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- Notice of Rulemaking
- Draft Rules Edits Highlighted
- Draft Rules Edits Included (final clean version)

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Caption

Amends Clean Fuels Program to accelerate transportation electrification by increasing generation and aggregation of credits.

Introduction

The Department of Environmental Quality invites public input on proposed permanent rule amendments to division 253 of chapter 340 of the Oregon Administrative Rules.

Request for Other Options

During the public comment period, DEQ asks for public comment on whether there are other options for achieving the rules' substantive goals while reducing the rules' negative economic impact on business.

Overview

The objective of the CFP Electricity 2021 Rulemaking is to enable further greenhouse gas emissions reductions by advancing methods to accelerate the generation and aggregation of clean fuels credits by utilities and others to advance transportation electrification. DEQ is considering proposing changes or additions to the regulations that will further incent the generation and aggregation of electricity credits to a broader range of stakeholders including both public and private sector fleets.

Procedural Summary

More information

Information about this rulemaking is on this rulemaking's web page: <u>Clean Fuels Program</u> <u>Electricity 2021</u>.

Public Hearings

DEQ plans to hold one public hearing. Anyone can attend the hearing by webinar. The hearing will take place:

Thursday, Jan. 28, 2021, 1:30 p.m.

Join online via Zoom Join by phone Call-in number: 888-475-4499 (Toll-free in the U.S.) Meeting ID: 836 2711 7728 Passcode: 944497

How to comment on this rulemaking proposal

DEQ is asking for public comment on the proposed rules. Anyone can submit comments and questions about this rulemaking. A person can submit comments by email, by regular mail, or at the public hearing.

Comment deadline

DEQ will only consider comments on the proposed rules that DEQ receives by 4 p.m., on Jan. 29, 2021.

Submit comment online

Any person can submit comments by emailing: <u>CFPE2021@deq.state.or.us</u>.

Note for public university students:

ORS 192.345(29) allows Oregon public university and OHSU students to protect their university email addresses from disclosure under Oregon's public records law. If you are an Oregon public university or OHSU student, notify DEQ that you wish to keep your email address confidential.

By mail

Oregon DEQ Attn: Cory-Ann Wind 700 NE Multnomah St., Room 600 Portland, OR 97232-4100

At the hearing

Thursday, Jan. 28, 2021, 1:30 p.m.

Sign up for rulemaking notices

Get email or text updates about this rulemaking by either:

- Signing up through this link: <u>GovDelivery;</u>
- Signing up on the rulemaking web site: <u>Clean Fuels Program Electricity 2021</u>.

What will happen next?

DEQ will include a written response to comments in a staff report that DEQ will submit to the Environmental Quality Commission. DEQ may modify the rule proposal based on the comments.

Proposed rules only become effective if the Environmental Quality Commission adopts them. DEQ's intended action is to present the proposed rule changes to the EQC as soon as possible after the earliest date on which the rule changes could take effect. DEQ intends to submit the proposed rule changes to the EQC on or after Feb. 10, 2021.

Overview

Brief History

The 2009 Oregon Legislature authorized the Oregon Environmental Quality Commission (EQC) to adopt rules to reduce lifecycle emissions of greenhouse gases from Oregon's transportation fuels by 10 percent over a 10-year period. The 2015 Oregon Legislature authorized the removal of the Dec. 31, 2015 sunset date of the authorizing statute and further authorized the EQC to adopt rules for managing and containing the costs of compliance with the Clean Fuels Program (CFP). The 2017 Oregon Legislature authorized additional provisions to manage and contain the costs of compliance with the CFP. The EQC adopted Phase 1 rules in Dec. 2012, Phase 2 rules in Jan. 2015, and several rule revisions in Dec. 2015, April 2016, Nov. 2017, and May 2020 to implement legislative mandates, update to the latest science, and improve the program.

Short Summary

The objective of the CFP Electricity 2021 Rulemaking is to enable further greenhouse gas emissions reductions by advancing methods to accelerate the generation and aggregation of clean fuels credits by utilities and others to advance transportation electrification. This will also help DEQ manage and contain the costs of program compliance. DEQ is considering proposing changes or additions to the regulations that will further incent the generation and aggregation of electricity credits to a broader range of stakeholders including both public and private sector fleets.

| Proposed Rule | Discussion |
|---|--|
| Εηςοι | araging New Types of Electric Vehicles |
| Add new energy economy ratios | DEQ is proposing to add two new categories of EERs – for electric cargo handling equipment and for electric ocean-going vessels. |
| Delegate authority to DEQ to approve new EERs | DEQ is proposing that the EQC delegate authority to DEQ to approve new EERs in a more limited fashion than those that appear in a rule table. The process would mirror the Tier 2 fuel pathway process in that an applicant would have to request the new EER and submit information to support the application. The process would also include a public comment period consistent with a rulemaking to ensure that stakeholders have the opportunity to examine and respond to the underlying assumptions, operating conditions specified in the issuance of an EER-adjusted carbon |

Discussion of the Proposed Rule Changes

| Proposed Rule | Discussion |
|--|---|
| | intensity (CI) value, and policy rationale for granting the EER. This EER-adjusted CI is specific to the applicant and cannot be used by any other party until sufficient information supports a new categorical EER that could then be adopted by the EQC through a rulemaking. |
| Allow new forklifts to generate displacement credits | DEQ is now proposing to grant displacement credits to electric forklifts that have been placed in service since 2016 to further encourage the transition to this lower carbon option. |
| Adjustm | ents to the Carbon Intensity of Electricity |
| Update the methodology to calculate the CI of electricity | DEQ is proposing to update this methodology in several ways. First, DEQ is proposing to switch to a single year value as opposed to a 5-year rolling average. Second, DEQ is proposing to remove the load that is allocated to a utility-specific CI from the statewide average CI. This will allow for more accurate accounting of what is left in the statewide grid mix. Third, DEQ is proposing to replace the emissions associated with the closed Boardman coal-fired power plant with the value used for an unspecified market power purchases of 0.428 MT/MWh to calculate the 2021 and 2022 CIs until actual data can be incorporated. |
| Allow for the retirement of RECs to claim zero carbon electricity | DEQ is proposing to allow for the retirement of renewable electricity credits (RECs) against the electricity used as a transportation fuel. This enables the generation of additional credits referred to as incremental credits which represents the difference in the current CI of electricity to zero. RECs must be Green-e certified, be generated from facilities that are 2015 and newer except in the case of biogas, and be generated from facilities located in the Western Electricity Coordinating Council. Bundled and unbundled RECs can be retired individually, or from participation in a utility green power product (such as Blue Sky and Green Source programs), or through participation in a power purchase agreement for renewable electricity. RECs can be retired for both residential and non-residential vehicle charging. |
| Establish parties eligible to generate incremental credits | DEQ is proposing to allow many of the same parties to generate the incremental credits as those who are eligible to generate the base credits. DEQ is proposing to allow the EV charger owner to generate the incremental credits for non-residential (for example, public, fleets, workplaces, multi-unit dwellings) charging; the transit agency to generate the incremental |

| Proposed Rule | Discussion | |
|--|--|--|
| | credits for light rail, street car, aerial tram, or electric buses; and the fleet owner or operator to generate the incremental credits for forklifts. Any unclaimed nonresidential incremental credits may be claimed by the Incremental Aggregator. For residential charging, DEQ is proposing to allow the utilities to generate the residential incremental credits on behalf of their EV-owning customers. If utilities opt not to retire RECs to generate incremental credits, that opportunity would be available to the Incremental Aggregator. The role of the Incremental Aggregator will mimic that of the existing Backstop Aggregator for the base credits with the addition of an equity advisory committee that DEQ will convene to assist in developing criteria to ensure that the revenue from the incremental credits will be focused on projects that prioritize underserved communities and those that are most vulnerable to the impacts of climate change. The equity advisory committee will also assist DEQ in developing the annual work plan of projects and evaluating the utility annual reports. | |
| Additional Credit Generation Opportunities | | |
| Allow for advance crediting for certain fleets | DEQ is proposing to allow fleets to "advance credits" to be paid back over a specified period of time. These credits that will be generated in future quarters and paid back against the up-front allocation until the entire amount is made up. In order to mitigate risks, DEQ is proposing to limit this advance crediting provision to transit agencies, school districts, public fleets and fleets that are contracted by those entities. Fleets will have to submit an application to DEQ to request a number of credits to be advanced, supported by information that will estimate the number of miles driven, the duty cycle, the electricity consumed, etc. DEQ and the applicant will negotiate the terms of the advance including the number of years' worth of credits that will be advanced, the payback period, and what happens if the terms are violated. If the number of credits advanced are not paid back by the end of the payback period, the applicant will have to retire additional credits to repay the remaining number of credits that were advanced. | |
| | Miscellaneous Provisions | |
| Increase the frequency of | DEQ is proposing to allow DEQ to issue residential EV credits at least twice per year. DEQ expects to receive EV registration data | |

| Proposed Rule | Discussion |
|---|---|
| residential EV crediting | from DMV in February for the second half of the previous calendar year and in August for the first half of the current calendar year. DEQ could issue the residential credits in March and September. This would apply to both base and incremental residential credits. |
| Reporting requirements for electric utilities | DEQ is proposing to require utilities to report to DEQ annually. For base credits, the report should describe how the revenue was spent. This report for the investor-owned utilities should be consistent with the guiding principles contained in UM 1826, under the authority of the Oregon Public Utility Commission. For incremental credits, the report should provide additional detail about how the revenue was spent in alignment with guiding principles developed by DEQ and an equity advisory committee. |

Regulated and Impacted Businesses

The regulated parties of the CFP are Oregon producers of transportation fuels and importers of gasoline, diesel, ethanol, biodiesel, and renewable. In addition, providers of electricity, natural gas, propane, and hydrogen can elect to participate in order to generate credits, which importers of gasoline and diesel may purchase to meet their compliance obligations. There are approximately 200 businesses that are registered to participate in the CFP, and more that have designated an aggregator to act on their behalf in the program.

For this rulemaking, since the scope is limited to the electricity provisions of the regulation, there are approximately 50 businesses that might be directly impacted. Those businesses include owners of EV chargers, electric utilities, forklift fleets, transit agencies, and local governments.

Statement of need

| Proposed Rule or Topic | Discussion | | |
|--|--|--|--|
| Add new energy | economy ratios | | |
| What need would the proposed rule address? | CFP strives to comprehensively account for the many ways in which the CI of transportation fuels can be lowered. | | |
| How would the proposed rule address the need? | EERs are used to compare alternative vehicle fuel technologies to their gasoline or diesel counterparts and are the way credits are equitably generated in the CFP. The proposal would add EERs for two new engine types. | | |
| How will DEQ know the rule addressed the need? | DEQ will monitor the reports submitted to see how many vehicles took advantage of these EERs. | | |
| Delegate authority to DEQ to approve new energy economy ratios | | | |
| What need would the proposed rule address? | CFP strives to allow for more flexibility within the program to more quickly and easily accommodate crediting of new ways in which the market is decarbonizing. | | |
| How would the proposed rule address the need? | The current regulation requires that new EERs be adopted by the EQC through rulemaking and the proposal would speed up the time that new EERs can be utilized to generate credits in CFP. | | |
| How will DEQ know the rule addressed the need? | DEQ will monitor and approve the applications for EER-adjusted CIs. | | |
| Allow new forklifts to gene | erate displacement credits | | |
| What need would the proposed rule address? | CFP would like to further incentivize electric forklifts. | | |
| How would the proposed rule address the need? | The granting of displacement credits would provide additional value to the more energy efficient alternative fuel vehicle relative to a less-efficient gasoline or diesel vehicle. | | |

| Proposed Rule or Topic | Discussion |
|--|---|
| How will DEQ know the rule addressed the need? | DEQ will monitor the registration of new forklifts. |
| Update the methodology to calcu electricity | late the carbon intensity of |
| What need would the proposed rule address? | CFP strives to better capture contemporaneous changes in the electricity sector to calculate its carbon intensity. The current CFP calculates the carbon intensity of electricity as a transportation fuel using data collected by DEQ's Greenhouse Gas Reporting Program using the most recently- available 5-year rolling average of electricity consumed in Oregon. |
| How would the proposed rule address the need? | The proposal would update the way the CI of the statewide mix is calculated to make it more accurate and contemporaneous. |
| How will DEQ know the rule addressed the need? | DEQ will monitor the sources of electricity generation provided to Oregon. |
| Allow for the retirement of renewa zero carbon electricity | able electricity credits to claim |
| What need would the proposed rule address? | The CFP wants to expand the use of zero carbon electricity to charge electric vehicles. The current regulation only allows zero carbon electricity to be claimed if the renewable source is connected directly to an EV charger behind the meter. |
| How would the proposed rule address the need? | The retirement of RECs creates incremental credits which represent the difference in the statewide grid mix or utility-specific CI and the zero carbon claim. This differs from the base credits which represent the difference between the gasoline or diesel standard and the carbon intensity of the statewide electric grid mix or utility-specific mix. This proposal allows for additional ways entities can acquire zero-emission electricity to attribute to their EV charging. |

| Proposed Rule or Topic | Discussion | |
|--|---|--|
| How will DEQ know the rule addressed the need? | DEQ will monitor the retirement of RECs used and the generation of incremental credits. | |
| Establish parties eligible to | generate incremental credits | |
| What need would the proposed rule address? | The generation of incremental credits will significantly increase the value of investing in transportation electrification in Oregon. | |
| How would the proposed rule address the need? | The proposal will designate specific parties that will be allowed to generate the incremental credits through the retirement of RECs. | |
| How will DEQ know the rule addressed the need? | DEQ will monitor the retirement of RECs used and the generation of incremental credits. DEQ will also oversee the Incremental Aggregator. | |
| Allow for advance crediting for certain fleets | | |
| What need would the proposed rule address? | CFP strives to offer effective incentives upfront to defray capital costs. The current regulation allows for credit generation as quarterly reports on the amount of electricity dispensed are submitted to DEQ. This method takes a long time to accrue the value of the investment. | |
| How would the proposed rule address the need? | The proposal would speed up credit generation for fleet vehicles owned by certain established entities by advancing credits for a long period of time and move those credits to be allocated at the beginning of an electric vehicle's service. | |
| How will DEQ know the rule addressed the need? | DEQ will approve applications from fleets that wish to participate in this provision and monitor the amount of credits advanced and paid back. | |
| Increase the Frequency of Resid | lential Electric Vehicle Crediting | |
| What need would the proposed rule address? | The current regulation allows DEQ to issue residential EV credits to utilities and the Backstop Aggregator once per year for the | |

| Proposed Rule or Topic | Discussion | |
|--|---|--|
| | previous calendar year. More frequent credit generation could increase market liquidity. | |
| How would the proposed rule address the need? | The proposal would allow for residential credit generation at least twice per year. | |
| How will DEQ know the rule addressed the need? | DEQ will issue the credits semi-annually and monitor the credit market. | |
| Reporting Requirements for Electric Utilities | | |
| What need would the proposed rule address? | The current regulation does not have any reporting requirements for electric utilities so DEQ does not know how they are using the revenue they receive from the sale of residential credits. | |
| How would the proposed rule address the need? | The proposal would require electric utilities to submit reports about how they spent the revenue from the sale of residential credits. | |
| How will DEQ know the rule addressed the need? | DEQ will receive the electric utility reports annually. | |

Rules affected, authorities, supporting documents

Lead division

Office of Greenhouse Gas Programs

Program or activity

Oregon Clean Fuels Program

Chapter 340 action

| Adopt OAR | | | | |
|--------------|--------------|--------------|--------------|--------------|
| 340-253-0460 | 340-253-1100 | | | |
| Amend OAR | | | | |
| 340-253-0040 | 340-253-0060 | 340-253-0100 | 340-253-0330 | 340-253-0400 |
| 340-253-0450 | 340-25-0470 | 340-253-0600 | 340-253-0640 | 340-253-1000 |
| 340-253-1010 | 340-253-1020 | 340-253-1055 | 340-253-8010 | |

| Statutory Authority - ORS | | | |
|---------------------------|----------|----------|---------|
| 468.020 | 468A.266 | 468A.277 | 468.130 |

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

Legislation

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

Documents relied on for rulemaking

| Document title | Document location |
|--|--|
| CFP Electricity 2021 Rulemaking materials, Sept. through Dec. 2020 | https://www.oregon.gov/deq/Regulations/rul emaking/Pages/rcfpe2021.aspx |
| 2018 Amendments to the California Low Carbon Fuel Standards | https://www.arb.ca.gov/regact/2018/lcfs18/l cfs18.htm |

Fee Analysis

This rulemaking does not involve fees.

Statement of fiscal and economic impact

The Oregon Clean Fuels Program is a technology-neutral, market-based regulatory program to reduce carbon pollution from transportation fuels and promote the commercialization and deployment of innovative low-carbon fuels. The program allows for many strategies to be employed for meeting the clean fuel standards, giving each regulated party the flexibility to consider its particular circumstance, perspective and business needs when devising its own strategy to meet the standard. This also provides maximum compliance flexibility, which helps to manage and contain the costs of compliance.

Fiscal impact of the proposed rules

The scope of this fiscal and economic impact statement is limited to the impact of the proposed rule changes contained in this rulemaking; it does not re-assess the existing CFP in its entirety. Overall, the proposals contained in this rulemaking will result in the generation of more credits and therefore may lower the program's overall cost of compliance to regulated parties, applying the basic economic principle of supply and demand.

| Proposed Rule | Fiscal and economic impact | |
|--|--|--|
| Encouraging New Types of Electric Vehicles | | |
| Add new energy economy ratios | This proposal will have a positive fiscal and economic impact to fleets that will be able to generate credits from the deployment of these EVs. There is no way for DEQ to anticipate the number of EVs that will take advantage of this proposal, but fleets with electric cargo handling equipment and electric ocean-going vessel shorepower will benefit from this provision. | |
| Delegate authority to DEQ to approve new EERs | This proposal will have a positive fiscal and economic impact to fleets that will be able to generate credits quicker through the administrative approval of EERs. DEQ is unable to anticipate the number of EVs that will take advantage of this proposal but those who do might be able to generate credits sooner will benefit from this provision. | |
| Allow new forklifts to generate displacement credits | This proposal will have a positive fiscal and economic impact to electric forklift owners and operators as the number of credits they are eligible to generate will increase. DEQ will work with the registered parties to determine the age of the electric forklifts in order to identify which would benefit from this provision. | |

| Proposed Rule | Fiscal and economic impact | |
|--|--|--|
| Adjustments to the Carbon Intensity of Electricity | | |
| Update the methodology to calculate the CI of electricity | This proposal will result in an increase in the statewide CI which will slightly decrease the amount of base credits generated per unit of fuel used and could therefore cause a negative fiscal impact on regulated parties (but which is more than offset of the increase in credits that are anticipated to be generated under the other changes in this rulemaking). | |
| Allow for the retirement of RECs to claim zero carbon electricity | This proposal will have a significant positive fiscal and economic benefit to those who can retire RECs to generate incremental credits due to the large increase in credit generation, along with renewable electricity generators that produce RECs along with their power. There is a cost to the acquisition and management of RECs in this provision, but that cost is offset by the revenue from selling incremental credits resulting in a net benefit to the credit generator. | |
| Establish parties eligible to generate incremental credits | This proposal will have a significant positive fiscal and economic benefit to the parties eligible to generate the incremental credits – EV charger owners, transit agencies, forklift owners and operators, utilities, and the Incremental Aggregator. | |
| Addit | ional Credit Generation Opportunities | |
| Allow for advance crediting for certain fleets | This proposal will have slight positive fiscal and economic benefit to the fleets that participate in this provision. The impact is slight since the advancing of credits effectively is a loan rather than granting extra credits; and that loan helps quicken the fuel cost and operations and maintenance benefits realized from switching from a petroleum fuel to electricity. As envisioned, the advancing of credits is intended to incentivize additional purchases of EVs and a quicker conversion of an entire fleet. | |
| Miscellaneous Provisions | | |
| Increase the frequency of residential EV crediting | This proposal does not have a significant fiscal and economic impact. Approximately the same number of credits will be generated, but on a more frequent cycle; and the revenue from the sale of those credits will not significantly differ. This proposal may provide additional liquidity to the clean fuels market as the number of electricity credits that are generated in the future increases but this will not be significant in the near term. | |

| Proposed Rule | Fiscal and economic impact |
|---|--|
| Reporting requirements for electric utilities | This proposal has a minor fiscal and economic impact to the utilities as these are new reporting requirements. DEQ intends to work with the utilities and the Oregon Public Utility Commission to streamline the report content and submittal date to minimize the amount of resources needed by stakeholders who are interested in this information. |

Statement of Cost of Compliance

Oregon Department of Environmental Quality

For DEQ, implementing these proposals will require several new processes but they can all be accomplished with existing resources. DEQ believes that its existing reporting tool can accommodate many of the additional data requirements and that some minor manual adjustments might be needed for everything else. Most significantly, the establishment of the equity advisory committee and the Incremental Aggregator will require significant resources in the initial years but that cost difference should decrease in future years.

Other state agencies and local governments

Many other state agencies and local governments are generators of credits since they own EVs and chargers. Changes to the CI of electricity will affect the number of base credits generated. They will also have the option of generating the incremental credits for those chargers. Additionally, the advance crediting provision are available to these public entities which might be a strong incentive to advance fleet electrification goals. Many cities are also electric utilities and they will be subject to the additional reporting requirement.

Public

The fiscal and economic impact to the general public should be negligible in that no additional costs are anticipated. In fact, the public will benefit from lower air pollution wherever EVs replace dirtier vehicles. The members of the public that are EV owners will likely see an increase in charging infrastructure and incentives that benefit the EV ecosystem broadly as credit generators reinvest their credit revenue.

Large businesses - businesses with more than 50 employees

Currently, approximately 200 entities are registered to participate in the Clean Fuels Program and approximately 50 of those entities are registered as credit generators and provide electricity as a transportation fuel. These credit generators are a combination of large and small businesses. The large businesses, approximately 45, are a mix of private EV charging companies, electric utilities, and local governments. As generators of electricity credits, large businesses will benefit from these proposed rules due to the potential to generate even more credits. The large businesses that are regulated parties in the CFP are likely to see either no fiscal impact, or a positive fiscal impact, as this rulemaking is anticipated to allow for an increase in credit generation, which should decrease the cost of compliance.

