program and Third-Party Verification program

Chapter 340 action

Adopt				
340-253-1060				
		Amend		
340-253-0040	340-253-0060	340-253-0330	340-253-0400	340-253-0450
340-253-0460	340-253-0470	340-253-0500	340-253-0600	340-253-0630
340-253-0640	340-253-0650	340-253-0670	340-253-1000	340-253-1005
340-253-8010	340-272-0020	340-272-0100	340-272-0110	340-272-0120
340-272-0350	340-272-0415	340-272-0420	340-272-0425	340-272-0500

Statutory Authority - ORS				
468.020		468A.266	468A.268	468A.277

Statutes Implemented - ORS				
468A.265 through 468A.277 468.020				

Legislation

House Bill 2186 (2009), Senate Bill 324 (2015), House Bill 2017 (2017)

Documents relied on for rulemaking

Document title	Document location
	https://www.oregon.gov/deq/rulemaking/Pa ges/cfp2024.aspx
Argonne GREET 2022	<u>https://greet.anl.gov/</u>

California GREET 4.0	ww2.arb.ca.gov/resources/documents/lcfs- life-cycle-analysis-models-and- documentation
California LCFS 2024 rulemaking documents	ww2.arb.ca.gov/rulemaking/2024/lcfs2024

Fee analysis

This rulemaking does not involve fees.

Statement of fiscal and economic impact

Fiscal and economic impact

This rulemaking: (1) Updates the Oregon GREET model, which is used to calculate carbon intensity (CI) scores for the fuels in the Clean Fuels Program, (2) requires electricity reporting entities and fuel pathway applicants to undergo third party verification, (3) creates additional requirements and a reserve account for approved fuel pathways based partly on the use of carbon capture and sequestration projects and (4) makes other adjustments to the rules to clarify processes and better define requirements.

The changes to Oregon GREET update the model to more current science and make the program and its emissions reductions more accurate. There are a wide number of changes from OR-GREET 3.0 to OR-GREET 4.0, and they will affect different fuel producers differently. Some will see their CI scores lowered from the model change, increasing the number of credits they generate, while others will see their CI scores raised, decreasing the number of credits they generate.

Updates to the CI standards due to the updated baselines for E10, B5 and fossil jet fuel will also affect credit and deficit generation across a wide variety of fuels, but the effects are generally modest. Some producers or importers may be more affected than others depending on the fuels they import.

	Proposed OR-GREET 4.0 values			Existing Values from OR- GREET 3.0			Change		
\$/Credit	\$30	\$75	\$140	\$30	\$75	\$140	\$30	\$75	\$140
E10	\$0.0409	\$0.1024	\$0.1911	\$0.0418	\$0.1045	\$0.1951	\$(0.0009)	\$(0.0021)	\$(0.0040)
B5	\$0.0494	\$0.1224	\$0.2284	\$0.0477	\$0.1191	\$0.2224	\$0.0017	\$0.0032	\$0.0060
Gasoline	\$0.0489	\$0.1224	\$0.2284	\$0.0509	\$0.1272	\$0.2375	\$(0.0019)	\$(0.0049)	\$(0.0091)
Diesel	\$0.0583	\$0.1458	\$0.2722	\$0.0559	\$0.1397	\$0.2608	\$0.0025	\$0.0062	\$0.0115

Table 1. Effect of lookup table and CI standard updates in 2026

The above table estimates the cost effect of the updates on imported gallons of pure gasoline, diesel, and imported E10 gasoline and B5 diesel that was blended out of state. This follows the same methodology that DEQ uses for its annual cost posting, with the range of values chosen as \$30 represents current credit market prices, \$140 was roughly the average price in 2023, and \$75 to provide a point in the middle between the two. The analysis was done for 2026, which is the year that the updates are proposed to take effect. The change portion of the table shows that the effect of the updated values is generally less than a cent per gallon of fuel.

Updating fuel pathways from the current to the updated GREET model will require some administrative costs for fuel producers to fill out both models with the 2025 Annual Fuel Pathway Report, and to have their verifier confirm that both models have been filled out correctly if they are subject to third party verification in Oregon. These are one-time costs and DEQ estimates that they could cost each producer up to a few thousand dollars.

Based on the above, the overall fiscal and economic effect of the OR-GREET updates is generally modest across the program's participants. Individual companies will see different effects from the change – some low-carbon fuel producers may generate more credits and have a positive impact from the changes, others may generate fewer credits. All would need to switch to the new models and absorb those costs. A fuel importer who imports mainly gasoline could see their costs decrease, while one that imports mainly diesel could see their costs increase to the extent they are still importing fossil diesel in 2026. How individual companies will be affected is difficult to estimate ahead of time as different companies are differently situated and may react differently.

The elimination of the hydrogen lookup table values and addition of the Tier 1 calculator for that fuel will require those producers to incur some additional costs to compile and apply for fuel pathways with DEQ to report their fuels. That effort will cost several thousand dollars per application, but if their fuel's carbon intensity has a lower value than the more conservative lookup table values in the current program, they will generate more credits in the program and thus benefit from additional revenue.

The additional requirements for fuel pathway applicants and electricity reporting entities to undergo third party verification will require them to pay for a verifier to review their data. Verification costs will vary depending on the complexity of the verification being required. For fuel pathway applicants this verification is a one-time cost, as it is only required for the application process and existing rules already determine whether they must undergo verification on an annual basis for their annual fuel pathway reporting.

For entities that only report electricity transactions, this rulemaking will now require them to go through third party verification and pay for a verifier if their reporting is over the threshold. California estimates that the costs of verifying electricity transactions is \$0.006 per KWh, reported in their regulatory impact statement in December 2023, based on a survey of verification bodies.

Estimates provided to DEQ for our 2019 rulemaking assessing the cost of thirdparty verification of CFP quarterly reports and fuel pathway applications ranged from \$17,000 for a simple report to \$70,000 for a more complex report or pathway application. Which would put the cost range for validation and verification services now between \$20,000-\$82,000 using the consumer price index to estimate inflation.

The new requirements for fuel pathways that include use of carbon capture and sequestration facilities and the reserve account do result in costs for those facilities in terms of credits they may have otherwise generated going into the reserve

account. The number of credits being put aside will depend on the factors in the risk-based methodology that DEQ is proposing to adopt, which will vary depending on various factors and ranges between 8-16.5% of the credits attributable to the CCS project component of the fuel pathway. The cost to the CCS project operator/fuel pathway holder is the forgone credits times the credit price when they would have monetized them. However, but for the proposed creation of the reserve, if there was future leakage from the CCS storage reservoir, they would have been responsible for the costs of replacing the number of credits commensurate with the amount of that leakage, so this insurance mechanism avoids that potential future cost for them.

The other updates to the rules are largely clarifying existing requirements, better defining processes around corrections and fuel transfer reconciliation, and creating an attestation system for specified source feedstocks. The clarifications and better-defined processes should not create additional costs for regulated parties.

The attestation system will require fuel producers and specified source feedstock suppliers to maintain attestations about those feedstocks and will require their verifiers to review those attestations. This will create some administrative and recordkeeping costs for fuel producers and feedstock suppliers that DEQ estimates will cost several thousand dollars per year per feedstock supplier and producer.

Statement of Cost of Compliance

Oregon Department of Environmental Quality

DEQ will use existing positions to implement changes resulting from the proposed rules.

Other governments

State agencies other than DEQ and local governments that are subject to Division 253 may experience the fiscal impacts as discussed in the Fiscal and Economic Impacts section above.

Public

The public may indirectly be impacted if the cost of complying with the proposed rule changes are passed on to consumers by the affected parties. As shown above, the cost of compliance is variable from entity to entity, so it is difficult to quantify a specific impact. Nevertheless, given that the estimated fiscal impacts to regulated entities are modest, DEQ believes the main effect on the public would be any costs passed through from the changes to the standards and lookup table values in Table 1 above.

Large businesses - businesses with more than 50 employees

The impacts described in the Fiscal and Economic Impact section above applies to large businesses that are:

- Fuel producers
- Registered parties
- Aggregators

Small businesses – businesses with 50 or fewer employees

ORS 183.336 - Cost of Compliance for Small Businesses

a. Estimated number of small businesses and types of businesses and industries with small businesses subject to proposed rule.

As defined in Oregon's Administrative Procedures Act, a "small business" means a corporation, partnership, sole proprietorship or other legal entity formed for the purpose of making a profit, which is independently owned and operated from all other businesses, and which has 50 or fewer employees.

Approximately 5 percent of participants in the Clean Fuels Program are small businesses, which equate to about 20-30 participants. They fall into three categories of businesses: local fuel distribution companies, companies that are registered as an aggregator to assist larger companies in reporting data and managing credit transactions, and fuel producers. In addition to aggregators being small businesses, they represent and report on behalf of other companies and organizations, which may also be small businesses.

Some of the specified source feedstock supplying organizations that will be affected by the new attestation requirements may be small businesses, but DEQ does not have the data to estimate how many of those there are that meet the definition.

b. Projected reporting, recordkeeping and other administrative activities, including costs of professional services, required for small businesses to comply with the proposed rule.

The proposed rules may require some small businesses to go through third party verification for the first time, depending on how many credits they generate. Estimates provided to DEQ for our 2019 rulemaking assessing the cost of third-party verification of CFP quarterly reports and fuel pathway applications ranged from \$17,000 for a simple report to \$70,000 for a more complex report or pathway application. Which would put the cost range for validation and verification services now between \$20,000-\$82,000 using the consumer price index to estimate inflation.

Other costs associated with third party verification can include but are not limited to staff time associated with the preparation of, third party verification of, and corrections to their reporting, as well as associated administration and

recordkeeping expenses. DEQ does not have information to provide an estimate of these costs.

c. Projected equipment, supplies, labor and increased administration required for small businesses to comply with the proposed rule.

The costs to comply with this rulemaking are largely administrative and may require some increased labor and recordkeeping costs. Estimates provided to DEQ for our 2019 rulemaking assessing the cost of third-party verification of CFP quarterly reports and fuel pathway applications ranged from \$17,000 for a simple report to \$70,000 for a more complex report or pathway application. Which would put the cost range for validation and verification services now between \$20,000-\$82,000 using the consumer price index to estimate inflation.

Other costs associated with third party verification can include but are not limited to staff time associated with the preparation of, third party verification of, and corrections to their reporting, as well as associated administration and recordkeeping expenses. DEQ does not have information to provide an estimate of these costs.

d. Describe how DEQ involved small businesses in developing this proposed rule.

DEQ took public comment and included representatives from some small businesses and trade groups in the rulemaking advisory committee for this rulemaking.

Documents relied on for fiscal and economic impact

The requirement to list the documents relied on to determine fiscal impact is separate from and in addition to the similar list in the Rules affected, authorities, supporting documents section above.

Document title	Document location
GHG 2019 Rulemaking Notice	Oregon Records Management System
Standardized Regulatory Impact Analysis for 2023-2024 California LCFS rulemaking	https://ww2.arb.ca.gov/sites/default/files/bar cu/regact/2024/lcfs2024/appc-1.pdf

Advisory committee fiscal review

DEQ appointed an advisory committee. As ORS 183.333 requires, DEQ asked for the committee's recommendations on:

- Whether the proposed rules would have a fiscal impact,
- The extent of the impact, and

• Whether the proposed rules would have a significant adverse impact on small businesses; if so, then how DEQ can comply with ORS 183.540 reduce that impact.