Small businesses – businesses with 50 or fewer employees

ORS 183.336 Cost of Compliance Effect on Small Businesses

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

Approximately 5 small businesses are affected by these proposed rules. The small businesses are primarily companies that are registered as aggregators to assist larger companies in reporting data and managing credit transactions.

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

There is minimal additional reporting, recordkeeping and other administrative activities that are associated with these proposed changes that will affect the small businesses who will be impacted, and those costs are offset by the revenue those businesses are likely to receive from the additional credit generation that these proposed changes likely will facilitate.

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

There is minimal additional equipment, supplies, labor and increased administration for the small businesses that will be impacted by these proposed changes and those costs are offset by the revenue from the additional credit generation that these proposed changes likely will facilitate.

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

Several of the registered small businesses participated in the rulemaking advisory committee (RAC) meetings and one was appointed to the RAC.

Documents relied on for fiscal and economic impact

| Document title | Document location |
|--------------------------------|-------------------------|
| List of CFP registered parties | DEQ 700 NE Multnomah |

| | Portland OR 97232 |
|--------------------------------------|---|
| CFP Scenario Tool | https://www.oregon.gov/deq/Regulations/rulema king/RuleDocuments/cfpe2021scenariotool.xlsx |
| Clean Fuels Program Electricity 2021 | https://www.oregon.gov/deq/Regulations/rulema |
| Rulemaking web page | king/Pages/rcfpe2021.aspx |

Advisory committee fiscal review

DEQ appointed the CFP Electricity 2021 Rulemaking Advisory Committee to provide input on the proposed rules and for input on the fiscal and economic impact statement. As ORS 183.33 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 meeting summary dated Dec. 1, 2020.

The committee did not determine that the proposed rules would have a significant adverse impact on small businesses in Oregon.

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-squarefoot detached, single-family dwelling on that parcel. DEQ determined the proposed rules would have no effect on the development costs because, as explained above, DEQ expects these rules may slightly decrease the cost of compliance for regulated parties, and so they should not affect fuel prices that could influence such development costs.

Federal relationship

Relationship to federal requirements

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. The proposed rules protect the environment and residents of Oregon by reducing greenhouse gas emissions.

What alternatives did DEQ consider if any?

In designing the Clean Fuels Program, DEQ considered many alternatives contained in the proposed rule. Input from advisory committees in 2010, 2012, 2014, 2015, 2016, 2017, 2018, and 2020 and extensive outreach with affected stakeholders throughout the process informed the design of the Oregon Clean Fuels Program. Documentation is in the rulemaking record.

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:
 - o Resources, objectives or areas identified in the statewide planning goals, or
 - Present or future land uses identified in acknowledged comprehensive plans

To determine whether the proposed rules involve programs or actions that affect land use, DEQ reviewed its Statewide Agency Coordination plan, which describes the DEQ programs that have been determined to significantly affect land use. DEQ considers that its programs specifically relate to the following statewide goals:

Goal Title

- 5 Open Spaces, Scenic and Historic Areas, and Natural Resources
- 6 Air, Water and Land Resources Quality

9 Ocean Resources

- 11 Public Facilities and Services
- 16 Estuarial 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

DEQ shares general rulemaking information with EQC through the monthly Director's Report. DEQ did not present additional information specific to this proposed rule revision.

Advisory Committee

Background

DEQ convened the CFP Electricity 2021 Rulemaking Advisory Committee. The committee included representatives from entities involved in providing electricity as a transportation fuel. The committee met six times. The committee's web page is located at: https://www.oregon.gov/deq/Regulations/rulemaking/Pages/rcfpe2021.aspx.

| Rulemaking Name Advisory Committee | | |
|------------------------------------|--|--|
| Name | Representing | |
| Greg Alderson | Portland General Electric | |
| Eva DeCesaro | PacifiCorp | |
| Danelle Romain | Oregon Public Utility District Association | |
| Stu Green | City of Ashland | |
| Victoria Paykar | Climate Solutions | |
| Jana Gastellum | Oregon Environmental Council | |
| Annabel Drayton | Northwest Energy Coalition | |
| Mike Goetz | Citizens Utility Board | |
| John Thornton | CleanFuture Inc. | |
| Rhett Lawrence | Forth | |
| David Breen | Port of Portland | |
| Evan Neyland | ChargePoint | |
| Erick Karlen | Greenlots | |
| Tiffany Roberts | Western States Petroleum Association | |
| Andrew Dick | Electrify America | |
| Michael Graham | Columbia Willamette Clean Cities Coalition | |
| Thad Kurowski | Tesla | |

The committee members were:

Meeting notifications

To notify people about the advisory committee's activities, DEQ sent a GovDelivery bulletin, a free e-mail subscription service, to the Oregon Clean Fuels subscribers to describe how to participate in the advisory committee process.

Committee discussions

In addition to the recommendations described under the Statement of Fiscal and Economic Impact section above, the committee was asked to discuss and provide input on ways to advance credit generation and aggregation for electricity.

Public Engagement

Public notice

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

- On Dec. 22, 2020, filing notice with the Oregon Secretary of State for publication in the January 2021 Oregon Bulletin;
- Posting the Notice, Invitation to Comment and Draft Rules on the web page for this rulemaking, located at:

https://www.oregon.gov/deq/Regulations/rulemaking/Pages/rcfpe2021.aspx;

- Emailing approximately 18,657 interested parties on the following DEQ lists through GovDelivery:
 - Rulemaking
 - DEQ Public Notices
 - Oregon Clean Fuels Program
- Emailing the following key legislators required under <u>ORS 183.335</u>:
 - o Representative Karin Power
 - House Speaker Tina Kotek
 - Senator Jeff Golden
 - o Senate President Peter Courtney
- Emailing advisory committee members,
- Posting on the DEQ event calendar: <u>DEQ Calendar</u>

How to comment on this rulemaking proposal

DEQ is asking for public comment on the proposed rules. Anyone can submit comments and questions about this rulemaking. A person can submit comments through email, by regular mail, or at the public hearing.

Comment deadline

DEQ will only consider comments on the proposed rules that DEQ receives by 4 p.m., on Jan. 29, 2021.

Submit comment online

Any person can submit comments by emailing: <u>CFPE2021@deq.state.or.us</u>.

Note for public university students:

ORS 192.345(29) allows Oregon public university and OHSU students to protect their university email addresses from disclosure under Oregon's public records law. If you are an Oregon public university or OHSU student, notify DEQ that you wish to keep your email address confidential.

By mail

Oregon DEQ Attn: Cory-Ann Wind 700 NE Multnomah St., Room 600 Portland, OR 97232-4100

At hearing

Thursday, Jan. 28, 2021, 1:30 p.m.

Public Hearing

DEQ plans to hold one public hearing. The public hearing is online and by teleconference only. Anyone can attend the hearing by webinar or teleconference. The hearing will take place:

Thursday, Jan. 28, 2021, 1:30 p.m.

Join online via Zoom Join by phone Call-in number: 888-475-4499 (Toll-free in the U.S.) Meeting ID: 836 2711 7728 Passcode: 944497

DEQ will consider all comments and testimony received before the closing date. DEQ will summarize all comments and respond to comments in the Environmental Quality Commission staff report.

Accessibility Information

DEQ can provide documents in an alternate format or in a language other than English upon request. Call DEQ at 800-452-4011 or email <u>deqinfo@deq.state.or.us</u>.



Key to Identifying Changed Text: Deleted Text New/inserted text

Division 253 OREGON CLEAN FUELS PROGRAM

340-253-0040 Definitions

The definitions in OAR 340-200-0020, OAR 340-272-0020, and this rule apply to this division. If the same term is defined here and in either of the other two divisions, the definition in this rule applies to this division.

(1) "Above the rack" means sales of transportation fuel at pipeline origin points, pipeline batches in transit, barge loads in transit, and at terminal tanks before the transportation fuel has been loaded into trucks.

(2(2) "Advance Credits" refers to credits advanced under OAR 340-253-1100 for actions that will result in real reductions of the carbon intensity of Oregon's transportation fuels.

(3) "Aggregation indicator" means an identifier for reported transactions that are a result of an aggregation or summing of more than one transaction. An entry of "True" indicates that multiple transactions have been aggregated and are reported with a single transaction number. An entry of "False" indicates that the record reports a single fuel transaction.

(34) "Aggregator" or "Credit aggregator" means a person who registers to participate in the Clean Fuels Program, described in OAR 340-253-0100(3), on behalf of one or more credit generators to facilitate credit generation and trade credits.

(4<u>5</u>) "Aggregator designation form" means a DEQ-approved document that specifies that a credit generator has designated an aggregator to act on its behalf.

(56) "Alternative Fuel Portal" or "AFP" means the portion of the Oregon Fuels Reporting System where fuel producers can register their production facilities and submit fuel pathway code applications and physical pathway demonstrations.

(67) "Alternative Jet Fuel" means a fuel, made from petroleum or non-petroleum sources, which can be blended and used with conventional petroleum jet fuels without the need to

modify aircraft engines and existing fuel distribution infrastructure. The fuel must have a lower carbon intensity than the applicable annual standard under Table 3 under OAR 340-253-8010. This includes alternative jet fuel derived from co-processed feedstocks at a conventional petroleum refinery.

(78) "Application" means the type of vehicle where the fuel is consumed, shown as either LDV/MDV or HDV.

(89) "B5" means diesel fuel containing 5 percent biodiesel.

(910) "Backstop aggregator" means a qualified entity approved by DEQ under OAR 340-253-0330(6) to aggregate credits for electricity used as a transportation fuel, when those credits would not otherwise be generated.

(1011) "Battery electric vehicle" or "BEV" means any vehicle that operates solely by use of a battery or battery pack, or that is powered primarily through the use of an electric battery or battery pack but uses a flywheel or capacitor that stores energy produced by the electric motor or through regenerative braking to assist in vehicle operation.

(11) "Base Credits" refers to electricity credits that are generated by the carbon reduction between the gasoline or diesel standard and the carbon intensity of grid or utility electricity.

(13) "Below the rack" means sales of clear or blended gasoline or diesel fuel where the fuel is being sold as a finished fuel for use in a motor vehicle.

(1214) "Bill of lading" means a document issued that lists goods being shipped and specifies the terms of their transport.

(1315) "Bio-based" means a fuel produced from non-petroleum, biogenic renewable resources.

(1416) "Biodiesel" means a motor vehicle fuel consisting of mono-alkyl esters of long chain fatty acids derived from vegetable oils, animal fats, or other nonpetroleum resources, not including palm oil, designated as B100 and complying with ASTM D6751.

(1517) "Biodiesel Blend" means a fuel comprised of a blend of biodiesel with petroleumbased diesel fuel, designated BXX. In the abbreviation BXX, the XX represents the volume percentage of biodiesel fuel in the blend.

(1618) "Biogas" means gas, consisting primarily of methane and carbon dioxide, produced by the anaerobic decomposition of organic matter. Biogas cannot be directly injected into natural gas pipelines or combusted in most natural gas-fueled vehicles unless first upgraded to biomethane.

(1719) "Biomethane" or "Renewable Natural Gas" means refined biogas, or another synthetic stream of methane from renewable resources, that has been upgraded to a near-pure methane content product. Biomethane can be directly injected into natural gas pipelines or combusted in natural gas-fueled vehicles.

(1820) "Blendstock" means a fuel component that is either used alone or is blended with one or more other components to produce a finished fuel used in a motor vehicle. A blendstock that is used directly as a transportation fuel in a vehicle is considered a finished fuel.

(1921) "Bulk system" means a fuel distribution system consisting of refineries, pipelines, vessels and terminals. Fuel storage and blending facilities that are not fed by pipeline or vessel are considered outside the bulk transfer system.

(2022) "Business partner" refers to the second party that participates in a specific transaction involving the regulated party. This can either be the buyer or seller of fuel, whichever applies to the specific transaction.

(2123) "Buy/Sell Board" means a section of the Oregon Fuels Reporting System where registered parties can post that they are interested in buying or selling credits.

(2224) "Carbon intensity" or "CI" means the amount of lifecycle greenhouse gas emissions per unit of energy of fuel expressed in grams of carbon dioxide equivalent per megajoule (gCO2e/MJ).

(2325) "Carryback credit" means a credit that was generated during or before the prior compliance period that a regulated party acquires between January 1st and April 30th of the current compliance period to meet its compliance obligation for the prior compliance period.

(2426) "Clean fuel" means a transportation fuel whose carbon intensity is lower than the applicable clean fuel standard which is either:

(a) For gasoline and gasoline substitutes and alternatives, listed in Table 1 under OAR 340-253-8010;

(b) For diesel and diesel substitutes and alternatives, listed in Table 2 under OAR 340-253-8010; or,

(c) For alternative jet fuel, listed in Table 3 under OAR 340-253-8010.

(2527) "Clean fuel standard" or "Low carbon fuel standard" means the annual average carbon intensity a regulated party must comply with, as listed in Table 1 under OAR 340-253-8010 for gasoline and gasoline substitutes and in Table 2 under 340-253-8010 for diesel fuel and diesel substitutes.

(2628) "Clear diesel" means a light middle or middle distillate grade diesel fuel derived from crude oil that has not been blended with a renewable fuel.

(2729) "Clear gasoline" means gasoline derived from crude oil that has not been blended with a renewable fuel.

(2830) "Compliance period" means each calendar year(s) during which regulated parties must demonstrate compliance under OAR 340-253-0100.

(2931) "Compressed natural gas" or "CNG" means natural gas stored inside a pressure vessel at a pressure greater than the ambient atmospheric pressure outside of the vessel.

(3032) "Co-processing" means the processing and refining of renewable or alternative low-carbon feedstocks intermingled with crude oil and its derivatives at petroleum refineries.

(3133) "Credit" means a unit of measure generated when a fuel with a carbon intensity that is less than the applicable clean fuel standard is produced, imported, or dispensed for use in Oregon, such that one credit is equal to one metric ton of carbon dioxide equivalent not emitted as a result of the use of the fuel as compared to a fuel that precisely met the clean fuel standard.

(3234) "Credit facilitator" means a person in the Oregon Fuels Reporting System that a regulated party designates to initiate and complete credit transfers on behalf of the regulated party.

(3335) "Credit generator" means a person eligible to generate credits by providing clean fuels for use in Oregon and who voluntarily registers to participate in the Clean Fuels Program, described in OAR 340-253-0100(2), and specified by fuel type under OAR 340-253-0320 through 340-253-0340.

(3436) "Crude oil" means any naturally occurring flammable mixture of hydrocarbons found in geologic formations.

(3537) "Deferral" means a delay or change in the applicability of a scheduled applicable clean fuel standard for a period of time, accomplished pursuant to an order issued under OAR 340-253-2000 or -2100, or under ORS 468A.273 and 468A.274.

(3638) "Deficit" means a unit of measure generated when a fuel with a carbon intensity that is more than the applicable clean fuel standard is produced, imported, or dispensed for use in Oregon, such that one deficit is equal to one metric ton of carbon dioxide equivalent that is emitted as a result of the use of the fuel as compared to a fuel that precisely met the clean fuel standard.

(3739) "Denatured Fuel Ethanol" or "Ethanol" means nominally anhydrous ethyl alcohol meeting ASTM D 4806 standards. It is intended to be blended with gasoline for use as a fuel in a spark-ignition internal combustion engine. Before it is blended with gasoline, the denatured fuel ethanol is first made unfit for drinking by the addition of substances approved by the Alcohol and Tobacco Tax and Trade Bureau.

(3840) "Diesel fuel" or "diesel" means either:

(a) A light middle distillate or middle distillate fuel suitable for compression ignition engines blended with not more than 5 volume percent biodiesel and conforming to the specifications of ASTM D975 or;

(b) A light middle distillate or middle distillate fuel blended with at least 5 and not more than 20 volume percent biodiesel suitable for compression ignition engines conforming to the specifications of ASTM D7467.

(3941) "Diesel substitute" means a liquid fuel, other than diesel fuel, suitable for use as a compression-ignition piston engine fuel.

(4042) "Duty-cycle testing" means a test procedure used for emissions and vehicle efficiency testing.

(43) "E10" means gasoline containing 10 volume percent fuel ethanol.

(4144) "Energy economy ratio" or "EER" means the dimensionless value that represents:

(a) The efficiency of a fuel as used in a powertrain as compared to a reference fuel; or

(b) The efficiency of a fuel per passenger mile, for fixed guideway applications.

(4245) "Electric Transport Refrigeration Units (eTRUs)" means refrigeration systems powered by electricity designed to refrigerate or heat perishable products that are transported in various containers, including semi-trailers, truck vans, shipping containers, and rail cars.

(43(46) "Electric Service Supplier" has the same definition as in OAR 860-038-005.

(47) "Emergency period" is the period of time in which an Emergency Action under OAR 340-253-2000 is in effect.

(44<u>48</u>) "Export" means to have ownership title to transportation fuel from locations within Oregon, at the time it is delivered to locations outside Oregon by any means of transport, other than in the fuel tank of a motor vehicle for the purpose of propelling the motor vehicle.

(4549) "Feedstock transfer document" means a document, or combination of documents, that demonstrates the delivery of specified source feedstocks from the point of origin to the fuel production facility as required under OAR 340-253-0400(7).

(4650) "Finished fuel" means a transportation fuel that can legally be used directly in a motor vehicle without requiring additional chemical or physical processing.

(47<u>51</u>) "Fixed guideway" means a public transportation facility using and occupying a separate right-of-way for the exclusive use of public transportation using rail, using a fixed catenary system, using an aerial tramway, or for a bus rapid transit system.

(48<u>52</u>) "Fossil" means any naturally occurring flammable mixture of hydrocarbons found in geologic formations such as rock or strata. When used as an adjective preceding a type of fuel (e.g., "fossil gasoline," or "fossil LNG"), it means the subset of that type of fuel that is derived from a fossil source.

(49<u>53</u>) "Fuel pathway" means a detailed description of all stages of fuel production and use for any particular transportation fuel, including feedstock generation or extraction, production, distribution, and combustion of the fuel by the consumer. The fuel pathway is used to calculate the carbon intensity of each transportation fuel.

(5054) "Fuel pathway code" or "FPC" means the identifier used in the Oregon Fuels Reporting System that applies to a specific fuel pathway as approved or issued under OAR 340-253-0400 through 0470.

(5155) "Fuel pathway holder" means the entity that has applied for and received a certified fuel pathway code from DEQ, or who has a certified fuel pathway code from the California Air Resources Board that has been approved for use in Oregon by DEQ.

(5256) "Fuel production facility" means the facility at which a regulated or opt-in fuel is produced. With respect to biomethane, a fuel production facility means the facility at which the fuel is upgraded, purified, or processed to meet the standards for injection to a natural gas common carrier pipeline or for use in natural gas vehicles.

(5357) "Fuel supply equipment" refers to equipment registered in the Oregon Fuels Reporting System that dispenses alternative fuel into vehicles, including but not limited to electric vehicle chargers, hydrogen fueling stations, and natural gas fueling equipment.

(54<u>58</u>) "Gasoline" means a fuel suitable for spark ignition engines and conforming to the specifications of ASTM D4814.

(5559) "Gasoline substitute" means a liquid fuel, other than gasoline, suitable for use as a spark-ignition engine fuel.

(56(60) "Green-e" means the certification program run by the Center for Resource Solutions.

(61) "Heavy duty motor vehicle" or "HDV" means any motor vehicle rated at more than 10,000 pounds gross vehicle weight.

(5762) "Illegitimate credits" means credits that were not generated in compliance with this division.

(5863) "Import" means to have ownership title to transportation fuel at the time it is brought into Oregon from outside the state by any means of transport other than in the fuel tank of a motor vehicle for the purpose of propelling that motor vehicle.

(5964) "Importer" means:

(a) With respect to any liquid fuel, the person who imports the fuel; or

(b) With respect to any biomethane, the person who owns the biomethane when it is either physically transported into Oregon or injected into a pipeline located outside of Oregon and delivered for use in Oregon.

(60(65)"Incremental aggregator" means a qualified entity approved by DEQ under OAR 340-253-0330(10) to earn incremental credits, when those credits would not otherwise be claimed.

(66) "Incremental credit" means a credit that is generated by an action to further lower the carbon intensity of electricity. Incremental credits are calculated from the difference between the carbon intensity of grid electricity and the carbon intensity of renewable electricity.

(67) "Indirect land use change" means the average lifecycle greenhouse gas emissions caused by an increase in land area used to grow crops that is caused by increased use of crop-based transportation fuels, and expressed as grams of carbon dioxide equivalent per megajoule of energy provided (gCO2e/MJ). Indirect land use change values are listed in Table 10 under OAR 340-253-8010.

(a) Indirect land use change for fuel made from corn feedstocks is calculated using the protocol developed by the Argonne National Laboratory.

(b) Indirect land use change for fuel made from sugarcane, sorghum, soybean, canola and palm feedstocks is calculated using the protocol developed by the California Air Resources Board.

(6168) "Invoice" means the receipt or other record of a sale transaction, specifying the price and terms of sale, that describes an itemized list of goods shipped.

(6269) "Large importer of finished fuels" means any person who imports into Oregon more than 500,000 gallons of finished fuels in a given calendar year.

(6370) "Light-duty motor vehicle" or "LDV" means any motor vehicle rated at 8,500 pounds gross vehicle weight or less.

(6471) "Lifecycle greenhouse gas emissions" are:

(a) The aggregated quantity of greenhouse gas emissions, including direct emissions and significant indirect emissions, such as significant emissions from changes in land use associated with the fuels;

(b) Measured over the full fuel lifecycle, including all stages of fuel production, from feedstock generation or extraction, production, distribution, and combustion of the fuel by the consumer; and

(c) Stated in terms of mass values for all greenhouse gases as adjusted to CO2e to account for the relative global warming potential of each gas.

 $(\frac{6572}{10})$ "Liquefied compressed natural gas" or "L-CNG" means natural gas that has been liquefied and transported to a dispensing station where it was then re-gasified and compressed to a pressure greater than ambient pressure.
(6673) "Liquefied natural gas" or "LNG" means natural gas that has been liquefied.

(6774) "Liquefied petroleum gas" or "propane" or "LPG" means a petroleum product composed predominantly of any of the hydrocarbons, or mixture thereof; propane, propylene, butanes and butylenes maintained in the liquid state.

(6875) "Material information" means:

(a) Information that would result in a change of the carbon intensity of a fuel, expressed in a gCO2e/MJ basis to two decimal places; or

(b) Information that would result in a change by any whole integer of the number of credits or deficits generated under OAR 340-253-1000 through OAR 340-253-1030.

(6976) "Medium duty vehicle" or "MDV" means any motor vehicle rated between 8,501 pounds and 10,000 pounds gross vehicle weight.

(7077) "Motor vehicle" means any vehicle, vessel, watercraft, engine, machine, or mechanical contrivance that is self-propelled.

(7478) "Multi-family housing" means a structure or facility established primarily to provide housing that provides four or more living units, and where the individual parking spaces that an electric vehicle charger serves, and the charging equipment itself, are not deeded to or owned by a single resident.

(72<u>79</u>) "Natural gas" means a mixture of gaseous hydrocarbons and other compounds with at least 80 percent methane by volume.

(7380) "Oregon Fuels Reporting System" means the interactive, secured, web-based, electronic data tracking, reporting and compliance system that DEQ develops, manages and operates to support the Clean Fuels Program.

(74<u>81</u>) "Oregon Fuels Reporting System reporting deadlines" means the quarterly and annual reporting dates in OAR 340-253-0630 and in 340-253-0650.

(7582) "OR-GREET" means the Greenhouse gases, Regulated Emissions, and Energy in Transportation (GREET) model developed by Argonne National Laboratory that DEQ modifies and maintains for use in the Oregon Clean Fuels Program. The most current version is OR-GREET 3.0. DEQ will make available a copy of OR-GREET 3.0 on its website (https://www.oregon.gov/deq/Pages/index.aspx). As used in this rule, OR-GREET refers to both the full model and the fuel-specific simplified calculators that the program has adopted.

(7683) "Physical Transport Mode" means the applicable combination of actual fuel delivery methods, such as truck routes, rail lines, pipelines and any other fuel distribution methods through which the regulated party reasonably expects the fuel to be transported under contract from the entity that generated or produced the fuel, to any intermediate entities and ending in Oregon.

(7784) "Plug-In Hybrid Electric Vehicle" or "PHEV" means a hybrid vehicle with the capability to charge a battery from an off-vehicle electric energy source that cannot be connected or coupled to the vehicle in any manner while the vehicle is being driven.

(7885) "Position holder" means any person that has an ownership interest in a specific amount of fuel in the inventory of a terminal operator. This does not include inventory held outside of a terminal, retail establishments, or other fuel suppliers not holding inventory at a fuel terminal.

(79(86) "Power Purchase Agreement" means a written agreement between an electricity service supplier and a customer that specifies the source or sources of electricity that will supply the customer.

(87) "Producer" means:

(a) With respect to any liquid fuel and renewable propane, the person who makes the fuel; or

(b) With respect to any biomethane, the person who refines, treats or otherwise processes biogas into biomethane.

(8088) "Product transfer document" or "PTD" means a document, or combination of documents, that authenticates the transfer of ownership of fuel between parties and must include all information identified in OAR 340-253-0600(2). A PTD may include bills of lading, invoices, contracts, meter tickets, rail inventory sheets or RFS product transfer documents.

(8189) "Public transportation" means regular, continuing shared passenger-transport services along set routes which are available for use by the general public.

(8290) "Public transit agency" means an entity that operates a public transportation system.

(8391) "Registered party" means a regulated party, credit generator, or aggregator that has a DEQ-approved registration under OAR 340-253-0500 to participate in the Clean Fuels Program.

(8492) "Regulated fuel" means a transportation fuel identified under OAR 340-253-0200(2).

(8593) "Regulated party" means a person responsible for compliance with requirements listed under OAR 340-253-0100(1).

(8694) "Related entity" means any direct parent company, direct subsidiary, or a company with common ownership or control.

(8795) "Renewable hydrocarbon diesel" or "renewable diesel", means a diesel fuel that isproduced is produced from non-petroleum renewable resources but is not a monoalkylester and which is registered as a motor vehicle fuel or fuel additive under Title 40, part 79 of the Code of Federal Regulations. This includes the renewable portion of a diesel fuel derived from co-processing biomass with a petroleum feedstock.

(8896) "Renewable hydrocarbon diesel blend" or "renewable diesel blend" means a fuel comprised of a blend of renewable hydrocarbon diesel with petroleum-based diesel fuel, designated RXX. In the abbreviation RXX, the XX represents the volume percentage of renewable hydrocarbon diesel fuel in the blend.

(8997) "Renewable gasoline" means a spark ignition engine fuel that substitutes for fossil gasoline and that is produced from renewable resources.

(9098) "Renewable propane" means liquefied petroleum gas (LPG or propane) that is produced from non-petroleum renewable resources.

(9199) "Renewable naphtha" means naphtha that is produced from non-petroleum renewable resources.

(92100) "Small importer of finished fuels" means any person who imports into Oregon 500,000 gallons or less of finished fuels in a given calendar year. Any fuel imported by persons that are related, or share common ownership or control, shall be aggregated together to determine whether a person meets this definition.

(93101) "Specified source feedstocks" are feedstocks for fuel pathways that require chain of custody evidence to be elegibile for a reduced CI associated with the use of a waste, residue, by-product, or similar material under the pathway certification process under OAR 340-253-0400(7).

(94102) "Substitute fuel pathway code" means a fuel pathway code that is used to report transactions that are sales or purchases without obligation, exports, loss of inventory, not for transportation use, and exempt fuel use when the seller of a fuel does not pass along the credits or deficits to the buyer and the buyer does not have accurate information on the carbon intensity of the fuel or its blendstocks.

(95103) "Tier 1 calculator", "Simplified calculator" or "OR-GREET 3.0 Tier 1 calculator" means the tools used to calculate lifecycle emissions for commonly produced fuels, including the instruction manuals on how to use the calculators. DEQ will make available copies of these simplified calculators on its website (https://www.oregon.gov/deq/Pages/index.aspx). The simplified calculators used in the program are:

(a) Tier 1 Simplified Calculator for Starch and Corn Fiber Ethanol;

(b) Tier 1 Simplified CI Calculator for Sugarcane-derived Ethanol;

(c) Tier 1 Simplified CI Calculator for Biodiesel and Renewable Diesel;

(d) Tier 1 Simplified CI Calculator for LNG and L-CNG from North American Natural Gas;

(e) Tier 1 Simplified CI Calculator for Biomethane from North American Landfills;

(f) Tier 1 Simplified CI Calculator for Biomethane from Anaerobic Digestion of Wastewater Sludge;

(g) Tier 1 Simplified CI Calculator for Biomethane from Food, Green and Other Organic Wastes; and

(h) Tier 1 Simplified CI Calculator for Biomethane from AD of Dairy and Swine Manure.

(96104) "Tier 2 calculator" or "OR-GREET 3.0 model" means the tool used to calculate lifecycle emissions for next-generation fuels, including the instruction manual on how to use the calculator. Next-generation fuels include, but are not limited to, cellulosic alcohols, hydrogen, drop-in fuels, or first-generation fuels produced using innovative production processes. DEQ will make available a copy of the Tier 2 calculator on its website (https://www.oregon.gov/deq/Pages/index.aspx).

(97105) "Transaction date" means the title transfer date as shown on the PTD.

(98106) "Transaction quantity" means the amount of fuel reported in a transaction.

(99107) "Transaction type" means the nature of the fuel transaction as defined below:

(a) "Produced in Oregon" means the transportation fuel was produced at a facility in Oregon;

(b) "Import within the bulk system" means the transportation fuel was imported into Oregon and placed into the bulk system;

(c) "Import outside the bulk system" means the transportation fuel was imported into Oregon and delivered outside the bulk system;

(d) "Purchased with obligation" means the transportation fuel was purchased with the compliance obligation passing to the purchaser;

(e) "Purchased without obligation" means the transportation fuel was purchased with the compliance obligation retained by the seller;

(f) "Sold with obligation" means the transportation fuel was sold with the compliance obligation passing to the purchaser;

(g) "Sold without obligation" means the transportation fuel was sold with the compliance obligation retained by the seller;

(h) "Position holder sale" means the transportation fuel was sold below the rack without a transfer of the compliance obligation;

(i) "Position holder sale for export" means the transportation fuel was sold below the rack to an entity who exported the fuel.

(j) "Purchase below the rack for export" means the transportation fuel was purchased below the rack and exported.

(k) "Export" means a transportation fuel that was reported under the Clean Fuels Program but was later moved from a location inside of Oregon to a location outside of Oregon;

(1) "Loss of inventory" means the fuel exited the Oregon fuel pool due to volume loss, such as through evaporation or due to different temperatures or pressurization;

(m) "Gain of inventory" means the fuel entered the Oregon fuel pool due to a volume gain, such as through different temperatures or pressurization;

(n) "Not used for transportation" means a transportation fuel that was used in an application unrelated to the movement of goods or people, such as process heat at an industrial facility, home or commercial building heating, or electric power generation.;

(o) "EV charging" means providing electricity to recharge EVs including BEVs and PHEVs;

(p) "LPGV fueling" means the dispensing of liquefied petroleum gas at a fueling station designed for fueling liquefied petroleum gas vehicles;

(q) "NGV fueling" means the dispensing of natural gas at a fueling station designed for fueling natural gas vehicles;

(r) "Exempt fuel use - Aircraft", "Exempt fuel use - Racing Activity Vehicles (ORS 801.404)", "Exempt fuel use - Military tactical and support vehicle and equipment", "Exempt fuel use - Locomotives", "Exempt fuel use - Watercraft", "Exempt fuel use - Farm vehicles, tractors, implements of husbandry", "Exempt fuel use - Motor trucks primary used to transport logs", "Exempt fuel use - Off-highway construction vehicles which must meet OAR 340-253-0250(2)(a)(J)" means that the fuel was delivered or sold into the category of vehicles or fuel users that are exempt under OAR 340-253-0250; or

(s) "Production for Import into Oregon" means the out-of-state production of a fuel that will be imported into Oregon.

(100108) "Transportation fuel" means gasoline, diesel, any other flammable or combustible gas or liquid and electricity that can be used as a fuel for the operation of a motor vehicle. Transportation fuel does not mean unrefined petroleum products.

(101109) "Unit of fuel" means fuel quantities expressed to the largest whole unit of measure, with any remainder expressed in decimal fractions of the largest whole unit.

(102110) "Unit of measure" means either:

(a) The International System of Units defined in NIST Special Publication 811 (2008) commonly called the metric system;

(b) US Customer Units defined in terms of their metric conversion factors in NIST Special Publications 811 (2008); or

(c) Commodity Specific Units defined in either:

(A) The NIST Handbook 130 (2015), Method of Sale Regulation; or

(B) OAR chapter 603 division 027.

(111) "Utility Renewable Electricity Product" means a product where a utility customer has elected to purchase renewable electricity through a product that retires RECs or represents a bundled purchase of renewable electricity and its RECs.

[NOTE: Publications referenced are available from the agency.]

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 **Statutes/Other Implemented:** ORS 468.020 & ORS 468A.265 through 468A.277 **History:**

DEQ 14-2020, amend filed 05/07/2020, effective 05/07/2020 DEQ 13-2019, amend filed 05/16/2019, effective 05/16/2019 DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019 DEQ 160-2018, minor correction filed 04/12/2018, effective 04/12/2018 DEQ 27-2017, amend filed 11/17/2017, effective 11/17/2017 DEQ 13-2015, f. 12-10-15, cert. ef. 1-1-16 DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15 DEQ 8-2014, f. & cert. ef. 6-26-14 DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14 DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-0060 Acronyms

The following acronyms apply to this division:

(1) "AFP" means Alternative Fuel Portal.

(2) "ASTM" means ASTM International (formerly American Society for Testing and Materials).

(3) "BEV" means battery electric vehicle.

(4) "CARB" means the California Air Resources Board.

(5) "CA-GREET" means the California Air Resources Board adopted version of GREET.

(6) "CFP" means the Clean Fuels Program established under OAR chapter 340, division 253.

- (7) "CI" means carbon intensity.
- (8) "CNG" means compressed natural gas.
- (9) "CO2e" means carbon dioxide equivalents.
- (10) "DEQ" means Oregon Department of Environmental Quality.
- (11) "EER" means energy economy ratio.

(12) "EN" means a European Standard adopted by one of the three European Standardization Organizations.

- (13) "EQC" means Oregon Environmental Quality Commission.
- (14) "EV" means electric vehicle.
- (15) "FEIN" means federal employer identification number.
- (16) "FFV" means flex fuel vehicle.
- (17) "FPC" means fuel pathway code.
- (18) "gCO2e/MJ" means grams of carbon dioxide equivalent per megajoule of energy.
- (19) "HDV" means heavy-duty vehicle.
- (20) "HDV-CIE" means a heavy-duty vehicle compression ignition engine.
- (21) "HDV-SIE" means a heavy-duty vehicle spark ignition engine.
- (22) "L-CNG" means liquefied-compressed natural gas.
- (23) "LDV" means light-duty vehicle.
- (24) "LNG" means liquefied natural gas.
- (25) "LPG" means liquefied petroleum gas.
- (26) "LPGV" means liquefied petroleum gas vehicle.
- (27) "MDV" means medium-duty vehicle.
- (28) "mmBtu" means million British Thermal Units.
- (29) "NERC" means the North American Electric Reliability Corporation.
- (30) "NGV" means natural gas vehicle.
- (3031) "PHEV" means partial hybrid electric vehicle.

(3132) "PTD" means product transfer document.

(3233) "REC" means Renewable Energy Certificate.

(3334) "RFS" means the Renewable Fuel Standard implemented by the US Environmental Protection Agency.

(3435) "scf" means standard cubic foot.

(3536) "ULSD" means ultra low sulfur diesel.

(3637) "WREGIS" means the Western Renewable Energy Generation Information System run by the Western Electricity Coordinating Council.

(38) "WECC" means the Western Electricity Coordinating Council.

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 **Statutes/Other Implemented:** ORS 468.020 & ORS 468A.265 through 468A.277 **History:**

DEQ 14-2020, amend filed 05/07/2020, effective 05/07/2020 DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019 DEQ 161-2018, minor correction filed 04/12/2018, effective 04/12/2018 DEQ 27-2017, amend filed 11/17/2017, effective 11/17/2017 DEQ 13-2015, f. 12-10-15, cert. ef. 1-1-16 DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15 DEQ 8-2014, f. & cert. ef. 6-26-14 DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14 DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-0100 Oregon Clean Fuels Program Applicability and Requirements

(1) Regulated parties.

(a) All persons that produce in Oregon, or import into Oregon, any regulated fuel must comply with the rules in this division.

(b) The regulated parties for regulated fuels are designated under OAR 340-253-0310 and must comply with sections (4) through (8) below;

(c) An out-of-state producer of ethanol, biodiesel, renewable diesel, alternative jet fuel, renewable natural gas, or renewable propane that is not an importer is not required to participate in the program. Any out-of-state producer that is not an importer who chooses voluntarily to participate in the program in order to initially generate credits from the volumes of their fuel that is imported into Oregon must comply with sections (4), (5), (7), (8), and (9) below;

(d) Small importers of finished fuels are exempt from sections (6) and (7) below;

(e) Regulated parties must comply with OAR chapter 340, division 215.

(2) Credit generators.

(a) The following rules designate persons eligible to generate credits for each of the following fuel types:

(A) OAR 340-253-0320 for compressed natural gas, liquefied natural gas, liquefied compressed natural gas, and liquefied petroleum gas;

(B) OAR 340-253-0330 for electricity;

(C) OAR 340-253-0340 for hydrogen fuel or a hydrogen blend; and

(D) OAR 340-253-0350 for alternative jet fuel.

(b) Any person eligible to be a credit generator, and that is not a regulated party, is not required to participate in the program. Any person who chooses voluntarily to participate in the program in order to generate credits must comply with sections (4), (5), (7), (8), and (9) below.

(3) Aggregator.

(a) Aggregators must comply with this section and sections (4), (5), (7), and (8) below.

(b) Aggregators facilitate credit generation and trade credits only if a regulated party or a credit generator has authorized an aggregator to act on its behalf by submitting an Aggregator Designation Form. An eligible credit generator may designate an aggregator for its credit generation. The only exception to that designation by a credit generator is the backstop aggregator designated under OAR 340-253-0330(7). A regulated party or credit generator already registered with the program may also serve as an aggregator for others. An aggregator is responsible for notifying DEQ when its authorization to act on behalf of a credit generator or regulated party has been withdrawn. Aggregator designations and withdrawals may only take effect at the start or end of a full calendar quarter.

(4) Registration.

(a) A regulated party must submit a complete registration application to DEQ under OAR 340-253-0500 for each fuel type on or before the date upon which that party begins producing the fuel in Oregon or importing the fuel into Oregon. The registration application must be submitted using DEQ approved forms.

(b) A credit generator must submit a complete registration application to DEQ under OAR 340-253-0500 for each fuel type before it may generate credits for fuel produced, imported, or dispensed for use in Oregon. DEQ will not recognize credits allegedly generated by any person that does not have an approved, accurate and current registration.

(c) An aggregator must submit a complete registration application to DEQ under OAR 340-253-0500 and an Aggregator Designation Form each time it enters into a new contract with a regulated party, a credit generator, or another aggregator to facilitate credit generation or trade credits. Any violations by the aggregator may result in enforcement against both the aggregator and the party it was designated to act on behalf of.

(5) Records. Regulated parties, credit generators, and aggregators must develop and retain all records OAR 340-253-0600 requires.

(6) Clean fuel standards. Each regulated party must comply with the following standards for all transportation fuel it produces in Oregon or imports into Oregon in each compliance period. Each regulated party may demonstrate compliance in each compliance period either by producing or importing fuel that in the aggregate meets the standard or by obtaining sufficient credits to offset the deficits it has incurred for such fuel produced or imported into Oregon. The initial compliance period is for two years, 2016 and 2017, and after that compliance periods will be for each single calendar year.

(a) Table 1 under OAR 340-253-8010 establishes the Oregon Clean Fuel Standard for Gasoline and Gasoline Substitutes; and

(b) Table 2 under OAR 340-253-8010 establishes the Oregon Clean Fuel Standard for Diesel and Diesel Substitutes.

(7) Quarterly report. Each regulated party, credit generator, and aggregator must submit quarterly reports under OAR 340-253-0630, unless they are exempt under subsection (1)(b) or they are a credit generator solely registered for residential charging of electric vehicles.

(8) Annual report. Each regulated party, credit generator, and aggregator must submit an annual report under OAR 340-253-0650. Each regulated party must submit an annual report for 2016 notwithstanding that the initial compliance period is for 2016 and 2017.

(9) Voluntary participation. The voluntary participation in the program by any person shall conclusively establish that person's consent to be subject to the jurisdiction of the State of Oregon, its courts, and the administrative authority of DEQ to implement this program. If a person does not consent to such jurisdiction, then the person may not participate in the program.

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 **Statutes/Other Implemented:** ORS 468.020 & ORS 468A.265 through 468A.277 **History:**

DEQ 14-2020, amend filed 05/07/2020, effective 05/07/2020 DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019 DEQ 27-2017, amend filed 11/17/2017, effective 11/17/2017 DEQ 13-2015, f. 12-10-15, cert. ef. 1-1-16 DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15 DEQ 8-2014, f. & cert. ef. 6-26-14 DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14 DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-0330 Credit Generators: Providers of Electricity

(1) Applicability. This rule applies to providers of electricity used as a transportation fuel.

(2) For residential charging. For electricity used to charge an electric vehicle at a residence, subsections (a) and (b) determine the person who is eligible to generate credits.

(a) Electric Utility. In order to generate credits for the following year, an electric utility must notify DEQ by October 1 of the current year whether it will generate credits or designate an aggregator to act on its behalf. The utility or its aggregator must have an active registration approved by DEQ under OAR 340-253-0500. Once a utility has made a designation under this section that designation will remain in effect unless the utility requests a change in writing to DEQ.

(b) Backstop <u>Aggregator.and Incremental Aggregators</u>. If an electric utility does not register or designate an aggregator under subsection (a), then <u>a</u>-backstop <u>aggregator isand</u> <u>incremental aggregators are</u> eligible to claim any credits that the utility could have generated for the following year under section (6). <u>The backstop aggregator may claim any base</u> <u>credits and the incremental aggregator may claim any incremental credits</u>.

(3) For non-residential charging. For electricity used to charge an electric vehicle at non-residential locations, such as in public, for a fleet, at a workplace, or at multi-family housing sites, subsections (a) through (c) determine the person who is eligible to generate credits.

(a) Owner or service provider of the electric-charging equipment. The owner or service provider of the electric-charging equipment may generate the credits. Only one entity may generate credits from each piece of charging equipment.

(b) Electric Utility. If the owner or service provider of the electric-charging equipment does not generate the credits, then an electric utility or an aggregator designated to act on the utility's behalf is eligible to generate the credits. The utility or its aggregator must have an active registration approved by DEQ under OAR 340-253-0500. Once a utility has made a designation under this section that designation will remain in effect unless the utility requests a change in writing to DEQ.

(c) Backstop <u>Aggregator.and Incremental Aggregators</u>. If an electric utility does not register or designate an aggregator under subsection (b), then a backstop aggregator isand incremental aggregators are eligible to claim any credits that the utility could have generated for the following year under section (6).

(4) Public Transit. For electricity used to power fixed guideway vehicles such as light rail systems, streetcars, and aerial trans, or transit buses, a transit agency may generate the credits. The transit agency must have an active registration approved by DEQ under OAR 340-253-0500.

(5) Forklifts. For electricity used to power forklifts, the forklift fleet owner or fleet operator may generate the credits. Only one entity may generate credits from each piece of equipment. The fleet owner has precedence to generate credits or designate an aggregator.

(6) Transportation Refrigeration Units. The fleet owner or fleet operator of the electric transportation refrigeration unit may generate credits for electricity used in transport refrigeration units. Only one entity may generate credits from each piece of equipment. The fleet owner has precedence to generate credits or designate an aggregator.

(7) <u>Electric Cargo Handling Equipment. The owner or service provider of the electric-charging equipment may generate the credits or designate an aggregator. Only one entity may generate credits from each piece of charging equipment.</u>

(8) Electric Ocean-Going Vessel powering. The owner of the equipment that provides electrical power from the shore to the vessel is eligible to generate credits or designate an aggregator.

(9) Responsibilities to generate credits. Any person specified under sections (2) through (68) may generate clean fuel credits by complying with the registration, recordkeeping and reporting requirements of this division.