The committee reviewed the draft fiscal and economic impact statement and its findings are stated in the summary for the Aug. 14, 2024 meeting, along with follow-up written comments published on the rulemaking webpage.

The committee reviewed the proposed fiscal impact statement and specifics about the committee's fiscal impact review. The committee determined the proposed rules would have a significant adverse impact on some small businesses in Oregon.

As ORS 183.333 and 183.540 require, the committee considered how DEQ could reduce the rules' fiscal impact on small business and did not provide options outside of those proposed within this rulemaking and the existing program for mitigating that impact.

Housing cost

As ORS 183.534 requires, DEQ evaluated whether the proposed rules would have an effect on the development cost of a 6,000-square-foot parcel and construction of a 1,200-square-foot detached, single-family dwelling on that parcel.

DEQ determined the proposed rules would have a negligible effect on the development costs to the extent that they affect fuel prices and fuel costs are included in the cost of developing a parcel and dwelling.

Racial equity

ORS 183.335(2)(a)(F) requires state agencies to provide a statement identifying how adoption of this rule will affect racial equity in this state. Communities that are adjacent to or near transportation facilities and corridors are disproportionately impacted by those emissions and are traditionally lower-income and have a higher percentage of Black, indigenous, and other peoples of color residents. These environmental justice communities have been historically overburdened by transportation emissions and expansion of the program's targets will benefit these most vulnerable Oregonians by decreasing the air pollution to which they are exposed.

DEQ's review of the overall effect of the program in our 2022 rulemaking showed that the program will have modest but positive effects on racial equity by reducing road transportation emissions. DEQ does not believe anything in this rulemaking creates any material changes to the results of that analysis given the limited scope of this rulemaking.

Environmental Justice considerations

ORS 182.545 requires natural resource agencies to consider the effects of their actions on environmental justice issues.

Environmental Justice analysis

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, culture, education or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies. DEQ is committed to incorporating environmental justice best practices into its programs and decision-making, to ensure all people in Oregon have equitable environmental and public health protections.

In our 2022 rulemaking, DEQ analyzed the effects of the program over time on racial equity and used environmental justice communities in part as a proxy for racial equity effects of the program. DEQ's review of the overall effect of the program in our 2022 rulemaking showed that the program will have modest but positive effects on environmental justice communities by reducing road transportation emissions. DEQ does not believe anything in this rulemaking creates any material changes to the results of that analysis given the limited scope of this rulemaking.

Federal relationship

ORS 183.332, 468A.327 and OAR 340-011-0029 require DEQ to attempt to adopt rules that correspond with existing equivalent federal laws and rules unless there are reasons not to do so. The proposed rules are "in addition to federal requirements" since there are no federal regulations that require the reduction in the average lifecycle content of greenhouse gases in transportation fuels, and ORS 468A.265 through 468A.277 require the Commission to adopt and DEQ to operate a Clean Fuels Program. The proposed rules protect the environment and residents of Oregon by ensuring the integrity of the program and continuing its work to reducing greenhouse gas emissions and transition the transportation sector to clean alternatives to fossil fuels.

The closest analogous federal program is the Renewable Fuel Standard, which is a set of volumetric targets for renewable fuels in the transportation sector. That program does not directly regulate the carbon intensity of fuels – though they must meet certain benchmarks to qualify for the program – nor does it cover electricity as a transportation fuel. The Clean Fuels Program's approach directly targets the overall carbon intensity of the state's transportation sector and creates a market-based program and set of incentives to decarbonize transportation fuels and the sector over time. The existing federal requirements are not sufficient to meet Oregon's climate goals or provide necessary support to other adopted regulations in the transportation sector, such as the Advanced Clean Cars and Advanced Clean Trucks rules. In summary, the Clean Fuels Program is necessary to reduce greenhouse gas emissions and thereby mitigate the effects of climate change, which will result in public health and environmental benefits to the people of Oregon.

The rule amendments proposed here are necessary to improve public health and the environment, and make sense from an economic, technological and administrative perspective. These proposed rules will improve the scientific and technical accuracy of the program (updated and more accurate GREET model), will reduce administrative burdens on DEQ staff (expanded third-party verification for fuel pathways), and will help to ensure the integrity of the program to achieve public health and environmental benefits (expanded third-party verification and creation of reserve account for carbon capture and storage projects). For all of these reasons, these rules are necessary notwithstanding that they differ from federal requirements.

What alternatives did DEQ consider if any?

In designing the Clean Fuels Program, DEQ has considered many alternatives to those contained in the proposed rule. Input from advisory committees in 2010, 2012, 2014, 2015, 2016, 2017, 2018, 2020, 2021, and 2022 and extensive outreach with affected stakeholders throughout the process informed the design of the Oregon Clean Fuels Program, and this experience and record was also used as we considered approaches in this rulemaking.

The alternatives to updating the Oregon GREET model that were considered include not updating the model and continuing to use the existing OR-GREET 3.0 model, or moving to a different lifecycle carbon intensity model. Because a significant majority of the pathways used in Oregon are recertified from California Air Resources Boardapproved pathways, failing to update the Oregon model would lead to a different treatment of pathways over time, which could impose additional burdens on fuel producers and DEQ staff. It would also render the program's carbon intensity values increasingly inaccurate over time, as the updated OR-GREET 4.0 model corrects issues and updates various scientific and technological values and processes for different fuels based on the OR-GREET 3.0 model.

Moving to another model would pose similar difficulties. Argonne National Lab produces the R&D version of GREET, and there are multiple other versions of the models in various stages of development by EPA and other federal agencies for different tax credits and the federal RFS. The British Columbia Low Carbon Fuels Standard uses the GHGenius Model, and the Canadian federal government has adopted its own lifecycle model for the Clean Fuels Regulations. While each of these models – including GREET – has its own set of merits and drawbacks, the US west coast low carbon fuel standard states each have their own adopted version of the GREET model based on the CA-GREET model, which provides consistent system boundaries, emissions factors, and an overall approach to calculating transportation fuel carbon intensity values. Moving from that common lifecycle framework would potentially create disparate economic incentives between Oregon's program and its neighbours and would be administratively burdensome for fuel producer, regulated entities, and DEQ.

The alternatives considered to the proposed requirements for third-party verification for fuel pathway applications and electricity reporting were more intensive reviews of both by DEQ staff. Workloads for program staff are already high and providing a similar level of review that third-party verifiers can provide would significantly hinder our ability to operate other portions of the program or lead to unacceptable timeframes for fuel pathway application reviews.

For the Reserve Account and related CCS provisions, the alternative considered for mitigating the reversal risk for these projects were to do nothing and allow the general credit invalidation procedures to apply. This alternative was rejected due to the likely difficulties DEQ would face using those procedures if the reversal occurs years or decades after the credits were issued and used for compliance. Over that timescale, one or more of the parties that DEQ would normally seek to make up for the invalided credits may no longer be operating in the state or operating at all, making it difficult to have those credits replaced.

Land use

Land-use considerations

In adopting new or amended rules, ORS 197.180 and OAR 340-018-0070 require DEQ to determine whether the proposed rules significantly affect land use. If so, DEQ must explain how the proposed rules comply with statewide land-use planning goals and local acknowledged comprehensive plans.

Under OAR 660-030-0005 and OAR 340 Division 18, DEQ considers that rules affect land use if:

- The statewide land use planning goals specifically refer to the rule or program, or
- The rule or program is reasonably expected to have significant effects on:
- Resources, objects, or areas identified in the statewide planning goals, or
- Present or future land uses identified in acknowledge comprehensive plans

DEQ determined whether the proposed rules involve programs or actions that affect land use by reviewing its Statewide Agency Coordination plan. The plan describes the programs that DEQ determined significantly affect land use. DEQ considers that its programs specifically relate to the following statewide goals:

Goal	Title
5	Natural Resources, Scenic and Historic Areas, and Open Spaces
6	Air, Water and Land Resources Quality
11	Public Facilities and Services
16	Estuarine Resources
19	Ocean Resources

Statewide goals also specifically reference the following DEQ programs:

- Nonpoint source discharge water quality program Goal 16
- Water quality and sewage disposal systems Goal 16
- Water quality permits and oil spill regulations Goal 19

Determination

DEQ determined that these proposed rules are not expected to significantly affect land use under OAR 660-030-005 because the proposed amendments are not reasonably expected to have significant effects on either: (a) resources, objectives or areas identified in the statewide planning goals; or (b) present or future land uses identified in acknowledged comprehensive plans.

EQC prior involvement

Information about this item was presented to the EQC during their November 2024 meeting.

Advisory Committee

Background

DEQ convened the Clean Fuels Program 2024 Rulemaking advisory committee. The committee included representatives from stakeholder groups and industry and met twice. The committee's web page is located at: https://www.oregon.gov/deg/rulemaking/Pages/cfp2024.aspx

The committee members were:

Rulemaking Advisory Committee Membership				
Primary Representative	Affiliation	Alternate		
Mark Bunch	BP	Brent Pace		
John Thornton	Clean Future			
Bascomb Grecian	Ed Staub	Nick Staub		
Tad Hepner	Renewable Fuels Association			
Antonio Machado	Western States Petroleum Association	Sophia Steele		
Jeff Earl	Clean Fuels Alliance of America	Floyd Vergara		
Nick Facciola	3Degrees			
Jacqui Treiger	Oregon Environmental Council	Jana Gastellum		
Danelle Romain	Oregon Fuels Association	Mike Freese		
Kari Buttenhoff	Christianson PLLP	Danielle Anderson		
Zhichao Wang	Eco Engineers			
John Sens	Chevron REG	Curtis Powers		
Sam Wade	RNG Coalition			
Jessica Hoffman	RPMG	Jon Costantino		
Gonca Seber Olcay	International Council on Clean Transportation	Jane O'Malley		

Meeting notifications

To notify people about the advisory committee's activities, DEQ:

- Sent GovDelivery bulletins, a free e-mail subscription service, to the following lists:
 - o Rulemaking
 - DEQ Public Notices
 - Clean Fuels Program

- Climate Protection Program
- Greenhouse Gas Programs
- Greenhouse Gas Reporting
 Third Party Verification Program
- Added advisory committee announcements to DEQ's calendar of public meetings at <u>DEQ Calendar</u>.