(<u>\$10</u>) Backstop Aggregator. The backstop aggregator that serves as the credit generator of electricity credits that have not been claimed by an electric utility, an aggregator designated by an electric utility, or an owner or service provider of electric charging equipment under sections (2) and (3).

(a) To qualify to submit an application to be a backstop aggregator, an organization must:

(A) Be an organization exempt from federal taxation under section 501(c)(3) of the U.S. Internal Revenue Code;

(B) Complete annual independent financial audits.

(b) An entity that wishes to be the backstop aggregator must submit an application with DEQ that includes:

(A) A description of the mission of the organization and how being a backstop aggregator fits into its mission;

(B) A description of the experience and expertise of key individuals in the organization who would be assigned to work associated with being a backstop aggregator;

(C) A plan describing:

(i) How the organization will promote transportation electrification statewide or in specific utility service territories, if applicable;

(ii) Any entities that the organization might partner with to implement its plan;

(iii) How the organization plans to use the revenue from the sale of credits, which may include, without limitation, programs that provide incentives to purchase electric vehicles or install electric vehicle chargers, opportunities to educate the public about electric vehicles, and anticipated costs to administer its plan; and

(iv) The financial controls that are, or will be put, in place to segregate funds from the sale of credits from other monies controlled by the organization.

(D) Its last three years of independent financial audits and I.R.S. form 990s, and proof that the I.R.S. has certified them as qualifying as an exempt organization under 501(c)(3);

(c) Initial applications to be a backstop aggregator are due to DEQ no later than March 15, 2018, to be eligible to be the backstop aggregator beginning in 2018. If the EQC does not approve the designation of a backstop aggregator under subsection (e), then DEQ may set a new deadline for applications if it decides to undertake a new selection process.

(d) Applications will be evaluated by DEQ with the assistance of relevant experts selected by DEQ. DEQ will evaluate applications based on the likelihood that the applicant will maximize the benefits from the credits it receives to expand the use of alternative fuel vehicles and reduce greenhouse gas emissions from the transportation sector in Oregon.

(e) DEQ may recommend an organization be designated as the initial backstop aggregator to the EQC by May 31, 2018. If DEQ does not recommend an organization to be the backstop aggregator or the EQC does not approve DEQ's recommendation, then DEQ may undertake a new selection process at a later date under the same criteria in subsections (b) and (d).

(f) Following EQC approval of an organization to be the backstop aggregator, DEQ and the organization may enter into a written agreement regarding its participation in the program. A written agreement must be in place prior to the backstop aggregator registering an account in the CFP Online System and receiving credits for the first time. The backstop aggregator must:

(A) By March 31st of each year, submit a report that summarizes the previous year's activity including:

(i) How much revenue was generated from the credits it received;

(ii) A description of activities including the status of each activity, where each activity took place, and each activity's budget, including administrative costs, and an estimate of its outcomes; and

(iii) The results of its most recent independent financial audit.

(B) Maintain records and make them available upon request by DEQ, including records required to be maintained under OAR 340-253-0600 and, in addition, any records relating to its application, the programs it operates using the proceeds from the sale of credits under this program, and any of the organization's financial records.

(g) If DEQ determines that a backstop aggregator is in violation of this division or the agreement that it enters into with DEQ to be the backstop aggregator, DEQ may rescind its designation and solicit applications to select a new backstop aggregator.

(h) If backstop aggregator wishes to terminate its agreement with DEQ, then DEQ may solicit applications to select a new backstop aggregator.

(i) After a backstop aggregator has been in place for three years, DEQ may hold a new selection process to appoint a backstop aggregator for future years. Unless DEQ has rescinded an organization as backstop aggregator under subsection (g), the current backstop aggregator may apply to be re-designated as the backstop aggregator for future years.

(11) Incremental credits. Other than for residential charging, incremental credits may be claimed by the eligible credit generator identified in sections (3)-(8) of this rule or the incremental aggregator. For residential charging, the following entities may claim incremental credits:

(a) The electric utility claiming base credits for the same vehicles under subsection (2)(a) or their designated aggregator if they notify DEQ by June 15 or December 15 that they wish to begin generating incremental credits starting with the charging covered by the next period of residential electric vehicle charging. A utility's election remains in place until they inform DEQ otherwise; or

(b) Incremental Aggregator. The incremental aggregator that serves as the credit generator of incremental electricity credits that have not been claimed by an electric utility, an aggregator designated by an electric utility, or the eligible credit generator under sections (3)-(8). The incremental aggregator will be selected as provided in subsection (c).

(c)(A) To qualify to submit an application to be the incremental aggregator, an organization <u>must:</u>

(i) Be an organization exempt from federal taxation under section 501(c)(3) of the U.S. Internal Revenue Code; and

(ii) Complete annual independent financial audits.

(B) An entity that wishes to be the incremental aggregator must submit an application with DEQ that includes:

(i) A description of the mission of the organization and how being the incremental aggregator fits into its mission;

(ii) A description of the experience and expertise of key individuals in the organization who would be assigned to work associated with being the incremental aggregator;

(iii) How the organization plans to promote transportation electrification statewide in an equitable manner and conduct programs on a statewide basis;-

(iv) The financial controls that are, or will be put, in place to segregate funds from the sale of credits from other monies controlled by the organization; and-

(v) Its last three years of independent financial audits and I.R.S. form 990s, and proof that the I.R.S. has certified them as qualifying as an exempt organization under 501(c)(3).

(C) Initial applications to be the incremental aggregator are due to DEQ no later than July 1, 2021, to be eligible to be selected by the EQC to be the incremental aggregator beginning with 2020 residential EV crediting. If the EQC does not approve the designation of an incremental aggregator under subsection (11)(e), then DEQ may set a new deadline for applications if it decides to undertake a new selection process.

(D) Applications to be the incremental aggregator will be evaluated by DEQ in partnership with the equity advisory committee selected under subsection (11)(j). DEQ will evaluate applications based on the likelihood that the applicant will use the revenue from the credits it receives to advance transportation electrification statewide with a focus on actions that will help vulnerable populations and communities impacted by air pollution and climate change.

(E) DEQ may recommend that an applicant organization be designated as the initial incremental aggregator to the EQC by August 15, 2021. If DEQ does not recommend an organization to be the incremental aggregator or the EQC does not approve DEQ's recommendation, then DEQ may undertake a new selection process at a later date under the same criteria in paragraphs (11)(c)(A) through (D).

(F) Following EQC approval of an organization to be the incremental aggregator, DEQ and the organization may enter into a written agreement regarding the selected organization's participation in the program. A written agreement must be in place prior to the incremental aggregator receiving credits for the first time. The incremental aggregator must:

(i) By March 31st of each year, submit a report that summarizes the previous year's activity including:

(I) How much revenue was generated from the credits it received;

(II) A description of activities including the status of each activity, where each activity took place, and each activity's budget, including administrative costs, and an estimate of its outcomes; and

(III) The results of its most recent independent financial audit.; and

(ii) Maintain records and make them available to DEQ upon request by DEQ, including records required to be maintained under OAR 340-253-0600 and, in addition, any records relating to its application, the programs it operates using the proceeds from the sale of credits under this program, and any of the organization's financial records.

(G) If DEQ determines that an incremental aggregator is in violation of this division or the agreement that it enters into with DEQ to be the incremental aggregator, DEQ may rescind its designation and solicit applications to select a new incremental aggregator.

(H) If the incremental aggregator wishes to terminate its agreement with DEQ, then DEQ may solicit applications to select a new incremental aggregator.

(I) After an incremental aggregator has been in place for three years, DEQ may hold a new selection process to appoint an incremental aggregator for future years. Unless DEQ has rescinded an organization as incremental aggregator under paragraph (11)(c)(G), the current backstop aggregator may apply to be re-designated as the incremental aggregator for future years.

(J) Equity advisory committee. DEQ will appoint and convene an advisory committee to help the agency design projects and programs for the incremental aggregator to implement that prioritize the revenue for transportation electrification projects that equitably distributes benefits and address the needs and interests of impacted communities that are the most vulnerable to the adverse effects of transportation air pollution and climate change. The committee will also advise DEQ in its review of reports on utility spending, and:

(i) The committee will advise DEQ in:

(I) The selection of the incremental aggregator;

(II) Establishing criteria that will be used to set priorities to be carried out by the incremental aggregator;

(III) Developing the annual work plan for the incremental aggregator;

(IV) Identifying areas of need that should be prioritized by utility projects and programs paid for by revenue from CFP incremental credit sales in order to ensure equitable outcomes and benefits;

(V) Reviewing the utility reports submitted under OAR 340-253-0640(9); and

(VI) Reviewing the performance of the incremental aggregator;

(ii) DEQ will solicit applications for residents of the state of Oregon to be appointed to the equity advisory committee. DEQ will seek representatives with the following interests and areas of expertise:

(I) Transportation electrification;

(II) Equity and environmental justice; and

(III) The needs and interests of communities that are most vulnerable to the impacts of climate change, tribes, low-income communities, rural communities, and other under-represented communities;- and

(iii) DEQ will solicit applications to serve on the equity advisory committee in May 2021 and may select the committee from those applicants. Committee members may serve terms of three years and DEQ may annually solicit applications and make additional selections to serve on the committee. Committee members will serve as volunteers, and will not be compensated for their service on the committee.

(K) The incremental aggregator must consult with DEQ and the equity advisory committee to propose an annual workplan to guide its spending for the next year, subject to approval by DEQ. DEQ will not award credits to the incremental aggregator unless DEQ has approved such workplan and the incremental aggregator has followed such workplan. The incremental aggregator and DEQ may mutually agree to modify the annual workplan at any time, after consultation with the equity advisory committee. Projects to be undertaken by the incremental aggregator may include:

(i) Electrification and battery swap programs for school or transit buses;

(ii) Electrification of drayage trucks;

(iii) Investment in public EV charging infrastructure and EV charging infrastructure in multi-family residences;

(iv) Investment in electric mobility solutions, such as EV sharing and ride-hailing programs;

(v) Multilingual marketing, education, and outreach designed to increase awareness and adoption of EVs and clean mobility options that includes information about their benefits to individuals, the environment, and human health;

(vi) Additional rebates and incentives for low-income individuals beyond existing local, federal and state rebates and incentives for:

(I) Purchasing or leasing new or previously owned EVs;

(II) Installing EV charging infrastructure in residences and related electrical work;

(III) Promoting the use of public transit and other clean mobility; and

(IV) Off-setting costs for residential or non-residential EV charging; and-

(vii) Other projects that promote transportation electrification in disadvantaged or lowincome communities, rural areas, or for low-income individuals and that are reviewed by the equity advisory committee and approved by DEQ. Individuals and organizations may submit such projects to DEQ for consideration, and the application must include:

(I) A complete description of the project, the demonstration that the project promotes transportation electrification in communities that are most vulnerable to the impacts of climate change, tribes, low-income communities, rural communities, and other under-represented communities, or that the project provides increased access to electric transportation for low-income individuals; and

(II) Evidence that the project was developed in coordination with local environmental justice advocates, local community-based organizations, local units of government, or multiple such entities.

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 **Statutes/Other Implemented:** ORS 468.020 & ORS 468A.265 through 468A.277 **History:**

DEQ 1-2019, minor correction filed 01/03/2019, effective 01/03/2019 DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019 DEQ 27-2017, amend filed 11/17/2017, effective 11/17/2017 DEQ 13-2015, f. 12-10-15, cert. ef. 1-1-16 DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15 DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-0400 Carbon Intensities

(1) OR-GREET. Carbon intensities for fuels must be calculated using OR-GREET 3.0 or a model approved by DEQ. If a party wishes to use a modified or different lifecycle carbon intensity model, it must be approved by DEQ in advance of an application under OAR 340-253-0450.

(2) DEQ review of carbon intensities. Every three years, or sooner if DEQ determines that new information becomes available that warrants an earlier review, DEQ will review the carbon intensities used in the CFP and must consider, at a minimum, changes to:

(a) The sources of crude and associated factors that affect emissions such as flaring rates, extraction technologies, capture of fugitive emissions, and energy sources;

(b) The sources of natural gas and associated factors that affect emissions such as extraction technologies, capture of fugitive emissions, and energy sources;

(c) Fuel economy standards and energy economy ratios;

(d) GREET, OR-GREET, CA-GREET, GTAP, AEZ-EF or OPGEE;

(e) Methods to calculate lifecycle greenhouse gas emissions;

(f) Methods to quantify indirect land use change; and

(g) Methods to quantify other indirect effects.

(3) Statewide carbon intensities.

(a) Regulated parties, credit generators and aggregators must use the statewide average carbon intensities listed in Tables 3 and 4 under OAR 340-253-8010 and -8010 for the following fuels:

(A) Clear gasoline or the gasoline blendstock of a blended gasoline fuel;

(B) Clear diesel or the diesel blendstock of a blended diesel fuel;

(C) Fossil CNG;

(D) Fossil LNG; and

(E) Fossil LPG.

(b) For electricity suppliers,

(A) The statewide average electricity carbon intensity is calculated annually under OAR 340-253-0470 and posted on the DEQ website.

(B) Credit generators or aggregators may use a carbon intensity different from the statewide average under subsection (b)(A) if:

(i) The utility has applied for an individual carbon intensity under OAR 340-253-0470; or

(ii) The party generates lower carbon electricity at the same location as it is dispensed into a motor vehicle consistent with the conditions of the approved fuel pathway code under OAR 340-253-0470(3).

(c) A hydrogen supplier may use the applicable value in Table 4 under OAR 340-253-8010, or apply for a specific carbon intensity under OAR 340-253-0450.

(4) Carbon intensities for established fuel pathways. Except as provided in sections (3) or (5), regulated parties, credit generators, and aggregators can use a carbon intensity that:

(a) CARB has certified for use in the California Low Carbon Fuel Standard program, as adjusted for fuel transportation distances and indirect land use change, and that has been reviewed and approved by DEQ as being consistent with OR-GREET 3.0; or

(b) Matches the description of a fuel pathway listed in Table 4 under OAR 340-253-8010. For Hydrogen produced using biomethane or renewable power, the producer of the hydrogen will have to demonstrate to DEQ that the value in Table 4 is appropriate for its production facility and must submit attestations on an annual basis that the renewable power and biomethane attributes, as applicable, were not claimed in any other program except for the federal RFS. Any such claims under the federal RFS must be made for the same use and volume of biomethane or its derivatives as it is being claimed for in the CFP, or the claim under the CFP is invalid.

(5) Transition to OR-GREET 3.0.

(a) Pathways certified under OR-GREET or CA-GREET 2.0 will be deactivated by DEQ in the Oregon Fuels Reporting System for reporting after the fourth quarter of 2020. Fuel pathway holders with pathways certified under OR-GREET or CA-GREET 2.0 that wish to

keep generating credits from those fuels from January 1, 2021 onward must follow the pathway application and certification process in this rule to obtain a new pathway under OR-GREET 3.0, or request DEQ approval of a CARB-certified CA-GREET 3.0 pathway.

(b) Table 4 pathways. Entities reporting fuels using Table 4 pathways that do not require an application under subsection (a) will have those pathways automatically updated to the OR-GREET 3.0 values on January 1, 2019 for first quarter 2019 reporting.

(c) New pathway applications. DEQ will not consider new applications using OR-GREET 2.0.

(6) Primary alternative fuel pathway classifications. If it is not possible to identify an applicable carbon intensity under either section (3) or (4), then the regulated party, credit generator, or aggregator has the option to develop its own fuel pathway and apply for it to be certified under 340-253-0450. Fuel pathway applications fall into one of two tiers:

(a) Tier 1. Conventionally-produced alternative fuels of a type that have been well-evaluated in the Oregon and California low carbon fuel standards. Tier 1 fuels include:

(A) Starch- and sugar-based ethanol;

(B) Biodiesel produced from conventional feedstocks (plant oils, tallow and related animal wastes and used cooking oil);

(C) Renewable diesel produced from conventional feedstocks (plant oils, tallow and related animal wastes and used cooking oil);

(D) Natural Gas; and

(E) Biomethane from landfills; anaerobic digestion of dairy and swine manure or wastewater sludge; and food, vegetative or other organic waste.

(b) Tier 2. All fuels not included in Tier 1 including but not limited to:

(A) Cellulosic alcohols;

(B) Biomethane from other sources;

(C) Hydrogen;

(D) Renewable hydrocarbons other than renewable diesel produced from conventional feedstocks;

(E) Biogenic feedstocks co-processed at a petroleum refinery

(F) Alternative Jet Fuel;

(G) Renewable propane; and

(H) Tier 1 fuels using innovative methods, including but not limited to carbon capture and sequestration or a process that cannot be accurately modeled using the simplified calculators.

(7) Specified source feedstocks. Fuels that are produced from a specified source feedstock may be eligible for a reduced carbon intensity <u>scorevalue</u> when applying under OAR 340-253-0450 so long as they meet all of the following requirements:

(a) Specified source feedstocks are non-primary products of commercial or industrial processes for food, fuel or other consumer products and include, but are not limited to, used cooking oil, animal fats, fish oil, yellow grease, distiller's corn oil, distiller's sorghum oil, brown grease, and other fats, oils, and greases;.

(b) The specified source feedstocks are used in pathways for biodiesel; renewable diesel; alternative jet fuel; co-processed refinery products; biomethane supplied using book and claim accounting and claimed as a feedstock for CNG, LNG, L-CNG; or steam-methane reformation produced hydrogen;

(c) Under OAR 340-253-0450(9)(d), any feedstock can be designated as a specified source feedstock if requested by a supplier using site-specific carbon intensity data or if it is specified in a pathway approval condition; and .

(d) Chain-of-custody evidence must be used to demonstrate the proper characterization and accuracy of the quantity of the specified source feedstocks going into a fuel production facility or claimed as biomethane, subject to all of the following provisions:

(A) Chain-of-custody evidence must be provided to the verifier and to DEQ upon request;

(B) Joint applicants may assume responsibility for different portions of the chain-of-custody evidence;

(C) Fuel pathway applicants using specified source feedstocks must maintain either:

(i) Delivery records that show shipments of feedstock type and quantity directly from the point of origin to the fuel production facility; or

(ii) Information from material balance or energy balance systems that control and record the assignment of input characteristics to output quantities at relevant points along the feedstock supply chain between the point of origin and the fuel production facility; and

(e) In order to maintain the pathway, the fuel production and any joint applicant must meet the following requirements:

(A) Maintain records of the type and quantity of feedstock obtained from each supplier, including feedstock transaction records, feedstock transfer documents pursuant to (f), weighbridge tickets, bills of lading or other documentation for all incoming and outgoing feedstocks;

(B) Maintain records used for material balance and energy balance calculations; and

(C) Ensure DEQ staff and verifier access to audit feedstock suppliers to demonstrate proper accounting of attributes and conformance with certified CI data.

(8) The carbon intensity value certified under OAR 340-253-0450, including any margin of safety requested by the fuel producer, is the maximum carbon intensity value that a fuel can be reported in the CFP. The actual operational carbon intensity of a fuel will be calculated from the most recent production data covering 24 months of the fuel production facility's operation. Registered parties shall not report fuel sales under any CFP carbon intensity unless the actual operational carbon intensity is equal to or less than the certified CI.

(9) Fuel producers labeling fuel sold in Oregon with a carbon intensity under the CFP and registered entities using those labeled carbon intensities to report in the Oregon Fuels Reporting System, must ensure that the fuel so labeled and reported will be found to have an actual operational lifecycle carbon intensity equal to or below its certified carbon intensity.

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 **Statutes/Other Implemented:** ORS 468.020 & ORS 468A.265 through 468A.277 **History:**

DEQ 14-2020, amend filed 05/07/2020, effective 05/07/2020 DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019 DEQ 27-2017, amend filed 11/17/2017, effective 11/17/2017 DEQ 13-2015, f. 12-10-15, cert. ef. 1-1-16 DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15 DEQ 8-2014, f. & cert. ef. 6-26-14 DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14 DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-0450 Obtaining a Carbon Intensity

(1) Fuel producers can apply to obtain a carbon intensity by following the process to obtain a carbon intensity under this rule.

(2) Applicants seeking approval to use a carbon intensity that is currently approved by the CARB must provide:

(a) The application package submitted to CARB;

(b) The CARB-approved Tier 1 or Tier 2 CA-GREET 3.0 calculator, and the OR-GREET 3.0 equivalent with the fuel transportation and distribution cells modified for that fuel's pathway to Oregon;

(c) The CARB review report for the approved fuel pathway;

(d) Any other supporting materials relating to the pathway, as requested by DEQ; and

(e) If the applicant is seeking to use a provisional pathway approved by CARB, then the applicant must submit to DEQ the ongoing documentation it provides to CARB, and as required in section (6). The applicant must provide DEQ within fourteen days:

(A) Any additional documentation it has submitted to CARB; and

(B) A notification of any changes to the status of its CARB-approved provisional pathway.

(3) Applicants seeking to obtain a carbon intensity using either the Tier 1 or Tier 2 calculator must submit the following information:

(a) Company name and full mailing address.

(b) Company contact person's contact information including the name, title or position, phone number, mobile phone number, facsimile number, email address, and website address.

(c) Facility name (or names if more than one facility is covered by the application).

(d) Facility address (or addresses if more than one facility is covered by the application).

(e) Facility ID for facilities covered by the RFS program.

(f) Facility geographical coordinates (for each facility covered by the application).

(g) Facility contact person's contact information including the name, title or position, phone number, mobile phone number, facsimile number, and email address.

(h) Facility nameplate production capacity in million gallons per year (for each facility covered by the application).

(i) If applicable, consultant's contact information including the name, title or position, phone number, mobile phone number, facsimile number, email address, and website URL.

(j) Declaration whether the applicant is applying for a carbon intensity for a Tier 1 or Tier 2 fuel.

(4) In addition to the items in section (3), applicants seeking to obtain a carbon intensity for a Tier 1 fuel using one of the simplified calculators must submit the following:

(a) The applicable simplified calculator with all necessary inputs completed, following the instructions in the applicable manual for that calculator;

(b) A positive verification statement from an approved verification body, provided in compliance with OAR chapter 340, division 272, stating that it has reviewed and validated all of the data used to form the inputs for the Tier 1 calculator submitted under (a), or the invoices and receipts for all forms of energy consumed in the production process, all fuel sales, all feedstock purchases, and all co-products sold for the most recent 24 months of full commercial production, along with a summary of those invoices and receipts; and

(c) The most recent RFS third party engineering report, if one has been conducted for the facility.

(5) In addition to the items in section (3), applicants seeking to obtain a carbon intensity for a Tier 2 fuel using the full OR-GREET 3.0 model must submit the following:

(a) A positive verification statement from an approved verificiation verification body, provided in compliance with OAR chapter 340, division 272, stating that it has reviewed and validated all of the data used to form the inputs for the Tier 2 calculator submitted under (c), or the invoices and receipts for all forms of energy consumed in the production process, all fuel sales, all feedstock purchases, and all co-products sold for the most recent 24 months of full commercial production, and a summary of those invoices and receipts;

(b) The geographical coordinates of the fuel production facility;

(c) A completed Tier 2 model;

(d) Process flow diagrams that depict the complete fuel production process;

(e) Applicable air permits issued for the facility;

(f) A copy of the RFS third party engineering report, if available;

(g) A copy of the RFS fuel producer co-products report; and

(h) A lifecycle analysis report that describes the fuel pathway and describes in detail the calculation of carbon intensity for the fuel. The report shall contain sufficient detail to allow staff to replicate the carbon intensity the applicant calculated. The applicant must describe all inputs to, and outputs from, the fuel production process that are part of the fuel pathway.

(6) Applicants seeking a provisional carbon intensity. If a fuel production facility has been in full commercial production for at least 90 days but less than 24 months, it can apply for a provisional carbon intensity.

(a) The applicant shall submit operating records covering all periods of full commercial operation in accordance with sections (2) through (5).

(b) DEQ may approve the provisional carbon intensity under section (9).

(c) At any time before the plant reaches a full 24 months of full commercial production, DEQ may revise as appropriate the operational carbon intensity based on the required ongoing submittals or other information it learns.

(d) If, after a plant has been in full commercial production for more than 24 months of full commercial production, the facility's operational carbon intensity is higher than the provisionally-certified carbon intensity, DEQ will replace the certified carbon intensity with the operational carbon intensity in the Oregon Fuels Reporting System and adjust the credit balance accordingly.

(e) If the facility's operational carbon intensity appears to be lower than the certified carbon intensity, DEQ will take no action. The applicant may, however, petition DEQ for a new carbon intensity that reflects the operational data. In support of such a petition, the applicant must submit a revised application packet that fully documents the requested reduction.

(7) Applicants employing co-processing at a petroleum refinery. Applicants employing coprocessing of biogenic feedstocks at a petroleum refinery must submit all information required under sections (3) and (5).

(a) For the renewable diesel or other renewable refinery product of the fuel, the applicant must also submit:

(A) The planned proportions of biogenic feedstocks to be processed;

(B) A detailed methodology for the attribution of biogenic feedstocks to the renewable products; and

(C) The corresponding carbon intensities from each biogenic feedstock.

(b) The attribution methodology will be subject to approval by DEQ and may be modified at DEQ's discretion based on ongoing quarterly reporting of production data at the refinery.

(c) DEQ may adjust the carbon intensities applied for under this section as it determines is appropriate.

(8) Temporary Fuel Pathway Codes for Fuels with Indeterminate Carbon Intensities. A regulated party or credit generator that has purchased a fuel without a carbon intensity must submit a request to DEQ for permission to use a temporary fuel pathway code found in Table 9 under OAR 340-253-8010, or a temporary fuel pathway code otherwise approved and posted by DEQ under OAR 340-253-0450(11).

(a) The request must:

(A) Be submitted within 45 days of the end of the calendar quarter for which the applicant is seeking to use a temporary fuel pathway code; and

(B) Explain and document that the production facility is unknown or that the production facility is known but there is no approved fuel pathway code.

(b) Temporary fuel pathway codes may be used for up to two calendar quarters. If more time is needed to obtain a carbon intensity, the party that obtained the temporary fuel pathway must submit an additional request to DEQ for an extension of the authorization to use a temporary fuel pathway code.

(c) If DEQ grants a request to use a temporary fuel pathway code, credits and deficits may be generated subject to the quarterly reporting provisions in OAR 340-253-0630.

(9) Approval process to use carbon intensities for fuels other than electricity.

(a) For applications proposing to use CARB-approved fuel pathways, including provisional pathways, DEQ will:

(A) Confirm that the proposed fuel pathway is consistent with OR-GREET 3.0; and

(B) Review the materials submitted under subsection (2).

(b) For applications proposing to use the Tier 1 or Tier 2 calculators, DEQ may approve the application if it can:

(A) Replicate the calculator outputs; and

(B) Verify the energy consumption and other inputs.

(c) If DEQ has approved or denied the application for a carbon intensity, DEQ will notify the applicant of its determination.

(d) DEQ may impose conditions in its approval of the carbon intensity. Conditions may include specific limitations, recordkeeping or reporting requirements, adherence to protocols to assure carbon reduction or sequestration claims, or operational conditions that DEQ determines should apply to assure the ongoing accuracy of the approved carbon intensity. Failure to meet those conditions may result in the carbon intensity approval being revoked.

(A) For applicants seeking a provisional pathway, DEQ will specify the conditions used to establish the pathway.

(i) In order to maintain an active provisional pathway eligible to generate credits, the applicant must file the annual fuel pathway report and seek third-party verification if required under OAR 340-253-0700.

(ii) At any point during the 24 months following the certification of a provisional pathway, DEQ may revise as appropriate the CI score for the provisional pathway based on new information or a better understanding of the pathway.

(iii) DEQ may remove the <u>The the</u> provisional status of the pathway after the applicant provides 24 months of operational data with a positive or qualified positive verification status.

(iv) For pathways that are not subject to verification, DEQ may remove the provisional status upon review of 24 months of operational data demonstrating that the pathway data supports the provisional $CI_{\overline{n_2}}$

(B) For a CARB-approved fuel pathway that DEQ has approved for use in Oregon, if at any time the pathway's approval is revoked by CARB then:

(i) The fuel pathway holder must inform DEQ within seven days of the revocation and provide DEQ with documentation related to that decision.

(ii) Upon DEQ request, the fuel pathway holder must provide to DEQ additional documentation.

(iii) DEQ may at its discretion revoke its approval of the pathway's use in Oregon at any time.

(iv) If CARB modifies its approval of the pathway then the fuel pathway holder must notify DEQ of the modification not later than 14 days after CARB's modification and must provide to DEQ any accompanying documentation the fuel pathway holder received from CARB.

(v) Based on the underlying facts that led to CARB's modification of the pathway's status, within 30 days DEQ may modify its approval, take no action, or revoke its approval and will provide the fuel pathway holder with written notice of its decision.

(e) In order to receive and maintain an active fuel pathway code, the producer of any fuel must:

(A) Maintain an active registration with the AFP;

(B) Provide proof of delivery to Oregon through a physical pathway demonstration in the quarter in which the fuel is first reported in the Oregon Fuels Reporting System;

(C) Beginning in calendar year 2021, each fuel pathway holder must submit an annual fuel pathway report into the AFP no later than March 31st of each calendar year. The annual fuel pathway report must include:

(i) The certified version of the simplified OR-GREET or full OR-GREET calculator, as applicable, updated to include the most recent two calendar years of operational data;

(ii) The annual fuel pathway report for renewable electricity and hydrogen lookup table pathways, in lieu of the CI calculator, must include invoices or metering records substantiating the quantity of renewable or low-CI inputs procured from a qualifying source.;

(iii) If the fuel or fuel production process involves biomethane or renewable electricity, the fuel producer must provide the attestation regarding environmental attributes or proof of non-generation or retirement of any RECs as required by OAR 340-253-0640(1)(d) or OAR 340-253-0470(3)(d);

(iv) Any fuel pathway holder, including a joint applicant, who is not subject to site visits by a third party verifier, whose pathway involves the use of renewable or low-CI process energy, must submit invoices for that energy to the AFP. Additionally, for any electricity that is used to reduce the carbon intensity of electricity used as a transportation fuel or hydrogen production via electrolysis, the pathway holder must upload records demonstrating that any renewable <u>energyenergy certificates generated were retired in WREGIS or another comparable, recognized REC tracking system</u> for the purpose of lowering the certified CI, or for credit generation;

(v) Any temporally-variable information that was requested or required by DEQ to be included in the initial application as supplemental information, or any required data or documentation listed in the pathway's operating conditions. The information required to be submitted under this section must cover the same time period as the updated OR-GREET model required under subparagraph (i);

(vi) If the verified operational CI as calculated from the operational data covering the prior two calendar years of production is found to be lower than the certified CI, and a positive verification statement is issued for this period, the fuel pathway holder may elect to keep the original certified CI, or may request to replace the certified CI with the verified operational CI. The pathway holder may elect to add a margin of safety to the new certified CI, and must submit an attestation that the new CI can be maintained through the next reporting period with the acknowledgement that exceeding the newly certified CI in subsequent annual reports or verifications is a violation of the requirements of this division; and

(vii) If the operational CI is found to be greater than the certified CI, the fuel pathway holder is out of compliance with this division and may be subject to investigation and enforcement by DEQ;

(D) Comply with the requirements of this division and OAR chapter 340, division 272. Failure to timely submit an annual fuel pathway report or a required verification statement for a facility's pathways will result in the deactivation of those pathways; and

(E) If a pathway employs carbon capture and sequestration, the fuel pathway holder or joint applicant must submit annual reports of greenhouse gas emissions reductions, project operations, and ongoing monitoring results. Reports must include measurements of relevant parameters sufficient to ensure that the quantification and documentation of CO2 sequestered is replicable and verifiable. DEQ may specify a protocol for measuring and reporting such information in its approval of such an application.

(f) If DEQ determines the proposal for the carbon intensity has not met the criteria in subsection (b), DEQ will notify the applicant that the proposal is denied and identify the basis for the denial.

(g) DEQ may modify an approved fuel pathway's CI or approval conditions upon receipt of a verification statement that shows that the verified operational CI is higher than the certified CI.

(h) Any applicant may include a margin of safety in its application which will increase its certified CI in order to account for potential process variability and to reduce the risk that it will violate this division by having its operational CI exceed its certified CI.

(10) Completeness determination process.

(a) For applications calculated using the Tier 1 or Tier 2 calculator, DEQ will determine whether the proposal is complete within 1 month after receiving a registration application.

(b) If DEQ determines the proposal is complete, DEQ will notify the applicant in writing of the completeness determination.

(c) If DEQ determines the proposal is incomplete, DEQ will notify the applicant of the deficiencies. The applicant has 30 calendar days to address the deficiencies or DEQ will deny the application. Upon request, DEQ may grant an extension of up to 30 additional days.

(d) If the applicant submits supplemental information, DEQ has 30 calendar days to determine if the supplemental submittal is complete, or to notify the party and identify the continued deficiencies. This process may repeat until the application is deemed complete or 180 calendar days have elapsed from the date that the applicant first submitted the registration application.

(11) Issuing additional substitute and temporary fuel pathway codes. For new fuels or new fuel blends being provided within Oregon, registered parties may request that DEQ issue additional fuel pathway codes that can be used in the same manner as those in Tables 8 or 9 (substitute or temporary pathway codes) under OAR 340-253-8010. DEQ may approve such substitute or temporary pathway codes if it concludes they are technically sound and supported by appropriate evidence. If any are approved, DEQ will post these additional pathway codes in the Oregon Fuels Reporting System and on its public website for the Clean Fuels Program. All of the following requirements apply to such requests:

(a) Requests must be made in writing to DEQ.

(b) If DEQ concludes the proposed pathway may be technically sound and supported by appropriate evidence, then it will post the proposed new substitute or temporary pathway codes on its website and take comments for:

(A) 14 calendar days in the case of a substitute fuel pathway code; or

(B) 45 calendar days in the case of a temporary fuel pathway code.

(c) DEQ will consider any comments received, make any modifications, if necessary, and make a final decision on the proposed pathway.

(d) If DEQ concludes the proposed pathway is technically sound and supported by appropriate evidence, then DEQ may approve it and publish its final decision on its website.

(e) Any newly <u>approvednewapproved</u> substitute or temporary fuel pathway code will be effective for use in the quarter in which it is approved.

(12) Measurement accuracy.

(a) All measurement devices that log or record data for use in a fuel pathway application must comply with the manufacturer-recommended recommended calibration frequency and precision requirements. If manufacturer-recommendations are not provided, the measurement devices must be calibrated at least every six years.

(b) Requests to Postpone Calibration. For units and processes that operate continuously with infrequent outages, it may not be possible to meet manufacturer-recommended calibration deadlines for measurement devices. In such cases, the owner or operator may submit a written request to DEQ to postpone calibration or inspection until the next scheduled maintenance outage. Such postponements are subject to the procedures of paragraphs (A) and (B) below and must be documented in the monitoring plan required under OAR 340-253-0600.

(A) A written request for postponement must be submitted to DEQ not less than 30 days before the required calibration, recalibration or inspection date. DEQ may request additional documentation to validate the operator's claim that the device meets the accuracy requirements of this section. The operator shall provide any additional documentation to DEQ within ten (10) business days of a request for documentation.

(B) The request must include:

(i) The date of the required calibration, recalibration, or inspection;

(ii) The date of the last calibration or inspection;

(iii) The date of the most recent field accuracy assessment, if applicable;

(iv) The results of the most recent field accuracy assessment, if applicable, clearly indicating a pass/fail status;

(v) The proposed date for the next field accuracy assessment, if applicable;

(vi) The proposed date for calibration, recalibration, or inspection which must be during the time period of the next scheduled shutdown. If the next shutdown will not occur within three years, this must be noted and a new request must be received every three years until the shutdown occurs and the calibration, recalibration or inspection is completed; and.

(vii) A description of the meter or other device, including at a minimum the: make, model, installation date, location, parameter measured by the meter or other device, the rate of data capture by the meter or other device, description of how data from the meter or other device is used in a fuel pathway, calibration or inspection procedure, reason for delaying the calibration or inspection, proposed method to ensure that the precision requirements listed by the manufacturer are upheld, and the contact details for an individual at the fuel production facility who can answer questions about the meter or other device.

(C) DEQ will approve or deny the request at its discretion based on whether or not it concludes that the device's calibration is reasonably reliable.

(13) Missing Data Provisions.

(a) Meter Record, Accuracy, or Calibration Requirements Not Met. If a measurement device is not functional, not calibrated within the time period recommended by the manufacturer, or fails a field accuracy assessment, the fuel production facility operator must otherwise demonstrate to a verifier or DEQ that the reported data are accurate within +/-5 percent. The following requirements apply to such demonstration:

(A) If the operator can demonstrate to the verifier or DEQ that reported data are accurate, the data are acceptable. The entity must then provide a detailed plan describing when the measurement device will be brought into calibration. This plan is subject to approval by DEQ; and

(B) If the operator cannot demonstrate to the verifier or DEQ that reported data are accurate, the data is not acceptable and the missing data provisions in subsection (b) apply.

(b) Missing Data Provisions. If missing data exists, the entity must submit for DEQ approval an alternate method of reporting the missing data. Alternate methods shall be evaluated on a case-by-case basis for reasonableness and continuity with the rest of the dataset. DEQ may choose to require a more conservative approach to the missing data if it is concerned that the alternative method may understate actual lifecycle emissions associated with the fuel or fuels produced by the facility.

(c) Force Majeure Events. In the event of a facility shutdown or disruption drastically affecting production attributable to a force majeure event, the fuel pathway applicant or holder must notify DEQ.

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 **Statutes/Other Implemented:** ORS 468.020 & ORS 468A.265 through 468A.277 **History:**

DEQ 14-2020, amend filed 05/07/2020, effective 05/07/2020 DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019 DEQ 27-2017, amend filed 11/17/2017, effective 11/17/2017 DEQ 13-2015, f. 12-10-15, cert. ef. 1-1-16 DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15 DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-0460

Energy Economy Ratio-Adjusted carbon intensity applications

(1) Energy Economy Ratio-Adjusted CI Applications. Applications submitted under this provision are modified Tier 2 pathway applications under OAR 340-253-0450.

(2) The following persons are eligible to submit an application under this rule:

(a) Vehicle owners or operators that would be eligible to generate credits for their vehicles;

(b) Manufacturers of vehicles that would be eligible to generate credits may make a joint application with an owner or operator of their vehicles based in Oregon; and

(c) A single, joint application may be submitted on behalf of, and combining data from, any combination of multiple vehicle owners, operators, and manufacturers.

(3) Applications made under this provision must be for electric vehicles capable of full normal operation using energy from onboard batteries or fuel cells.

(4) Application requirements. In addition to the application requirements for a Tier 2 pathway application under OAR 340-253-0450, the applicant or applicants must include:

(a) A letter of intent to request an Energy Economy Ratio (EER)-adjusted carbon intensity and why the EER values provided in OAR 340-253-8010 are inapplicable;

(b) The applicant must provide a detailed description of the methodology used in its calculations, all assumptions made, and provide all data and references to calculations. The methodology used must compare the useful output from the alternative fuel-vehicle technology under consideration to comparable conventional fuel-vehicle technology;

(c) The applicant must provide supplemental information including records and datasets used to establish any part of the application provided under (b); and

(d) If the applicant or applicants plan to use a value in the lookup table in OAR 340-253-8010 for the carbon intensity of the fuel, or an electricity fuel pathway code issued under OAR 340-253-0470, to request an EER-adjusted carbon intensity then they do not need to provide the fuel facility information required under OAR 340-253-0450(3)(e) through (h) and (5).

(5) Minimum data requirements.

(a) Any application made under this rule must include at least three months of operating data that represents typical usage for each individual vehicle included in the application, except that the application must cover at least 300 hours of operating data for each individual vehicle included in the application.

(b) Notwithstanding (a), an application from a manufacturer may provide data from dutycycle testing. A manufacturer seeking to apply using duty-cycle testing data must consult with DEQ prior to submitting an application and receive written, advanced approval from the agency for the duration and test cycles it is including in the application in addition to or in lieu of operational data.

(6) Application review process.

(a) DEQ will review an application for completeness, soundness of the assumptions and comparison to the conventional fuel technology, and accuracy of the data. DEQ may deny an application without prejudice if it is incomplete. DEQ may deny any application that it believes is adequately covered by an existing EER value in OAR 340-253-8010 or that it believes does not fit the intent and purpose of the Clean Fuels Program.

(b) DEQ may prioritize its review of applications under this provision to those that cover a greater number of entities or that the agency believes are critical to the state's transportation electrification goals.

(c) If DEQ intends to approve an application, it first must present a review report with a proposed EER value and pathway conditions to the applicant or applicants. If the applicant or applicants accept the proposed review report and EER value, DEQ will post the review report and application on its website for a 30-day public comment period. DEQ staff will work with the applicant to aggregate and summarize any submitted data in order to ameliorate concerns regarding trade secrets included in the application. The aggregated data must still allow external stakeholders to understand and replicate the EER value that DEQ is proposing to approve.

(d) Based on comments received during that public comment period, DEQ may move forward with approving the application, deny the application, request additional information from the applicant or applicants, or modify the review report. If DEQ modifies the review report or receives additional information that has a material bearing on the proposed EER value, it will issue the modified review report and any affected supplemental materials for another round of public comment.

(7) Based on its review of the application materials and any comments submitted upon the application, DEQ may issue an EER-adjusted fuel pathway or issue a value that it would post on its website that could be used similarly to the EER values contained in Table 7 of OAR 340-253-8010. Values issued under this rule can only be used by the applicant or applicants for that value.

(8) Adding Joint Applicants after a value is approved. If a value has been issued as part of an application that includes the manufacturer of the vehicle(s), owners or operators who begin to operate the same vehicle(s) covered in that application in Oregon may request to be added as a joint applicant. In order to do so they must provide the following:

(a) A letter from the manufacturer stating that the manufacturer supports the addition of the joint applicant;

(b) Any current operational data by the new joint applicant, or other data elements required to be reported under the value's pathway conditions; and

(c) A statement by the new joint applicant that they understand and accept any and all pathway conditions associated with the value.

(9) Ongoing reporting requirements.

(a) Applicants must annually submit vehicle usage and energy consumption data for each individual vehicle using a value approved under this section to generate credits or deficits in the Clean Fuels Program. DEQ may specify additional data elements that must be reported annually as part of its pathway conditions for an application that is approved under this rule.

(b) Notwithstanding the applicability requirements of OAR chapter 340, division 272, DEQ may require third party verification of the annual fuel pathway report submitted by the applicant or joint applicants. If DEQ determines that third party verification is required, DEQ will include it as a pathway conditions presented to the applicant or applicants under this rule prior.

(10) Modifications to values issued under this provision. Based on the ongoing reported data required under section (9) or additional applications for vehicles that DEQ determines to be in the same category, DEQ may modify any value issued under this provision for reporting beginning with the next full calendar quarter following its notice that the agency is modifying the value. DEQ will provide notice to the applicants prior to doing so, and may request comment from them and the public prior to modifying the value.

<u>Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277</u> <u>Statutes/Other Implemented: ORS 468.020 & ORS 468A.265 through 468A.277</u>

340-253-0470 Determining the Carbon Intensity of Electricity

(1) Statewide electricity mix. The carbon intensity for the statewide electricity mix will reflect the average carbon intensity of electricity served in Oregon and be calculated by using the carbon-intensity of electricity overfrom the most recent five years and determining the average of the five values. For 2018 and beyond, the carbon intensities for electricity will be calculated using the rolling five-year average of dataas submitted to DEQ under OAR chapter 340, division 215. In calculating the statewide mix DEQ will exclude the energy and emissions related to utilities that have received utility-specific carbon intensity values under section (3) of this rule for that year. No later than December 31 of each year, except that DEQ may revise the 2021 value no later than June 15, 2021, DEQ will:

(a) Post the updated statewide electricity mix carbon intensity for the next year on the DEQ webpage;

(b) Post the updated utility-specific carbon intensities for the next year on the DEQ webpage; and

(c) Add the new fuel pathway codes to the Oregon Fuels Reporting System effective for Q1 reporting for the next year.

(2(2) Retirement of major fossil-fuel generators. For the 2021 and 2022 statewide mixes and any applicable utility-specific mixes, DEQ will replace the direct emissions associated with power from the Boardman coal-fired power plant with an emissions rate of 0.428 metric tons CO2e per megawatt-hour. For indirect emissions, DEQ will continue to use the most recent fuel mix data available.

(3) Utility-specific carbon intensity. An electric utility may apply to obtain a utility-specific carbon intensity under OAR 340-253-0400 that reflects the average carbon intensity of electricity served in that utility district.