Public engagement

Public notice

DEQ provided notice of the proposed rulemaking and rulemaking hearing by:

- On Oct. 4, 2024, Filing notice with the Oregon Secretary of State for publication in the November 2024 Oregon Bulletin;
- Notifying the EPA by mail;
- Posting the Notice, Invitation to Comment and Draft Rules on the web page for this rulemaking, located at: <u>Clean Fuels Program 2024</u>;
- Emailing approximately 25.090 interested parties on the following DEQ lists through GovDelivery:
 - Rulemaking
 - DEQ Public Notices
 - o Clean Fuels Program
 - Climate Protection Program
 - Greenhouse Gas Programs
 - Greenhouse Gas Reporting
 - Third Party Verification Program
- Emailing the following key legislators required under <u>ORS 183.335</u>:
 - Senator Rob Wagner, Senate President
 - Representative Julie Fahey, House Speaker
 - Senator Janeen Sollman, Co-Chair, Senate Energy and Environment Committee
 - Senator Lynn Findley, Co-Chair, Senate Energy and Environment Committee
 - Representative John Lively, Chair, House Climate Energy and Environment Committee
- Emailing advisory committee members,
- Posting on the DEQ event calendar: <u>DEQ Calendar</u>

Public hearing

DEQ held one public hearing. DEQ received one comment at the hearing. Later sections of this document include a summary of the 16 comments received during the open public comment period, DEQ's responses, and a list of the commenters. Original comments are on file with DEQ.

Presiding Officers' record

Hearing

Date No	lov. 21, 2024
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Place	Held electronically via Zoom	
Start Time	4 p.m.	
End Time	4:26 p.m.	
Presiding Officer	Stephanie Summers	

Presiding Officer:

The presiding officer convened the hearing, summarized procedures for the hearing, and explained that DEQ was recording the hearing. The presiding officer asked people who wanted to present verbal comments to sign the registration list, or if attending by phone, to indicate their intent to present comments. The presiding officer advised all attending parties interested in receiving future information about the rulemaking to sign up for GovDelivery email notices.

As Oregon Administrative Rule 137-001-0030 requires, the presiding officer summarized the content of the rulemaking notice.

28 people attended by teleconference or webinar. One person commented orally, and no one submitted written comments at the hearing.

Summary of public comments and DEQ responses

Public comment period

DEQ accepted public comment on the proposed rulemaking from Oct. 4, 2024, until 4 p.m. on Nov. 21, 2024.

For public comments received by the close of the public comment period, the following table organizes comments into topics with cross references to the commenter(s). DEQ's response follows the summary. Original comments are on file with DEQ.

DEQ changed the proposed rules in response to comments described in the response sections below.

List of Comments			
Comment #	Commenter(s)	Comment Summary	Response to Comment
1	Chargepoint, CleanFuture, Carbon Verification Service	Delay the start of electricity third-party verification requirements.	We have updated the rules to start the electricity verification requirements for the 2025 data year in 2026.
2	Tesla, Chargepoint, Electrify America	In-person site visits by verifiers for electricity reporting should be limited to recordkeeping locations and/or the offices of the reporting entity and not the locations of the individual chargers.	The proposed rules do not require site visits to individual electric vehicle chargers, rather they reserve the decision of what must be visited and checked to the verifiers. Verifiers are expected to use their professional judgement to determine if additional sites must be visited in order to ensure that reporting into the Clean Fuels Program is accurate and reasonably assured to be free of material misstatement.
3	CleanFuture	There is no rational basis for imposing verification on all entities covered by aggregators who are over the verification threshold.	The purpose of the verification provisions is to ensure that the program's emissions reductions are accurate. In the absence of a requirement that all entities go through verification every year, or at least every three years, the 6,000 credit and deficit threshold helps ensure that the entities

Comments received by close of public comment period

	List of Comments			
Comment #	Commenter(s)	Comment Summary	Response to Comment	
			reporting the largest amounts of fuel in the program undergo verification, and that the value of the credits they generate is enough to absorb the costs of verification.	
4	CleanFuture, SmartCharging Technologies	Electricity reporting entities should have a higher verification threshold, like the 10,000 credits/year required under the California Low Carbon Fuel Standard (LCFS) rulemaking amendments.	DEQ does not believe a higher verification threshold is warranted for electricity than for other fuel types.	
5	CleanFuture, SmartCharging Technologies	Do not expand verification requirements to electricity reporting.	Verification is needed to ensure that there is accurate reporting into the Clean Fuels Program and that all credits are true and accurate. As electricity reporting has increased in recent years, DEQ staff have found errors in that reporting and have had errors self- reported by the reporting entities. Electricity reporting has not proved more resistant to error than other sectors that go through third-party verification.	
6	Electrify America, 3Degrees	Allow for remote site visits for electricity reporting entities.	DEQ does not believe a change to the less intensive verification rule is warranted at this time.	
7	Chargepoint	The allowance for aggregators proposed in 340-272-0420(2)(d) should be expanded to cover EV network service providers	We agree and have updated the OAR 340-272 to reflect this.	
8	POET, Neste	DEQ should update OR- GREET to allow for climate-smart agricultural practices to reduce the carbon intensity of crop- based fuels	This issue will take significant technical and stakeholder work to determine if it can be adopted and successfully implemented in a scientifically defensible way, and in a manner that can feasibly be implemented by DEQ program staff.	

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9	Tesla	The energy efficiency ratio used for electric vehicles should be updated to better reflect the difference in efficiency between EVs and internal combustion engine vehicles	DEQ did not engage in a review of our adopted EERs for this rulemaking, but will consider this issue as it plans future rulemakings. DEQ also notes that the EER for light duty electric vehicles in OAR 340-253-8010 is 3.4, not 3.2 as described in this comment letter.
10	Novohydrogen	The temporary fuel pathway code for electrolytic hydrogen from renewable electricity should have a lower CI and different assumptions.	Temporary fuel pathway codes are created with conservative assumptions around the carbon intensity of the fuel that fits the description so that the CI for the temporary should always be higher than the fuel's actual CI. That protects the environmental integrity of the program and creates the incentive for the fuel producer to submit a pathway application as soon as they have the necessary data. DEQ notes that the assumptions for this pathway are identical to California's, and both jurisdictions have proposed to delete the lookup table value that you are referencing in your comments as part of the move to treating hydrogen as a Tier 1 fuel with its own simplified calculator.
11	Novohydrogen	For hydrogen fuel production facilities, the OR-GREET model in use at the time the facility is initially certified should remain the OR-GREET model that applies to that facility for the remainder of its lifetime.	Regular updates to the models maintain the technical and scientific accuracy of the program. Especially with emerging technologies for producing fuels, the updates to the carbon intensity models ensure the fuel pathways are fully modeled as fuel production technologies are commercialized, ensuring the accuracy of carbon intensity scores and thus credits and deficits generated under the program.
12	Electrify America	DEQ should assess and act on low credit prices to maintain the incentive to install charging infrastructure.	DEQ regularly monitors the CFP credit market and the supply of and demand for credits. DEQ may consider program adjustments in a future rulemaking if that is needed to maintain the program's investment incentives and continue to advance further low-carbon fuel supply in Oregon.