(a) The carbon intensity will be calculated by using the carbon intensity of electricity over the most recent five years and determining the average of the five values recently reported year.

(b) Once DEQ has calculated a utility-specific carbon intensity, DEQ will propose its draft carbon intensity to the utility.

(A) If the utility does not agree with DEQ's proposed carbon intensity, then it must provide DEQ with an explanation of why it believes the proposed carbon intensity is not accurate within seven days of receiving DEQ's proposal. DEQ will consider whether to change its proposed carbon intensity based on the information it receives from the utility. If DEQ determines not to change it proposed carbon intensity within 30 days, then the utility may choose to accept the proposed carbon intensity or use the statewide electricity mix carbon intensity.

(B) If the utility agrees with DEQ's proposed carbon intensity, then the draft carbon intensity is made final and approved.

(C) If the utility fails to submit a timely objection to the calculation, then the draft carbon intensity is made final and approved.

(c) A utility that wants to discontinue a utility-specific carbon intensity may submit a written request to DEQ by October 31 for the following year. A utility can reapply for a utility-specific carbon intensity at any time in the future.

(34) For on-site generation of electricity using renewable generation systems such as solar or wind, applicants must document that:

(a) The renewable generation system is on-site or directly connected to the electric vehicle chargers;

(b) The fuel pathway codes listed in Table 3 under OAR 340-253-8010 for solar-generated or wind-generated electricity can only be used for the portion of the electricity dispensed from the charger that is generated by that dedicated renewable energy system;

(c) Any grid electricity dispensed from the charger must be reported separately under the statewide electricity mix or utility-specific fuel pathway codes; and

(d) RECs are not generated from the renewable generation system or, if they are, then an equal number of RECs generated from that facility to the number of MWh reported in the Oregon Fuels Reporting System from that facility must be retired in the <u>recognized REC</u> tracking system.

(5) Offsite renewable electricity. In order to lower the carbon intensity of electricity claimed as a vehicle fuel in the Clean Fuels Program, credit generators and aggregators may retire renewable electricity certificates that meet the following qualifications:

(a) Renewable Energy Certificates (RECs) retired in order to claim a carbon intensity other than the statewide mix or utility-specific mix must be certified by Green-e under their Renewable Energy Standard for Canada and the United States version 3.4, or by a certification system approved by DEQ as being substantially equivalent;

(b) RECs must be generated by an electric generator that was placed into service after 2015, or in the case of biogas generators they must meet the new date requirements of the Green-e Standard;

(c) RECs must be generated from facilities located in the Western Electricity Coordinating Council; and-

(d) RECs must be recorded and retired in a recognized REC tracking system. In addition to recognizing the Western Renewable Energy Generation Information System, DEQ may recognize additional REC tracking systems upon a request from a registered party. In reviewing those requests, DEQ will consider whether the tracking system is comparable to WREGIS and if it has systems in place to ensure accurate issuance and tracking of RECs.

(6) Carbon intensity of renewable electricity. The carbon intensity of solar, wind, geothermal, hydropower, and ocean power renewable electricity is deemed to be zero. For renewable electricity generated from biomass, biogas, biodiesel, and hydrogen, the generator must file a Tier 1 or Tier 2 fuel pathway application to determine the carbon intensity of their electricity. DEQ may adopt an efficiency adjustment factor for biogas to electricity pathways that include emissions reduction credits in order to maintain the program's incentive for energy efficiency.

(7) Utility Renewable Electricity Products and Power Purchase Agreements. Electric utilities and Electric Service Suppliers may apply via a Tier 2 fuel pathway application for DEQ to assign a carbon intensity to one or more of their renewable electricity products or a specific power purchase agreement, which may then be used to generate credits from charging electric vehicles attributable to the use of such products or agreements.

(a) Notwithstanding OAR 340-253-0450, Tier 2 applications made under this provision must include:

(A) A letter describing the power purchase agreement or Utility Renewable Electricity Product, the existing or planned source, or sources, of electricity and environmental attributes, and the terms by which it is being offered to customers;

(B) Samples or examples of bills, invoices, or other documentation that an entity claiming renewable energy under this product could provide to DEQ to prove that their electric vehicle charging is covered by the product or agreement;

(C) In the case of a Utility Renewable Electricity Product, any filings with, and orders by, the Oregon Public Utility Commission or a local governing board that approves the product; and

(D) An estimate of the amount of electric vehicle charging attributable to customers for the product or agreement.

(b) DEQ will review pathway applications under this provision to determine if they result in a substantially similar environmental outcome to the sources of renewable energy required under section (5) of this rule. In reviewing a utility product or agreement that contains multiple sources of power, DEQ may use the estimate under paragraph (a)(C) of this section to determine if sufficient renewable energy that is substantially similar to the requirements of section (5) is included in the product to cover transportation-related charging that may be
claimed under the CFP. DEQ may revisit this determination annually using the annual fuel pathway report.

(c) Annual Fuel Pathway Report. The annual fuel pathway report for pathways covered by this section must include information to update the sources or sources of electricity or environmental attributes that were used in the prior year and are planned for use in the year in which the report is submitted. It must also update the estimate of the amount of electric vehicle charging attributable to customers using the products or agreements. Fuel pathway reports required by this section are due by June 30, notwithstanding OAR 340-253-0450 (9)(e)(C).

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 **Statutes/Other Implemented:** ORS 468.020 & ORS 468A.265 through 468A.277 **History:**

DEQ 14-2020, amend filed 05/07/2020, effective 05/07/2020 DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019 DEQ 27-2017, adopt filed 11/17/2017, effective 11/17/2017

340-253-0600 Records

(1) Records Retention. Regulated parties, credit generators, and aggregators must retain the following records for at least seven years:

- (a) Product transfer documents as described in section (2);
- (b) Records related to obtaining a carbon intensity described in OAR 340-253-0450;
- (c) Copies of all data and reports submitted to DEQ;
- (d) Records related to each fuel transaction;
- (e) Records used for compliance or credit calculations;
- (f) Records used to establish that feedstocks are specified source feedstocks; and
- (g) Records related to third-party verification, if required under OAR 340-253-0700.

(2) Documenting Fuel Transactions. A product transfer document must prominently state the information specified below.

- (a) Transferor company name, address, and contact information;
- (b) Recipient company name, address, and contact information;
- (c) Transaction date;
- (d) Fuel pathway code;

(e) Carbon intensity;

(f) Volume/amount;

(g) A statement identifying whether the transferor or the recipient has the compliance obligation; and

(h) The EPA fuel production company identification number and facility identification number as registered with the RFS program.

(3) For transactions of clear and blended gasoline and diesel below the rack where the fuel is not destined for export, only the records described in subsections (2)(a), (b), (c), (f), and (g) are required to be retained.

(4) Documenting Credit Transactions. Regulated parties, credit generators, and aggregators must retain the following records related to all credit transactions for at least seven years:

(a) The contract under which the credits were transferred;

(b) Documentation on any other commodity trades or contracts between the two parties conducting the transfer that are related to the credit transfer in any way; and

(c) Any other records relating to the credit transaction, including the records of all related financial transactions.

(5) Review. All data, records, and calculations used by a regulated party, a credit generator, or an aggregator to comply with OAR chapter 340, division 253 are subject to inspection and verification by DEQ. Regulated parties, credit generators, and aggregators must provide records retained under this rule within 60 days after the date DEQ requests a review of the records, unless DEQ specifies otherwise.

(6) Initial 2016 Inventory. All regulated fuels held in bulk storage in the state on January 1, 2016 are subject to the program and must be reported as the initial inventory of fuels by regulated parties.

(7) Information exempt from disclosure. Pursuant to the provisions of the Oregon public records law, ORS 192.410 to 192.505, all information submitted to DEQ is subject to inspection upon request by any person unless such information is determined to be exempt from disclosure under the Oregon public records law or other applicable Oregon law.

(8) Attestations regarding environmental attributes.

(a) An entity reporting any biomethane as a transportation fuel in the CFP, and a fuel pathway holder using biogas or biomethane as process energy, must obtain and keep attestations from each upstream party collectively demonstrating that:

(A) The entity claiming the environmental attributes has the exclusive right to claim environmental attributes associated with the sale or use of the biogas or biomethane; and (B) The environmental attributes have not been used or claimed in any other program or jurisdictions with the exception of the federal RFS. Any such claims under the federal RFS must be made for the same use and volume of biomethane or its derivatives as it is being claimed for in the CFP, or the claim under the CFP is invalid.

(b) Any) attestation under subsection (a) must be provided to DEQ within seven days of receiving a request for such attestation <u>frombyby</u> DEQ. Failure to provide such attestations is grounds for credit invalidation under OAR 340-253-0670.

(9) Monitoring plan for entities and fuel producers who are required to obtain third-party verification services under OAR 340-253-0700.. Each entity responsible for obtaining third-party verification of their data under OAR chapter 340, division 272 must complete and retain a written monitoring planMonitoring Planplan for review by a verifier or DEQ. If a fuel production facility is required to complete and maintain a monitoring plan by the California LCFS, the same monitoring plan may be used to meet the requirements of this rule unless therethethere are substantive differences between the two programs' treatment of the fuel production process. A monitoring plan must include the following, as applicable:

(a) All of the The the following general items are required for all monitoring plans:

(A) Information to allow DEQ and the verification team to develop a general understanding of boundaries and operations relevant to the entity, facility, or project, including participation in other markets and other third-party audit programs;

(B) Reference to management policies or practices applicable to reporting pursuant to this division, including recordkeeping;

(C) Explanation of the processes and methods used to collect necessary data for reporting pursuant to this subarticle, including identification of changes made after January 1, 2020;

(D) Explanations and queries of source data to compile summary reports of intermediate and final data necessary for reporting pursuant to this division;

(E) Reference to one or more simplified block diagrams that provide a clear visual representation of the relative locations and positions of measurement devices and sampling locations, as applicable, required for calculating reported data (e.g., temperature, total pressure, LHV or HHV, fuel consumption); the diagram(s) must include storage tanks for raw material, intermediate products, and finished products, fuel sources, combustion units, and production processes, as applicable;

(F) Clear identification of all measurement devices supplying data necessary for reporting pursuant to this subarticle, including identification of low flow cutoffs as applicable, with descriptions of how data from measurement devices are incorporated into the submitted report;

(G) Descriptions of measurement devices used to report CFP data and how acceptable accuracy is demonstrated, e.g., installation, maintenance, and calibration method and frequency for internal meters and financial transaction meters; this provision does not apply

to data reported in the Oregon Fuels Reporting System for generating credits for EV charging;

(H) Description of the procedures and methods that are used for quality assurance, maintenance, and repair of all continuous monitoring systems, flow meters, and other instrumentation used to provide data for CFP reports;

(I) Original equipment manufacturer (OEM) documentation or other documentation that identifies instrument accuracy and required maintenance and calibration requirements for all measurement devices used to collect necessary data for reporting pursuant to this division;

(J) The dates of measurement device calibration or inspection, and the dates of the next required calibration or inspection;

(K) Requests for postponement of calibrations or inspections of internal meters and subsequent approvals by DEQ. The entity must demonstrate that the accuracy of the measured data will be maintained pursuant to the measurement accuracy requirements of OAR 340-253-0450(12);

(L) A listing of the equation(s) used to calculate flows in mass, volume, or energy units of measurement, and equations from which any non-measured parameters are obtained, including meter software, and a description of the calculation of weighted average transport distance;

(M) Identification of job titles and training practices for key personnel involved in CFP data acquisition, monitoring, reporting, and report attestation, including reference to documented training procedures and training materials;

(N) Records of corrective and subsequent preventative actions taken to address verifier and DEQ findings of past nonconformance and material misstatements;

(O) Log of modifications to a fuel pathway report conducted after attestation in response to review by third-party verifier or DEQ staff;

(P) Written description of an internal audit program that includes data report review and documents ongoing efforts to improve the entity's CFP reporting practices and procedures, if such an internal audit program exists; and

(Q) Methodology used to allocate the produced fuel quantity to each fuel pathway code;

(b) Any monitoring plan related to a fuel pathway carbon intensity or reporting quantities of fuels must also include the following elements specific to fuel pathway carbon intensity calculations and produced quantities of fuels per fuel pathway code:

(A) Explanation of the processes and methods used to collect necessary data for fuel pathway application and annual fuel pathway reports and all site-specific OR-GREET 3.0 inputs, as well as references to source data;

(B) Description of steps taken and calculations made to aggregate data into reporting categories, for example aggregation of quarterly fuel transactions per fuel pathway code;

(C) Methodology for assigning fuel volumes by fuel pathway code, if not using a method prescribed by DEQ. If using a DEQ perscribed prescribed methodology, the methodology should be referenced;

(D) Methodologies for testing conformance to specifications for feedstocks and produced fuels, particularly describing physical testing standards and processes;

(E) Description of procedure taken to ensure measurement devices are performing in accordance with the measurement accuracy requirements of OAR 340-253-0450(12);

(F) Methodology for monitoring and calculating weighted average feedstock transport distance and modes, including the specific documentation records that will be collected and retained on an ongoing basis;

(G) Methodology for monitoring and calculating fuel transport distance and modes, including the specific documentation records that will be collected and retained on an ongoing basis;

(H) References to contracts and accounting records that confirm fuel quantities were delivered into Oregon for transportation use in carbon intensity determination, and confirm feedstock and finished fuel transportation distance; and

(I) All documentation required pursuant to OAR 340-253-0600(10) for specified source feedstocks, defined in OAR 340-253-0400(7); and)

(c) The monitoring plan must also include documentation that can be used to justify transaction types reported for fuel in the Oregon Fuels Reporting System, including the production amount, sale/purchase agreements and final fuel dispensing records. Such documentationDocumentationdocumentation must be specific to quarterly fuel transactions reports for importers of blendstocks, importers of finished fuels, Oregon producers, credit generators, aggregators, and out-of-state producers.

(10) Feedstock Transfer Documents. A feedstock transfer document for specified source feedstocks must prominently state the following information:

(a) Transferor company name, address and contact information;

(b) Recipient company name, address and contact information;

(c) Type and amount of feedstock, including units; and

(d) Transaction date.

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 **Statutes/Other Implemented:** ORS 468.020 & ORS 468A.265 through 468A.277

History:

DEQ 14-2020, amend filed 05/07/2020, effective 05/07/2020 DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019 DEQ 27-2017, amend filed 11/17/2017, effective 11/17/2017 DEQ 13-2015, f. 12-10-15, cert. ef. 1-1-16 DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15 DEQ 8-2014, f. & cert. ef. 6-26-14 DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14 DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-0640 Specific Requirements for Reporting

(1) For natural gas or biomethane (inclusive of CNG, LNG, and L-CNG), any registered party must report the following as applicable:

(a) For CNG and L-CNG, the amount of fuel in therms dispensed per reporting period for all LDV and MDV, HDV-CIE, and HDV-SIE.

(b) For LNG, the amount of fuel dispensed in gallons per compliance period for all LDV and MDV, HDV-CIE, and HDV-SIE.

(c) For CNG, L-CNG, and LNG, the carbon intensity as listed in 4 under OAR 340-253-8040.

(d) For biomethane-based CNG, LNG, and L-CNG, the carbon intensity as approved under OAR 340-253-0450 and the EPA production company identification number and facility identification number. Additionally, the registered party must submit the following attestation at the time of filing the annual report:

"I certify that to the extent that the gas used in the fuel pathway or supplied as transportation fuel is characterized as biomethane, ______ (registered party name) owns the exclusive rights to the corresponding environmental attributes. ______ (registered party name) has not sold, transferred, or retired those environmental attributes in any program or jurisdiction other than the federal RFS. Based on diligent inquiry and review of contracts and attestations from our business partners, I certify under penalty of perjury under the laws of the State of Oregon that no other party has or will sell, transfer, or retire the environmental attributes corresponding to the biomethane for which _____(registered party name) claims credit in the CFP program."

(2) For electricity, any registered party must report the following as applicable:

(a) The information specified for electricity in Table 5 under OAR 340-253-8010;

(b) For each public access charging facility, fleet charging facility, workplace private access charging facility, or multi-family dwelling, the amount of electricity dispensed in kilowatt hours to vehicles-:

(c) For each public transit agency, the amount of electricity dispensed to or consumed by vehicles used for public transportation in kilowatt hours. The report must be:

(A) Separated by use for light rail, streetcars, aerial trams, or electric transit buses; and

(B) Separated by electricity used in portions of their system placed in service before and after January 1, $2012_{\frac{1}{2}}$

(d) To claim a carbon intensity other than a statewide or utility-specific mix, or directly connected renewable power under the Lookup Table in OAR 340-253-8010, a registered party must:

(A) Submit documentation that qualifying RECs were retired in a recognized renewable electricity tracking system at the same time as the submittal of the Quarterly report for the specific purpose of covering that charging; or

(B) Submit documentation at least annually that the electric vehicle chargers are covered by a Utility Renewable Electricity Product or a power purchase agreement that has been approved by DEQ for a carbon intensity. The carbon intensity assigned to the product or agreement can only be used for reporting if the electric vehicle chargers are covered by that same product or agreement for the time period which is being reported;

(e) Any entity that claims a carbon intensity using paragraph (2)(d)(A) must annually submit a verification report from Green-e for the RECs used to generate incremental credits. Failure to submit a report is grounds for DEQ to invalidate any incremental credits issued to the entity under the procedures of OAR 340-253-0670; and

(f) For entities reporting forklift charging, the amount of electricity dispensed to or consumed by forklifts. The report must be separated by electricity used to charge forklifts built before model year 2015 and electricity used to charge forklifts built in model year 2015 and after.

(3) For renewable hydrocarbon diesel or gasoline co-processed at a petroleum refinery, any registered party must report the following information as applicable:

(a) If the registered party is also the producer, then DEQ may require the registered party to report the ongoing information required under OAR 340-253-0450.

(b) If the registered party is not the producer, and the producer has not met its obligations under OAR 340-253-0450, then DEQ may require the registered party to report the volume of fuel under a temporary fuel pathway code or the fuel pathway code for clear gasoline or diesel, as applicable.

(4) Temperature Correction. All liquid fuel volumes reported in the Oregon Fuels Reporting System must be adjusted to the standard temperature conditions of 60 degrees Fahrenheit as follows:

(a) For ethanol, using the formula: Standardized Volume = Actual volume * ((-0.0006301 * T) + 1.0378), where standardized volume refers to the volume of ethanol in gallons at 60°F, actual volume refers to the measured volume in gallons, and T refers to the actual temperature of the batch in °F.

(b) For Biodiesel, one of the following two methodologies must be used:

(A) Standardized Volume = Actual Volume * ((-0.00045767 * T) + 1.02746025), where Standardized Volume refers to the volume in gallons at 60°F, Actual Volume refers to the measured volume in gallons, and T refers to the actual temperature of the batch in °F; or

(B) The standardized volume in gallons of biodiesel at 60°F, as calculated using the American Petroleum Institute Refined Products Table 6B, as referenced in ASTM 1250-08.

(c) For other liquid fuels, the volume correction to standard conditions must be calculated by the methods described in the American Petroleum Institute Manual of Petroleum Measurement Standards Chapter 11 – Physical Properties Data, the ASTM Standard Guide for the Use of Petroleum Measurement Tables (ASTM D1250-08), or the API Technical Data Book, Petroleum Refining Chapter 6 – Density.

(d) If a registered party believes the methods in (a) through (c) are inappropriate, they may request to use a different method and DEQ may approve that method if it finds that it is at least as accurate as the methods in (a) through (c).

(5) Reporting Exempt Gallons. When a registered party is reporting that it sold gallons of fuel to exempt fuel users as defined in OAR 340-253-0250, the registered party must designate in the transaction description field of the Oregon Fuels Reporting System the categories of exempt fuel users to which the registered party delivered fuel and the number of gallons delivered. For blended fuels, all components must be reported as exempt.

(6) Reporting "Not For Transportation" Gallons. When reporting that fuel was sold as not for transportation in the Oregon Fuels Reporting System, the registered party must report in the transaction description field of the Oregon Fuels Reporting System which stationary source_a or category of stationary fuel combustion_a the fuel was sold to and the number of gallons sold. For blended fuels, all components must be reported as not being used for transportation.

(7) Reporting Position Holder Transactions.

(a) Registered parties that are position holders must report fuel sold below the rack.

(b) Registered parties that are position holders that sell fuel to entities not registered in the CFP may be aggregate and report those sales in a single transaction using the <u>""Undefined</u>" Business <u>"Undefined"</u> business partner<u>" transaction category descriptor</u>.

(c) Registered parties that are position <u>oldersholders</u> that sell fuel below the rack for export must identify each recipient of such fuel that is registered in the CFP.

(8) Reporting Below the Rack Exports. Purchasers of fuel from a position holder that is directly exported without modification must report such fuel using the "Purchase below the rack for export" transactioncategory.transaction category.

(9) Annual reporting of utility credit revenue. Starting in 2021, all electric utilities that receive base or incremental credits must annually report the following items to DEQ no later than April 30th. Failure to file such a report will result in the backstop aggregator or the incremental aggregator receiving credits for that utility until the utility files any past-due reports. Each utility must report the following information, for the prior calendar year:

(a) Total revenue from the sale of base and incremental credits attributable to residential vehicle charging, if applicable;

(b) The percentages that result when dividing the utility's CFP-related administrative costs, including but not limited to submitting reports, selling credits, and to administer any programs that were funded by CFP revenue from the utility's sale of incremental credits, including but not limited to project management and development and management of contracts to operate such programs by the amount of revenue reported under subsection (a);

(c) A description of the programs that were funded by CFP revenue the utility received from its sale of base credits and the amount spent in each category; and

(d) A description of the programs that were funded by CFP revenue from incremental credits, the amount spent in each category, a description of the class of individuals or listing of organizations that benefited from the programs, and any other data elements that DEQ informs each utility receiving incremental credits that it will require following consultations with the Equity Advisory Committee created under OAR 340-253-0330(9)(j).

Statutory/Other Authority: OAR 468.020, 468A.266, 468A.268 & 468A.277 **Statutes/Other Implemented:** OAR 468.020 & ORS 468A.265 through 468A.277 **History:**

DEQ 14-2020, amend filed 05/07/2020, effective 05/07/2020 DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019 DEQ 27-2017, adopt filed 11/17/2017, effective 11/17/2017

340-253-1000 Credit and Deficit Basics

(1) Carbon intensities.