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13	Neste	Low credit prices indicate that market participants likely believe the current targets are too easy to achieve, and the CI standards should be strengthened to maintain the program's investment incentives.	DEQ regularly monitors the CFP credit market and the supply of and demand for credits. DEQ may consider program adjustments in a future rulemaking if that is needed to maintain the program's investment incentives and continue to advance further low-carbon fuel supply in Oregon.
14	1PointFive	The definition of Carbon Capture and Sequestration(CCS) projections should be expanded to cover direct air capture projects in case DEQ later expands eligibility for credit generation to those projects.	We define terms as they are needed to understand and make operative our regulations. At this point in time, we are not proposing direct air capture be made eligible for crediting, so we will leave the definition as it is proposed.
15	1PointFive	The project risk ratings for CCS projects used to determine the contribution to the reserve account are too high.	The risk ratings mirror those used by California in its CCS Protocol for the Low Carbon Fuel Standard, and DEQ believes that they are appropriate given the relatively short track record we have for understanding the risk of leakage from CCS projects. DEQ plans to review our CCS provisions for this program in 2029 and will review the risk ratings at that time.
16	RPMG	Suggested language edits to the new CCS reserve account rule OAR 340- 253-1060, and creating a trigger for DEQ to stop collecting credits into the proposed reserve account if it determines there are sufficient credits to maintain the program's environmental integrity.	DEQ will review our CCS provisions for this program in 2029 and as part of that review will consider if there is a point where credits in the reserve account should be returned to the producer or project operator and if the risk percentage for the set side should be adjusted.
17	RPMG	Please define leakage as it relates to CO2 being emitted from a CCS project.	We have defined the forms of leakage from the geologic storage area.

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18	RPMG	DEQ should allow related entities to maintain active OFRS reporting tool accounts, even if they had no activity and would otherwise have their registration deactivated from the program.	DEQ adopted the inactivity provisions in the 2022 rulemaking to put OFRS accounts on hold when the reporting entity has not used them for a year as part of our attempt to manage staff workload and ensure that credits and held and traded by companies actively engaged in the fuel marketplace in Oregon. We recognize that out-of-state fuel producers may have a need to hold and transfer credits even though they do not import fuel into the state in a given year due to credit adjustments or contractual arrangements. But given that staff resources are still very limited and that opening up accounts to all related entities for an active reporting entity could mean quite a number of other organizations entering the program, we are not modifying the existing inactivity provisions at this time.
19	RPMG	For the tier 1 calculator for Starch and Fiber Ethanol, DEQ should make the following modifications: (1) A summary line should be added to the site- specific input tab to ease review of the inputs, (2) the "US Average" option for eGrid regions should be removed, (3) the calculator should consider secondary and alternative energy that is directed to or allocated for co-product processing, (4) the default value for feedstock transport should be expanded to include more regions that produce biofuels in addition to the existing 9 state region.	We have reviewed the models and have updated them in line with suggestion (2), but the others would take us out of alignment with the California calculators or DEQ does not have time to implement those changes in the simplified calculators at this time.
20	RPMG	The mass balancing rule should be reworded as suggested.	Thank you for your suggested edits. This rule has needed ongoing explanation and technical assistance

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			from DEQ to regulated parties and credit generators, but given that the rule covers multiple sectors DEQ believes it would need to solicit broader comment prior to making changes to this rule.
21	Neste, RPMG	DEQ should allow for book-and-claim sourcing of biomethane and renewable electricity used as process energy or to create hydrogen used in the process of manufacturing hydroprocessed fuels	Extending the allowance for book and claim biomethane and electricity would add significant complications to those fuel pathways, especially given the year-over-year variation DEQ has seen in some biomethane pathways. It would also pose significant concerns around ensuring that the biomethane and electricity supplies are additional and at least environmentally protective as the requirements that DEQ has adopted for biomethane and renewable electricity. This sort of change to the scope of what is allowed in a pathway application would also need to be reviewed in context of the overall supply and demand for credits in the program, and DEQ does not believe it is warranted at this time.
22	Neste	Fuel delivered to Ocean Going Vessels, Locomotives, and Stationary Generators should be allowed to opt into the Clean Fuels Program to generate credits	Expanding the ability to generate credits in the program to sectors that are otherwise exempt due to the CFP's statute would make it more difficult to balance the supply and demand of credits, especially for sectors like Ocean Going Vessels and locomotives where the ships and trains can choose where to fuel between different states and countries. It would also have the effect of having the non-exempt modes of transportation subsidize fuel going into exempt vehicles.
23	Beta Analytic	DEQ should require carbon dating in regulation for cases where the biogenic portion of a fuel needs to be determined	In practice we have required carbon dating to be used to determine the biogenic fraction of co-processed fuels via pathway conditions that allow us to appropriately tailor the testing requirement to the circumstances, and do not believe it is necessary to write that requirement into rule at this time.

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24	WSPA	Modify the Used Cooking Oil (UCO) definition for clarity and make clearer what counts as processed UCO by clarifying that skimming solids or removing water should not count as processing.	We have slightly modified the Used Cooking Oil definition for clarity. The specificity around what counts as unprocessed versus processed UCO has been left as it was proposed, as the goal of that language is to ensure that all energy and resulting emissions associated with processing UCO are accounted for in the carbon intensity score of fuel made from it.
25	WSPA	Please clarify the source of the unspecified source of electricity emissions factor	The Clean Fuels Program has adopted the use of the unspecified source emissions factor from the Greenhouse Gas Reporting Program. The emissions factor is roughly equivalent to that of onsite emissions at a natural-gas-fired electricity generator and for the lifecycle emissions needed for the Clean Fuels Program DEQ has opted to assign the upstream emissions factor of natural gas to that electricity.
26	WSPA	Define the term 'conventional' for the purpose of where it is used in the Clean Fuels Program division	DEQ believes the dictionary definition of conventional is sufficient in this instance and that it does not need to be specifically defined for this division.
27	WSPA	Please clarify the updated specified source feedstock rules, and do not move forward with requiring the attestation letters for those feedstocks. The requirement that specified source feedstocks not undergo additional processing is too stringent, and specified source feedstocks should be allowed to be mixed with other feedstocks in transport.	Thank you for your comments. California and Washington's programs have also proposed to require the attestation letters. We believe it is appropriate to be consistent in this area of our programs' designs, and to require this additional layer of traceability and assurance that these feedstocks are true and not counterfeited at any point back to their origin. These provisions also do not prohibit processing UCO or another feedstock, but the default emissions factors here do not account for the energy and emissions of processing UCO so that energy and emissions must be included in a fuel producer's pathway application. Section (ii) also does not prohibit commingled transport or storage of different

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			feedstocks; it is aimed at the fraudulent relabeling of feedstocks as specified source. For example, if palm oil was added to UCO, the feedstock transfer documents would need to clearly state how much was palm oil versus UCO in the total shipment, and not fraudulently label the entire shipment as UCO.	
28	WSPA	Allow OR-GREET or CA- GREET 3.0 pathways to be submitted until the end of 2026, or at least until April 30th, 2026. Also clarify which model will be used for annual fuel pathway reports during the transition period.	This change would prevent the program from fully rolling off of the OR-GREET 3.0 pathways until at least 2027. Given the need to have accurate CI values and credit and deficit calculations, we believe the current transition period in the proposed rules is appropriate. We have clarified which years require which models be submitted for the Annual Fuel Pathway Reports.	
29	WSPA	Create a 30-day deadline for DEQ staff to review pathway applications from their submittal	While we endeavor to review pathway applications in a timely manner, DEQ does not have the staff to commit in regulation to reviewing pathway applications that would be necessary to review pathway applications within 30 days. The length of time to review a pathway application can also vary widely depending on the complexity of the fuel production process and feedstocks and the completeness of the pathway application when it is submitted.	
30	WSPA	Allow for corrections to be submitted within 15 days of a quarterly report being opened, instead of 2 business days	Extending the timeline for corrections to be completed and resubmitted to 15 days would threaten the timely publishing of the program's quarterly data summaries, which are necessary for the market to understand supply and demand in the program in a timely manner. Quarterly reports are only reopened when a correction request letter detailing all of the proposed changes has been submitted, and companies should endeavor to ensure that they have found all correctable	

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			errors in reporting when they submit such a letter.	
31	WSPA	WSPA requests that DEQ set the temporary CI of renewable naphtha and alternative jet fuel to the temporary CI values of renewable diesel (at 45 and 65 gCO2e/MJ depending on feedstocks).	DEQ has reviewed the Temporary FPC table and reviewed California's updated CI values for that table in their 2nd Fifteen Day amendment package and has elected to update the CI values for that table to those being adopted by California to maintain regional harmonization and set these temporary CI values at reasonably conservative levels.	
32	WSPA	DEQ should maintain Indirect Land Use Change(ILUC) values as global and not limit them to specific regions of the world.	The 2014 modeling for ILUC was regional and the updated labeling in the ILUC table is meant to reflect what was actually modeled in the Carbon Calculator for Land Use and Land Management Change from Biofuels Production (CCLUB), Global Trade Analysis Project(GTAP), and Agro- Ecological Zone Emission Factor (AEZ- EF) models.	
33	WSPA	Allow for remote site visits for quarterly fuel transaction reports	DEQ does not believe a change to the less intensive verification rule is warranted at this time. DEQ believes that site visits allow the verifier to better understand the entity's operations and organization and allow them to ask more informed questions during their verification.	
34	Smart Charging Technologies	DEQ's Fuel Supply Equipment registration process is burdensome, requires redundant information, and is not specified in the regulation	The FSE registration process is in the currently adopted regulation. Showing a reporting entity owns or operates FSE is required to prove that they are the legitimate credit generator under OAR 340-253-0330, and the evidence that the FSE or vehicles are operational is required under OAR 340-253-0500(5). DEQ will continue to work with credit generators and aggregators to make clear what documentation provides the evidence of ownership and operation necessary to show that FSE and/or eligible offroad equipment are registered by the rightful credit	