(a) Except as provided in subsections (b),(c), or (d), when calculating carbon intensities, regulated parties, credit generators, and aggregators must use a carbon intensity approved by DEQ under OAR 340-253-0450.

(b) If a regulated party, credit generator, or aggregator has an approved provisional carbon intensity approved under OAR 340-253-0450, the regulated party, credit generator, or aggregator must use the DEQ-approved provisional carbon intensity.

(c) If a regulated party, credit generator, or aggregator has an approved temporary carbon intensity under OAR 340-253-0450, the regulated party, credit generator, or aggregator must use the temporary carbon intensity for the period which it has been approved, unless DEQ has subsequently approved a permanent carbon intensity for that fuel.

(d) If a registered party purchases a blended finished fuel and the seller does not provide carbon intensity information, then the registered party must:

(A) Use the applicable substitute fuel pathway code in Table 8 under OAR 340-253-8010 or otherwise approved and posted by DEQ under OAR 340-253-0450(11) if the fuel is exported, not used for transportation, or used in an exempt fuel use; and

(B) Report the volume using the applicable Table 8 fuel pathway code, or a fuel pathway code otherwise approved and posted by DEQ under OAR 340-253-0450(11), for the fossil fuel and the applicable substitute fuel pathway code for the biofuel or biofuels if the finished fuel blend is not listed.

(2) Fuel quantities. Regulated parties, credit generators, and aggregators must express fuel quantities in the unit of fuel for each fuel.

(3) Compliance period. The annual compliance period is January 1 through December 31 of each year, except:

(a) The initial compliance period is January 1, 2016, through December 31, 2017; and

(b) The initial compliance period for large importers of finished fuels is January 1, 2016 through December 31, 2018.

(4) Metric tons of CO2 equivalent. Regulated parties, credit generators, and aggregators must express credits and deficits to the nearest whole metric ton of carbon dioxide equivalent.

(5) Deficit and credit generation.

(a) Credit generation. A clean fuel credit is generated when fuel is produced, imported, or dispensed for use in Oregon, as applicable, and the carbon intensity of the fuel approved for use under OAR 340-253-0400 through -0470 is less than the clean fuel standard for gasoline and gasoline substitutes in Table 1 under OAR 340-253-8010, for diesel fuel and diesel substitutes in Table 2 under 340-253-8010, or for alternative jet fuel in Table 3 under 340-253-8010. Credits are generated when a valid and accurate quarterly report is submitted in the Oregon Fuels Reporting System.

(b) Deficit generation. A clean fuel deficit is generated when fuel is produced, imported, or dispensed for use in Oregon, as applicable, and the carbon intensity of the fuel approved for use under OAR 340-253-0400 through -0470 is more than the clean fuel standard for gasoline and gasoline substitutes in Table 1 under OAR 340-253-8010 or for diesel fuel and diesel substitutes in Table 2 under 340-253-8010. Deficits are generated when a valid and accurate quarterly report is submitted in the Oregon Fuels Reporting System.

(c) No credits may be generated or claimed for any transactions or activities occurring in a quarter for which the quarterly reporting deadline has passed, unless the credits are being generated for residential charging of electric vehicles or for claiming incremental credits by a utility or the incremental aggregator.

(6) Mandatory retirement of credits. When filing the annual report at the end of a compliance period, a registered party that possesses credits must retire a sufficient number of credits such that:

(a) Enough credits are retired to completely meet the registered party's compliance obligation for that compliance period, or

(b) If the total number of the registered party's credits is less than the total number of the regulated party's deficits, the registered party must retire all of its credits.

(7) Credit Retirement Hierarchy. The Oregon Fuels Reporting System will use the following default hierarchy to retire credits for the purposes of meeting a compliance obligation, first retiring credits under subsection (a), next retiring credits under subsection (b), and last retiring credits under subsection (c):

(a) Credits acquired or generated in a previous compliance period prior to credits generated or acquired in the current compliance period;

(b) Credits with an earlier completed transfer "recorded date" before credits with a later completed transfer "recorded date;" and

(c) Credits generated in an earlier quarter before credits generated in a later quarter.

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 **Statutes/Other Implemented:** ORS 468.020 & ORS 468A.265 through 468A.277 **History:** DEQ 14-2020, amend filed 05/07/2020, effective 05/07/2020

DEQ 14-2020, amend filed 05/07/2020, effective 05/07/2020 DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019 DEQ 27-2017, amend filed 11/17/2017, effective 11/17/2017 DEQ 13-2015, f. 12-10-15, cert. ef. 1-1-16 DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15 DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-1010 Fuels to Include in Credit and Deficit Calculation

(1) Fuels included. Credits and deficits must be calculated for all regulated fuels and clean fuels, except that:

(a) Credits may be generated only for B100 that complies with an oxidation stability induction period of not less than 8 hours as determined by the test method described in the European standard EN 15751;

(b) B100 that does not comply with subsection (a) can still be imported into Oregon and must be reported, but cannot generate credits for the CFP.

(2) Fuels exempted. Except as provided in sections (3), (4), and (5), credits and deficits may not be calculated for fuels exempted under OAR 340-253-0250.

(3) Voluntary inclusion. A regulated party, credit generator, or aggregator may choose to include in its credits and deficits calculations fuel that is exempt under OAR 340-253-0250(1) and fuel that is sold to an exempt fuel user in Oregon under 340-253-0250(2), provided that the credit and deficit calculation includes all fuels listed on the same invoice.

(4) When fuels are exported from Oregon:

(a) Any bulk quantity of fuel that is exported must be reported by the person who holds title to the fuel when it is exported;

(b) If the exporter purchased the fuel with the compliance obligation, the exported fuels will not generate deficits or credits;

(c) If credits or deficits were generated and separated from the fuel through a transfer without obligation, the exporter will incur credits or deficits, as appropriate, to balance out the deficits or credits detached from the fuel; and

(d) If the fuel was imported in one quarter and exported in another quarter, the exporter will incur credits or deficits, as appropriate, to balance out the deficits or credits, respectively, associated with the fuel when it was <u>imported exported imported</u> in the <u>priorlater prior</u> quarter.

(5) Alternative jet fuel. Alternative jet fuel may be reported by the producer or importer of the fuel and any registered parties that hold title to it, so long as the fuel is loaded into airplanes in Oregon. If a gallon of alternative jet fuel that has been reported to the Clean Fuels Program as imported or produced is later exported, lost, or otherwise not used for transportation it must be reported as such.

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 **Statutes/Other Implemented:** ORS 468.020 & ORS 468A.265 through 468A.277 **History:**

DEQ 14-2020, amend filed 05/07/2020, effective 05/07/2020 DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019 DEQ 27-2017, amend filed 11/17/2017, effective 11/17/2017 DEQ 13-2015, f. 12-10-15, cert. ef. 1-1-16 DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15 DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-1020 Calculating Credits and Deficits

(1) Except as provided in sections (2) and (3), credit and deficit generation must be calculated for all fuels included in OAR 340-253-1010:

(a) Using credit and deficit basics as directed in OAR 340-253-1000;

(b) Calculating energy in megajoules by multiplying the amount of fuel by the energy density of the fuel in Table 6 under OAR 340-253-8010;

(c) Calculating the adjusted energy in megajoules by multiplying the energy in megajoules from section (2) by the energy economy ratio of the fuel listed in Table 7 or 8 under OAR 340-253-8010 or as approved by DEQ under OAR 340-253-0460, as applicable;

(d) Calculating the carbon intensity difference by subtracting the fuel's carbon intensity as approved under OAR 340-253-0400 through -0470, adjusted for the fuel application's energy economy ratio <u>as</u> listed in Table 7 under OAR 340-253-8010 or <u>as approved under OAR 340-253-0460</u> as applicable, from the clean fuel standard for gasoline or gasoline substitutes listed in Table 1 under OAR 340-253-8010 or diesel fuel and diesel substitutes listed in Table 2 under OAR 340-253-8010, as applicable;

(e) Calculating the grams of carbon dioxide equivalent by multiplying the adjusted energy in megajoules in section (3) by the carbon intensity difference in section (4);

(f) Calculating the metric tons of carbon dioxide equivalent by dividing the grams of carbon dioxide equivalent calculated in section (5) by 1,000,000; and

(g) Determining under OAR 340-253-1000(5) whether credits or deficits are generated.

(2) For electricity used to power fixed guideway vehicles on track placed in service prior to 2012 and forklifts from model year 2015 and earlier, credit and deficit generation must be calculated by:

(a) Using credit and deficit basics as directed in OAR 340-253-1000;

(b) Calculating energy in megajoules by multiplying the amount of fuel by the energy density of the fuel in Table 6 under OAR 340-253-8010;

(c) Calculating the carbon intensity difference by subtracting the fuel's carbon intensity as approved under OAR 340-253-0400 through -0470, adjusted for the fuel application's energy economy ratio listed in Table 7 under OAR 340-253-8010 as applicable, from the clean fuel standard for gasoline or gasoline substitutes listed in Table 1 under OAR 340-253-8010 or diesel fuel and diesel substitutes listed in Table 2 under OAR 340-253-8010, as applicable;

(d) Calculating the grams of carbon dioxide equivalent by multiplying the adjusted energy in megajoules in section (3) by the carbon intensity difference in section (4);

(e) Calculating the metric tons of carbon dioxide equivalent by dividing the grams of carbon dioxide equivalent calculated in section (5) by 1,000,000; and

(f) Determining under OAR 340-253-1000(5) whether credits or deficits are generated.

(3) For electricity used in residential charging of electric vehicles, credit calculations must be based on the total electricity dispensed (in kilowatt hours) to vehicles, measured by:

(a) The use of direct metering (either sub-metering or separate metering) to measure the electricity directly dispensed to all vehicles at each residence; or

(b) For residences where direct metering has not been installed, DEQ annually will calculate the total electricity dispensed as a transportation fuel based on analysis of the total number of BEVs and PHEVs in a utility's service territory based on Oregon Department of Motor Vehicles records. DEQ will perform this analysis at least twice a year and issue credits based on it. DEQ will select one of the following methods for estimating the amount of electricity charged based on its analysis of which is more accurate and feasible at the time it is performing the analysis:

(A) An average amount of electricity consumed by BEVs and PHEVs at residential chargers, based on regional or national data; or

(B) An analysis of the average electric vehicles miles traveled by vehicle type or make and model, which compares the total amount of estimated charging for those electric vehicle miles travelled with the total reported charging in those territories in order to determine the amount of unreported charging that can be attributed to residential charging. The analysis may be done on a utility territory specific or statewide basis.

(c) If DEQ determines after the issuance of residential electric vehicle credits that the estimate under (b) contained a significant error that led to one or more credits being incorrectly generated, the error will be corrected by withholding an equal number of credits to the erroneous amount from the next year's generation of residential electric vehicle credits.

(d) A credit generator or aggregator may propose an alternative method, subject to the approval of DEQ upon its determination that the alternative method is more accurate than either of the methods described in subsection (b).

(e) Credits generated under this subsection will be calculated by DEQ under section 1 of this rule using the estimated amount of electricity under subsection (3)(b) and issued <u>onceat least</u> <u>twice</u> per year into the Oregon Fuels Reporting System account of the utility, its designated aggregator, or the backstop aggregator within three months of the close of that year.

(f) Registered parties eligible to generate credits for the 2018 year also will generate credits for 2016 and 2017 residential electric vehicle charging.

(4) Incremental Credits. In calculating incremental credits for actions that lower the carbon intensity of electricity, the credit calculations must be performed based on section (1) of this rule, except that the carbon intensity difference is calculated based on the carbon intensity of the renewable power and the carbon intensity used to calculate the base credits for that electric vehicle or charging equipment.

(a) Incremental credits for non-residential charging are generated upon the retirement of RECs that qualify under OAR 340-253-0470(5) by the credit generator, its aggregator, or the incremental aggregator. For credit generators and their aggregators, RECs must be retired prior to or at the same time as the submittal as the quarterly report where the charging is being reported and REC retirement records must be submitted with the quarterly report as supplemental documentation. For incremental credits generated using a Utility Green Power Product or Power Purchase Agreement, evidence that the chargers were covered by such a product must be submitted along with the quarterly report. For the incremental aggregator, incremental credits are generated when it retires RECs on behalf of non-residential electric vehicle charging.

(b) Incremental credits for residential charging are generated by a utility, its aggregator, or the incremental aggregator when RECs are retired on behalf of that charging, or when a utility demonstrates to DEQ that EVs are being charged by customers enrolled in its Utility Renewable Electricity Products.

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 **Statutes/Other Implemented:** ORS 468.020 & ORS 468A.265 through 468A.277 **History:**

DEQ 14-2020, amend filed 05/07/2020, effective 05/07/2020 DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019 DEQ 27-2017, amend filed 11/17/2017, effective 11/17/2017 DEQ 13-2015, f. 12-10-15, cert. ef. 1-1-16 DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15 DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-1055 Public Disclosure

(1) List of DEQ-approved registered parties. DEQ will maintain a current list of DEQapproved registered parties and will make that list publicly available on its website. The list will include, at a minimum, the name of the party and whether the registered party is an importer of blendstocks, a large importer of finished fuels, a small importer of finished fuels, a producer, a credit generator, or an aggregator.

(2) Monthly credit trading activity report. DEQ must post on its webpage, by no later than the last day of the month immediately following the month for which the calculation is completed, a credit trading activity report that:

(a) Summarizes the aggregate credit transfer information for the:

- (A) Most recent month,
- (B) Previous three months,
- (C) Previous three quarters, and
- (D) Previous compliance periods;

(b) Includes, at a minimum

(A) The total number of credits transferred,

(B) The number of transfers,

(C) The number of parties making transfers, and

(D) The formula used by DEQ to calculate the volume-weighted average price of that month's transfers, exclusive of transactions that fall two standard deviations outside of the mean credit price for the month or that are transferred without a price;

(c) Is based on the information submitted into the CFP Online System; and

(d) Presents aggregated information on all fuel transacted within the state and does not disclose individual parties' transactions.

(3) Quarterly data summary. DEQ must post on its webpage at least quarterly:

(a) An aggregate data summary of credit and deficit generation for the most recent quarter and all prior quarters; and

(b) Information on the contribution of credit generation by different fuel types.

(4) Clean Fuels Program Annual Report. DEQ must post on its webpage by April 15th of each year, the following information from the previous year:

(a) The average cost or cost-savings per gallon of gasoline, per gallon of diesel, or any other fuel types, and the formulas used to calculate such costs or cost-savings; and

(b) The total greenhouse gas emissions reductions.

(5) Utility Reports. DEQ will post the utility reports it receives under OAR 340-253-0640(9) to its website.

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 Statutes/Other Implemented: ORS 468.020 & ORS 468A.265 through 468A.277 History: DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019 DEQ 27-2017, adopt filed 11/17/2017, effective 11/17/2017

<u>340-253-1100</u> Advance Crediting

(1) General Provisions.

(a) Advance Credits are used to advance the state's transportation electrification goals.

(b) All advance credits represent actual reductions of greenhouse gas emissions against the clean fuel standards.

(c) Vehicles must be registered in the State of Oregon to be eligible to earn advanced credits.

(2) Eligibility to generate Advance Credits.

(a) The following entities may apply for advance credits:

(A) Public Transit Agencies;

(B) Political subdivisions of the State of Oregon;

(C) Tribes;

(D) School Districts; and

(E) Companies under contract to provide services to a political subdivision of the State of Oregon or an Oregon School District may apply if the political subdivision endorses the application, and the vehicles covered by the application are intended to provide contracted services to the public.

(b) The entities identified in subsection (a) may earn apply to earn advance credits for the purchase and use of the following vehicle types:

(A) Medium and Heavy Duty vehicles; and

(B) Light-duty vehicles if they are part of an organization's plan to fully electrify its fleet within a 15-year time period.

(3) Applications for Advance Credits.

(a) Applications for advance crediting will be accepted by DEQ at least once per year. DEQ will notify stakeholders when applications will be accepted and will provide application materials and guidance about how it will process and consider applications.

(b) Applicants must supply the following information to DEQ:

(A) A letter describing the activities or purchases that they want to receive advance crediting for, including the number of vehicles, charging equipment, and estimated timeframes for when those vehicles and equipment will be put into useful service;

(B) A detailed estimate of the potential credit generation from the electric vehicles and charging equipment that they want to receive advance crediting for. In the case of electric vehicles, that detailed estimate must at least include the number of miles each vehicle will travel within Oregon annually and an estimated amount of charging for each vehicle;

(C) If covered electric vehicles will mainly use existing charging equipment, details on the ownership of that charging equipment, and how the applicant will ensure that another entity

will not generate credits, and will not attempt to general credits, from that vehicle until it has exited the payback period;

(D) Information on where the electric vehicles will be charged, if they will be charged using grid or renewable electricity, and, if applicable, the utility-specific CI for where the charging equipment will be located;

(E) A proposed number of credits to be advanced for each vehicle; and

(F) An attestation that the applicant will remain the owner or lessee of the vehicle or charging equipment until the vehicle has paid back the advanced credits, or that, if the vehicle is sold prior to the end of the payback period, that the applicant will buy and retire credits against the remaining unearned amount.

(c) If the applicant is a company under contract to provide school bus services to an Oregon School District, it must also provide:

(A) A contract with the Oregon School District that the school buses will be serving that shows they will be the provider of school bus services to that district for at least three years following their purchase or lease of the school buses covered by the Advance Crediting Agreement; and

(B) A letter from the school district that is endorsing their application for advance crediting.

(d) If the applicant is a company under a multi-year contract with a political subdivision of the State of Oregon, it must also provide:

(A) A contract with the political subdivision showing how the electric vehicles will be used and that they will be used in state for at least three years following their purchase or lease; and

(B) A letter endorsing the application from the political subdivision.

(e) In considering applications under this rule, DEQ will prioritize applications where the vehicles or charging equipment will reduce emissions in vulnerable communities disproportionately impacted by climate change, air toxics, and criteria air pollution.

(f) DEQ may request additional documentation from an applicant prior to making a decision on the application. If the applicant does not provide the requested documentation, then DEQ may deny the application without prejudice.

(4) Approval of Advance Credits. DEQ will negotiate with the applicant to issue advance credits based on all of the following considerations and requirements:

(a) A clear and objective milestone for issuing advance credits that represents when the vehicles and equipment covered by the application are placed into useful service;

(b) The number of credits being advanced in total or per vehicle;

(c) The length of the payback period, which must be one year longer than the number of years of credits that will be advanced;

(d) An attestation from the applicant that it understands that the advanced credits must represent real reductions and that if the activity covered by the agreement does not generate sufficient credits within the payback period that it is responsible for retiring a sufficient number of credits to make up the difference. The attestation must also include a statement that the applicant understands that it is responsible for making up the difference in credits if it sells or relocates covered vehicles outside of Oregon.

(e) An attestation from the applicant that it will ensure that actual credits are not generated from charging equipment serving these vehicles until the credits have been paid back.

(5) Issuance of Advance Credits.

(a) DEQ will issue advance credits to the applicant only after the vehicles or equipment are placed into useful service as agreed to under section (4) of this rule.

(b) Credits will only be issued to the applicant named in the agreement.

(c) DEQ may advance no more than six years of credits for any single vehicle or piece of infrastructure.

(6) Payback Period.

(a) The payback period for a vehicle or charging equipment will be specified in the agreement between DEQ and the applicant, except that the payback period may not exceed nine years. The payback period must be at least one year longer than the number of years of credits advanced to the applicant.

(b) In the event that the number of advanced credits was not realized during the payback period, the recipient is responsible for acquiring and retiring sufficient credits to ensure the environmental integrity of the program.

(c) If a vehicle or charging equipment is sold to another entity prior to the close of the payback period, the applicant is responsible for purchasing and retiring credits against the volume of advanced credits that has not yet been covered by actual credit generation.

(7) Reporting Requirements.

(a) The applicant that has been issued advance credits must file quarterly reports to DEQ showing the amount of charging going into the individual electric vehicles covered by the agreement.

(b) This charging must not generate additional credits until the advanced credits are paid back. DEQ and the applicant will monitor the amount of charging and credits that would have been generated to determine when an equal number of credits has been generated to the number of credits advanced. (8) Overall limitation on advance credits. DEQ may not issue more advance credits in any one year than an amount equal to five percent of the number of deficits generated in the prior compliance year. DEQ will process applications, negotiate and issue advance credits on a first-come, first served basis, and will stop working on any pending applications when it has issued advance credits equal to five percent of the number of deficits generated in the prior compliance year.

<u>Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277</u> <u>Statutes/Other Implemented: ORS 468.020 & ORS 468A.265 through 468A.277</u>

340-253-8010 Tables

(1) Table 1 — Oregon Clean Fuel Standard for Gasoline and Gasoline Substitutes

(2) Table 2 — Oregon Clean Fuel Standard for Diesel Fuel and Diesel Substitutes

- (3) Table 3 Oregon Clean Fuel Standard for Alternative Jet Fuel
- (4) Table 4 Oregon Carbon Intensity Lookup Table

(5) Table 5 - Summary Checklist of Quarterly Progress and Annual Compliance Reporting Requirements

- (6) Table 6 Oregon Energy Densities of Fuels
- (7) Table 7 Oregon Energy Economy Ratio Values
- (8) Table 8 Oregon Substitute Fuel Pathway Codes
- (9) Table 9 Oregon Temporary Fuel Pathway Codes
- (10) Table 10 Indirect Land-Use Change Values

[ED. NOTE: To view attachments referenced in rule text, click here to view rule.]