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			generator and that the equipment is active and operational.	
35	Neste	Oregon should adopt an Auto-Adjustment Mechanism	Thank you for your comments. DEQ regularly monitors the CFP credit market and the supply of and demand for credits, and can take action in a future rulemaking if it feels an adjustment to the program standard or other changes are needed to maintain the program's investment incentives and achieve all available cost-effective reductions from the transportation fuels the state uses. Given that DEQ can complete a rulemaking process within a year if needed, it believes that an automatic mechanism to change the CI standards is not warranted at this time.	
36	Christiansen	Verification bodies that are CPA firms should be exempt from the verification body rotation requirement, and instead should be subject to a partner/lead verifier rotation requirement	Thank you for your comment, DEQ does not believe a change to the verification body rotation requirements is warranted at this time. DEQ will monitor how the rotation requirements work in the first year they will be in effect for most reporting entities and consider if changes are needed then.	
37	Clean Fuels Alliance	The beef tallow rendering energy value in OR- GREET 4.0 is erroneously high.	Given that the value matches CA- GREET 4.0 and that fuel producers can submit joint applications with beef tallow renderers, DEQ believes this emissions factor is set conservatively and is justified.	
38	3Degrees	DEQ should continue to have dairy and swine manure to electricity pathways in a Tier 1 calculator	Given the public interest in these pathways and the significant issues we have seen with them in recent verification cycles, DEQ believes those pathways will benefit from going through the new public comment requirement for tier 2 pathways.	
39	3Degrees	DEQ should remove the requirement that Green-e certification be obtained for all renewable energy certificates used in the program	DEQ uses the Green-e certification requirement to ensure that RECs used in the program maintain the integrity of the carbon reduction attributes of those certificates. In the absence of that certification, DEQ would need to adopt	

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			a separate set of requirements and have staff to implement them and review RECs to ensure that their carbon emissions were not claimed in another program. Even if DEQ agreed that adopting a separate set of requirements was needed, the agency does not have the staff resources to implement them at this time.

Commenter #	Name	Organization	
1	Navjot Sandhu	1PointFive and Oxy Low Carbon Ventures	
2	Lexi Concannon	3Degrees	
3	Benjamin Kling	Beta Analytic	
4	James J Groome	Carbon Verification Service	
5	Nate Schuster	ChargePoint	
6	Kari Buttenhoff	Christenson	
7	Cory-Ann Wind	Clean Fuels Alliance America	
8	John A. Thornton	CleanFuture	
9	Elisia Hoffman	Electrify America	
10	Oscar Garcia	Neste US	
11	Manka Khanna	NovoHydrogen	

Commenter #	Name	Organization
12	Paul W. Townsend	POET
13	Jesse Nowicki	RPMG
14	Ma'n Altaher	Smart Charging Technologies
15	Mal Skowron	Tesla
16	Antonio Machado	Western States Petroleum Association (WSPA)

Implementation

Notification

The proposed rules would become effective upon filing on approximately Jan. 13, 2025. DEQ would notify affected parties by:

- A GovDelivery notice will be sent to the Oregon Clean Fuels Program email list
- Conducting outreach to registered parties and fuel producers as we implement the new rules via email and webinars

Compliance and enforcement

- Affected parties: All registered parties in the program will be notified about the changes to Divisions 253 and 272. In addition, a GovDelivery will be sent out to the subscribers of the Oregon Clean Fuels Program list.
- DEQ staff: There is no additional work to implement these changes.

Measuring, sampling, monitoring and reporting

- Affected parties: Registered parties will need to modify their records and reports to comply with the new rules. DEQ has been working with the rulemaking advisory committee who represent all aspects of participants in the program to identify the most efficient and effective ways to implement the policy goals of this rulemaking. The proposed rules reflect that input, with attention on what makes sense for the registered parties and the existing resources available to implement the CFP.
- DEQ staff: Prior to the effective date of these proposed rules, DEQ staff will develop a detailed implementation plan identifying the major points where there are changes to the measurements, sampling, monitoring, and reporting are occurring

Systems

- Website: The Oregon Clean Fuels web page will be modified to reflect these proposed rules.
- Oregon Fuels Reporting System: CFP staff will work to implement the necessary changes. DEQ staff has done an initial screening of relatively minor changes that are needed.

Training

- Affected parties: DEQ staff will provide training to registered parties on the new rules.
- DEQ staff: DEQ staff will also update the Frequently Asked Questions documents to reflect the new rules.

Five Year Review

Requirement

Oregon law requires DEQ to review new rules within five years after EQC adopts them. The law also exempts some rules from review. DEQ determined whether the rules described in this report are subject to the five-year review. DEQ based its analysis on the law in effect when EQC adopted these rules.

Exemption from five-year rule review

The Administrative Procedures Act exempts most of the proposed rules from the five-year review because the proposed rules would:

Rules exempt from five-year review				
340-253-0040	340-253-0060	340-253-0330	340-253-0400	340-253-0450
340-253-0460	340-253-0470	340-253-0500	340-253-0600	340-253-0630
340-253-0640	340-253-0650	340-253-0670	340-253-1000	340-253-1005
340-253-8010	340-272-0020	340-272-0100	340-272-0110	340-272-0120
340-272-0350	340-272-0415	340-272-0420	340-272-0425	340-272-0500

• Amend or repeal an existing rule. ORS 183.405(4).

Five-year rule review required

No later than Jan. 9, 2030, DEQ will review the newly adopted rules for which ORS 183.405 (1) requires review to determine whether:

- The rule has had the intended effect
- The anticipated fiscal impact of the rule was underestimated or overestimated
- Subsequent changes in the law require that the rule be repealed or amended
- There is continued need for the rule.

DEQ will use "available information" to comply with the review requirement allowed under ORS 183.405 (2).

DEQ will provide the five-year rule review report to the advisory committee to comply with ORS 183.405 (3).

Rules subject to five-year review					
340-253-1060					

Non-discrimination statement

DEQ does not discriminate on the basis of race, color, national origin, disability, age or sex in administration of its programs or activities.

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