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 **Statutes/Other Implemented:** ORS 468.020 & ORS 468A.265 through 468A.277 **History:** DEQ 14-2020, amend filed 05/07/2020, effective 05/07/2020

DEQ 13-2019, amend filed 05/16/2019, effective 05/16/2019 DEQ 13-2018, amend filed 05/16/2019, effective 05/16/2019 DEQ 27-2017, amend filed 11/16/2018, effective 01/01/2019 DEQ 27-2017, amend filed 11/17/2017, effective 11/17/2017 DEQ 8-2016, f. & cert. ef. 8-18-16 DEQ 5-2016(Temp), f. & cert. ef. 4-22-16 thru 9-1-16 DEQ 13-2015, f. 12-10-15, cert. ef. 1-1-16 DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15



Table 1

Oregon Clean Fuel Standard for Gasoline and Gasoline Substitutes

| Calendar Year | Oregon Clean Fuel Standard (gCO2e per MJ) | | | | | |
|--|--|----------------------|--|--|--|--|
| 2015 | None (Gasoline Baseline is 98.62 for 2016-2017, 98.64 for 2018, and 98.06 for 2019 and beyond) | | | | | |
| 2016* | 98.37 | 0.25 percent | | | | |
| 2017 | 98.13 | 0.50 percent | | | | |
| 2018 | 97.66 | 1.00 percent | | | | |
| 2019 | 96.59 | 1.50 percent | | | | |
| 2020 | 95.61 | 2.50 percent | | | | |
| 2021 | 94.63 | 3.50 percent | | | | |
| 2022 | 93.15 | 5.00 percent | | | | |
| 2023 | 91.68 | 6.50 percent | | | | |
| 2024 | 90.21 | 8.00 percent | | | | |
| 2025 and beyond | 88.25 | <u>10.00</u> percent | | | | |
| *Initial compliance period is a two-year period for 2016 and 2017. | | | | | | |



Table 2

State of Oregon Department of Environmental

Oregon Clean Fuel Standard for Diesel Fuel and Diesel Substitutes

| Guany | Jany | | | | | |
|--|--|--|--|--|--|--|
| Calendar Year | Oregon Clean Fuel Standard (gCO2e per MJ) | Percent Reduction | | | | |
| 2015 | None (Diesel Baseline is 99.64 for 98.74 for 2019 | None (Diesel Baseline is 99.64 for 2016-2017, 99.61 for 2018, and 98.74 for 2019 and beyond) | | | | |
| 2016* | 99.39 | 0.25 percent | | | | |
| 2017 | 99.14 | 0.50 percent | | | | |
| 2018 | 98.61 | 1.00 percent | | | | |
| 2019 | 97.26 | 1.50 percent | | | | |
| 2020 | 96.27 | 2.50 percent | | | | |
| 2021 | 95.29 | 3.50 percent | | | | |
| 2022 | 93.81 | 5.00 percent | | | | |
| 2023 | 92.32 | 6.50 percent | | | | |
| 2024 | 90.84 | 8.00 percent | | | | |
| 2025 and beyond | 88.87 | 10.00 percent | | | | |
| *Initial compliance period is a two-year period for 2016 and 2017. | | | | | | |

| DEQ State of Oregon Department of Environmental Quality | OAR 340-253-8010 Table 3 Oregon Clean Fuel Standard for Alternative Jet Fuel | | | | |
|---|---|--|--|--|--|
| Calendar Year | Oregon Clean Fuel Standard (gCO2e per MJ) | | | | |
| 2015 | None (Diesel Baseline is 99.64 for 2016-2017, 99.61 for 2018, and 98.74 for 2019 and beyond. The fossil jet baseline is 90.97.) | | | | |
| 2019 | 90.80 | | | | |
| 2020 | 90.80 | | | | |
| 2021 | 90.80 | | | | |
| 2022 | 90.80 | | | | |
| 2023 | 90.80 | | | | |
| 2024 | 90.80 | | | | |
| 2025 and beyon | ı 88.87 | | | | |



Oregon Carbon Intensity Lookup Table

| Fuel | Pathway | Pathway Description | Carbon Intensity Values (gCO2e/MJ) |
|---|------------|--|---------------------------------------|
| | Identifier | | Total Lifecycle Emissions |
| | ORGAS001 | Clear gasoline - based on a weighted average of gasoline supplied to Oregon | 100.14 |
| Gasoline | ORGAS002 | Imported blended gasoline (E10) – 90% clear gasoline & 10% corn ethanol based on Midwest average. Cannot be used to report exports except when the specific gallon was also imported under this fuel pathway code. | 98.06 |
| | ORULSD001 | Clear diesel, based on a weighted average of diesel fuel supplied to Oregon | 100.74 |
| Diesel | ORULSD002 | Imported blended diesel (B5) – 95% clear diesel & 5% soybean biodiesel. Cannot be used to report exports except when the specific gallon was also imported under this fuel pathway code. | 98.74 |
| | ORULSD003 | Imported blended diesel (B20) – 80% clear diesel & 20% soybean biodiesel. Cannot be used to report exports except when the specific gallon was also imported under this fuel pathway code. | 92.68 |
| Compressed Natural Gas | ORCNG001 | North American NG delivered via pipeline; compressed in OR | 79.98 |
| Liquefied Natural Gas | ORLNG001 | North American NG delivered via pipeline; liquefied in OR using liquefaction with 80% efficiency | 86.88 |
| Liquefied Petroleum Gas | ORLPG001 | Liquefied petroleum gas | 80.88 |
| Electricity ORELEC100 Solar power, produced at or directly station in Oregon, subject to OAR 340- 253-0470 (3). | | 0 | |



Oregon Carbon Intensity Lookup Table

| Fuel | Pathway | Pathway Description | Carbon Intensity Values (gCO2e/MJ) |
|----------|------------|---|---------------------------------------|
| | Identifier | | Total Lifecycle Emissions |
| | ORELEC101 | Wind power, produced at or directly connected to the site of the charging station in Oregon, subject to OAR 340- 253-0470 (3). | 0 |
| | ORELEC200 | Renewable power deemed to have a carbon intensity of zero under OAR <u>340-253-0470 and meeting the</u> provisions of (5). | <u>0</u> |
| | ORHYF | Compressed H2 produced in Oregon from central steam methane reformation of North American fossil- based NG | 120.68 |
| Hydrogen | ORHYFL | Liquefied H2 produced in Oregon from central steam methane reformation of North American fossil- based NG | 157.29 |
| | ORHYB | Compressed H2 produced in Oregon from central steam methane reformation of biomethane (renewable feedstock) from North American landfills | 116.76 |
| | ORHYBL | Liquefied H2 produced in Oregon from central steam methane reformation of biomethane (renewable feedstock) from North American landfills | 149.70 |
| | ORHYEG | Compressed H2 produced in Oregon from electrolysis using Oregon average grid electricity | 205.38 |
| | ORHYEB | Compressed H2 produced in Oregon from electrolysis using BPA average grid electricity | 31.65 |
| | ORHYER | Compressed H2 produced in Oregon from electrolysis using solar- or wind- generated electricity | 13.11 |



State of Oregon Department of Environmental Quality Summary Checklist of Quarterly Progress and Annual Compliance Reporting Requirements

| Parameters to Report | Gasoline & Diesel Fuel | Ethanol, Biodiesel & Renewable Diesel | CNG, LNG & LPG | Electricity | Hydrogen & Hydrogen Blends |
|---|---------------------------|---|-------------------|-------------|----------------------------------|
| Company or organization name | Х | x | х | х | х |
| Reporting period | Х | Х | Х | Х | х |
| Fuel pathway code | Х | Х | Х | Х | X |
| Transaction type | Х | Х | Х | Х | X |
| Transaction date | Х | Х | Х | Х | X |
| Business Partner | Х | х | Х | Х | х |
| Production Company ID and Facility ID | n/a | x | n/a | n/a | х |
| Physical transport mode code | Х | х | Х | х | х |
| Aggregation | Х | х | х | х | х |
| Application / EER | Х | Х | х | Х | х |
| Amount of each fuel used as gasoline replacement | Х | x | Х | Х | х |
| Amount of each fuel used as diesel fuel replacement | Х | x | х | х | х |
| *Credits/deficits generated per quarter (MT) | Х | x | Х | х | х |
| For Ann | ual Compliance | Reporting (in additi | on to the item | is above) | |
| *Credits and Deficits generated per year (MT) | X | x | X | X | X |



Summary Checklist of Quarterly Progress and Annual Compliance Reporting Requirements

| Parameters to Report | Gasoline & Diesel Fuel | Ethanol, Biodiesel & Renewable Diesel | CNG, LNG & LPG | Electricity | Hydrogen & Hydrogen Blends | |
|--|---------------------------|---|-------------------|-------------|----------------------------------|--|
| *Credits/deficits carried over from the previous year (MT), if any | Х | X | х | x | x | |
| *Credits acquired from another party (MT), if any | Х | х | х | Х | х | |
| *Credits sold to another party (MT), if any | Х | х | х | х | х | |
| *Credits retired within LCFS (MT) to meet compliance obligation, if any | X | X | X | x | X | |

| DEQ |
|----------------------------------|
| State of Oregon Department of |

Oregon Energy Densities of Fuels

| Quality | |
|--|----------------------------|
| Fuel (unit) | MJ/unit |
| Gasoline (gallon) | 122.48 (MJ/gallon) |
| Diesel fuel (gallon) | 134.48 (MJ/gallon) |
| Compressed natural gas (therm) | 105.5 (MJ/therms) |
| Electricity (kilowatt hour) | 3.60 (MJ/kilowatt hour) |
| Denatured ethanol (gallon) | 81.51 (MJ/gallon) |
| Clear biodiesel (gallon) | 126.13 (MJ/gallon) |
| Liquefied natural gas (gallon) | 78.83 (MJ/gallon) |
| Hydrogen (kilogram) | 120.00 (MJ/kilogram) |
| Liquefied petroleum gas (gallon) | 89.63 (MJ/gallon) |
| Renewable hydrocarbon diesel (gallon) | 129.65 (MJ/gallon) |
| Undenatured anhydrous ethanol (gallon) | 80.53 (MJ/gallon) |
| Alternative Jet Fuel (gallon) | 126.37 (MJ/gallon) |
| Renewable naphtha lene (gallon) | 117.66 (MJ/gallon) |



Table 7

Oregon Energy Economy Ratio Values for Fuels

| Light/Medium Duty Applications (Fuels used as gasoline replacements) | | Heavy-Duty/Off-Road (Fuels used as replacemen | Applications diesel nts) | Aviation Applications (Fuels used as jet fuel replacements) | |
|--|--------------------------------------|--|------------------------------------|---|---|
| Fuel/Vehicle Combination | EER Value Relative to Gasoline | Fuel/Vehicle Combination | EER Value Relative to Diesel | Fuel/Vehicle Combination | EER Value <u>R</u> relative to conventional jet |
| Gasoline (including E10) or any other gasoline-ethanol blend | 1 | Diesel fuel (including B5) or any other blend of diesel and biodiesel or renewable hydrocarbon diesel | 1 | Alternative Jet Fuel | 1 |
| CNG Internal Combustion Engine Vehicle (ICEV) | 1 | CNG, LNG, or LPG (Spark-Ignition Engines) | 0.9 | | |
| Electricity/Battery Electric Vehicle or Plug-In Hybrid Electric Vehicle | 3.4 | CNG,LNG, or LPG(Compression- Ignition Engines) | 1 | | |
| Electricity/On-Road Electric Motorcycle | 4.4 | Electricity/Battery Electric Vehicle or Plug-In Hybrid Electric Vehicle | 5 | | |
| Propane/Propane Forklift | 0.9 | Electricity/Battery Electric or Plug-in Hybrid Transit Bus | 5 | | |
| Hydrogen/Fuel Cell Vehicle | 2.5 | Electricity/Fixed Guideway Light Rail | 3.3 | | |
| | I | Electricity/Fixed Guideway Streetcar | 2.1 | | |
| | | Electricity/Fixed Guideway Aerial Tram | 2.6 | | |
| | | Electricity/Electric Forklift | 3.8 | | |



Table 7

Oregon Energy Economy Ratio Values for Fuels

| state of Ore | go |
|--------------|-----|
| Departmen | to |
| Invironme | nta |
| Quality | |
| | |

| Light/Medium Duty Applications (Fuels used as gasoline replacements) | | Heavy-Duty/Off-Road (Fuels used as replacemen | l Applications diesel nts) | Aviation Applications (Fuels used as jet fuel replacements) Fuel/Vehicle Combination | |
|--|--|---|------------------------------------|--|---|
| Fuel/Vehicle Combination Gasoline | | Fuel/Vehicle Combination | EER Value Relative to Diesel | Fuel/Vehicle Combination | EER Value <u>R</u> relative to conventional jet |
| | | Electricity/Electric TRU (eTRU) | 3.4 | | |
| | | Hydrogen/Fuel Cell Vehicle | 1.9 | | |
| | | Hydrogen/Fuel Cell Forklift | 2.1 | | |
| | | Electricity/Cargo Handling Equipment | <u>2.7</u> | | |
| | | Electricity/Ocean Going Vessels | <u>2.6</u> | | |



Table 8

Oregon Substitute Fuel Pathway Codes

| Fuel | Fuel Pathway code | CI (gCO2e/MJ) | |
|--|-------------------|---|--|
| Substitute CI for Ethanol. This pathway may only be used to report transactions that are sales or purchases without obligation, exports, loss of inventory, not for transportation use, and exempt fuel use. | ETH0116 | 40 | |
| Substitute CI for Biodiesel. This pathway may only be used to report transactions that are sales or purchases without obligation, exports, loss of inventory, not for transportation use, and exempt fuel use. | BIOD0116 | 15 | |
| Substitute CI for Renewable Diesel. This pathway may only be used to report transactions that are sales or purchases without obligation, exports, loss of inventory, not for transportation use, and exempt fuel use. | RNWD0116 | 15 | |
| Substitute CI for E10 Gasoline. This pathway may only be used to report transactions that are sales or purchases without obligation, exports, loss of inventory, not for transportation use, and exempt fuel use. | ORGAS0116 | For 2019: 96.59 For 2020 and beyond: 96.00 | |
| Substitute CI for B5 Diesel. This pathway may only be used to report transactions that are sales or purchases without obligation, exports, loss of inventory, not | ORULSD01165 | For 2019: 97.26 For 2020 and beyond: 96.71 | |



Table 8

Oregon Substitute Fuel Pathway Codes

| Guanty | | |
|---|-------------------|---------------|
| Fuel | Fuel Pathway code | CI (gCO2e/MJ) |
| for transportation use, and exempt fuel use. | | |
| Substitute CI for B20 Diesel. This pathway may only be used to report transactions that are sales or purchases without obligation, exports, loss of inventory, not for transportation use, and exempt fuel use. | ORULSD011620 | 84.45 |



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Table 9

Oregon Temporary Fuel Pathway Codes for Fuels with Indeterminate CIs

| Fuel | Feedstock | Process Energy | FPC | CI (gCO₂e/MJ) |
|---------------------|---|--|------------|---------------|
| Ethanol | Corn | Grid electricity, natural gas, and/or renewables | ORETH100T | 77.8 |
| | Sorghum | Grid electricity, natural gas, and/or renewables | ORETH101T | 95 |
| | Sugarcane and Molasses | Bagasse and straw only, no grid electricity | ORETH102T | 55 |
| | Any starch or sugar feedstock | Any | ORETH103T | 100.14 |
| | Corn Stover, Wheat Straw, or Sugarcane Straw | As specified in OR- Greet 2.0 | ORETH104T | 50 |
| Biodiesel | Any feedstock derived from animal fats, corn oil, or a waste stream | Grid electricity, natural gas, and/or renewables | ORBIOD200T | 45 |
| | Any feedstock derived from plant oils except for Palm-derived oils | Grid electricity, natural gas, and/or renewables | ORBIOD201T | 65 |
| | Any feedstock | Any | ORBIOD202T | 100.74 |
| Renewable Diesel | Any feedstock derived from animal fats, corn oil, or a waste stream | Grid electricity, natural gas, and/or renewables | ORRNWD300T | 45 |
| | Any feedstock derived from plant oils except for Palm-derived oils | Grid electricity, natural gas, and/or renewables | ORRNWD301T | 65 |
| | Any feedstock | Any | ORRNWD302T | 100.74 |



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Table 9

Oregon Temporary Fuel Pathway Codes for Fuels with Indeterminate CIs

| Fuel | Feedstock | Process Energy | FPC | CI (gCO₂e/MJ) |
|----------------------------------|---|--|------------|---------------|
| Biomethane CNG | Landfill or Digester Gas | Grid electricity, natural gas, and/or renewables | ORCNG500T | 70 |
| | Municipal Wastewater sludge, Food Waste, Green Waste, or Other Organic Waste | Grid electricity, natural gas, and/or parasitic load | ORCNG501T | 45 |
| Biomethane LNG | Landfill or Digester Gas | Grid electricity, natural gas, and/or renewables | ORLNG501T | 85 |
| | Municipal Wastewater sludge, Food Waste, Green Waste, or Other Organic Waste | Grid electricity, natural gas, and/or parasitic load | ORLNG502T | 60 |
| Biomethane L-CNG | Landfill or Digester Gas | Grid electricity, natural gas, and/or renewables | ORLCNG502T | 90 |
| | Municipal Wastewater sludge, Food Waste, Green Waste, or Other Organic Waste | Grid electricity, natural gas, and/or parasitic load | ORLCNG503T | 65 |
| Biomethane CNG, LNG, L-CNG | Dairy and Swine Manure | Grid electricity, natural gas, and/or parasitic load | ORLCNG504T | -150 |
| Renewable LPG | Fats, Oils, and Grease residues | Grid electricity, natural gas, and/or renewables | ORRNWP400T | 45 |
| | Any feedstock derived from plant oils (excluding palm | Grid electricity, natural gas, and/or renewables | ORRNWP401T | 65 |


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Table 9

Oregon Temporary Fuel Pathway Codes for Fuels with Indeterminate CIs

| Fuel | Feedstock | Process Energy | FPC | CI (gCO ₂ e/MJ) |
|--|---|-----------------------------------|------------|----------------------------|
| | and palm derivatives) | | | |
| Electricity | Coal, Natural Gas, Hydroelectric Dams, Wind Mills, etc. | Oregon average electricity mix | ORELEC600T | 135.00 |
| Any Gasoline Substitute Feedstock- Fuel Combination Not Included Above | Any | Any | ORSG800T | 100.14 |
| Any Diesel Substitute Feedstock- Fuel Combination Not Included Above | Any | Any | ORSD801T | 100.74 |

| DEO |
|-----|

OAR 340-253-8010

Table 10

State of Oregon Summary of Indirect Land-Use Change Values for Crop-Based Biofuels

| Feedstock | ILUC Value (gCO₂e/MJ) | | | |
|---------------------------------------|-----------------------|--|--|--|
| Corn Ethanol | 7.60 | | | |
| Sorghum Ethanol | 19.40 | | | |
| Sugarcane Ethanol | 11.80 | | | |
| Soybean Biodiesel or Renewable Diesel | 29.10 | | | |
| Canola Biodiesel or Renewable Diesel | 14.50 | | | |
| Palm Biodiesel or Renewable Diesel | 71.40 | | | |



Division 253 OREGON CLEAN FUELS PROGRAM

340-253-0040 Definitions

The definitions in OAR 340-200-0020, OAR 340-272-0020, and this rule apply to this division. If the same term is defined here and in either of the other two divisions, the definition in this rule applies to this division.

(1) "Above the rack" means sales of transportation fuel at pipeline origin points, pipeline batches in transit, barge loads in transit, and at terminal tanks before the transportation fuel has been loaded into trucks.

(2) "Advance Credits" refers to credits advanced under OAR 340-253-1100 for actions that will result in real reductions of the carbon intensity of Oregon's transportation fuels.

(3) "Aggregation indicator" means an identifier for reported transactions that are a result of an aggregation or summing of more than one transaction. An entry of "True" indicates that multiple transactions have been aggregated and are reported with a single transaction number. An entry of "False" indicates that the record reports a single fuel transaction.

(4) "Aggregator" or "Credit aggregator" means a person who registers to participate in the Clean Fuels Program, described in OAR 340-253-0100(3), on behalf of one or more credit generators to facilitate credit generation and trade credits.

(5) "Aggregator designation form" means a DEQ-approved document that specifies that a credit generator has designated an aggregator to act on its behalf.

(6) "Alternative Fuel Portal" or "AFP" means the portion of the Oregon Fuels Reporting System where fuel producers can register their production facilities and submit fuel pathway code applications and physical pathway demonstrations.

(7) "Alternative Jet Fuel" means a fuel, made from petroleum or non-petroleum sources, which can be blended and used with conventional petroleum jet fuels without the need to modify aircraft engines and existing fuel distribution infrastructure. The fuel must have a lower carbon intensity than the applicable annual standard under Table 3 under OAR 340-

253-8010. This includes alternative jet fuel derived from co-processed feedstocks at a conventional petroleum refinery.

(8) "Application" means the type of vehicle where the fuel is consumed, shown as either LDV/MDV or HDV.

(9) "B5" means diesel fuel containing 5 percent biodiesel.

(10) "Backstop aggregator" means a qualified entity approved by DEQ under OAR 340-253-0330(6) to aggregate credits for electricity used as a transportation fuel, when those credits would not otherwise be generated.

(11) "Battery electric vehicle" or "BEV" means any vehicle that operates solely by use of a battery or battery pack, or that is powered primarily through the use of an electric battery or battery pack but uses a flywheel or capacitor that stores energy produced by the electric motor or through regenerative braking to assist in vehicle operation.

(12) "Base Credits" refers to electricity credits that are generated by the carbon reduction between the gasoline or diesel standard and the carbon intensity of grid or utility electricity.

(13) "Below the rack" means sales of clear or blended gasoline or diesel fuel where the fuel is being sold as a finished fuel for use in a motor vehicle.

(14) "Bill of lading" means a document issued that lists goods being shipped and specifies the terms of their transport.

(15) "Bio-based" means a fuel produced from non-petroleum, biogenic renewable resources.

(16) "Biodiesel" means a motor vehicle fuel consisting of mono-alkyl esters of long chain fatty acids derived from vegetable oils, animal fats, or other nonpetroleum resources, not including palm oil, designated as B100 and complying with ASTM D6751.

(17) "Biodiesel Blend" means a fuel comprised of a blend of biodiesel with petroleum-based diesel fuel, designated BXX. In the abbreviation BXX, the XX represents the volume percentage of biodiesel fuel in the blend.

(18) "Biogas" means gas, consisting primarily of methane and carbon dioxide, produced by the anaerobic decomposition of organic matter. Biogas cannot be directly injected into natural gas pipelines or combusted in most natural gas-fueled vehicles unless first upgraded to biomethane.

(19) "Biomethane" or "Renewable Natural Gas" means refined biogas, or another synthetic stream of methane from renewable resources, that has been upgraded to a near-pure methane content product. Biomethane can be directly injected into natural gas pipelines or combusted in natural gas-fueled vehicles.

(20) "Blendstock" means a fuel component that is either used alone or is blended with one or more other components to produce a finished fuel used in a motor vehicle. A blendstock that is used directly as a transportation fuel in a vehicle is considered a finished fuel.

(21) "Bulk system" means a fuel distribution system consisting of refineries, pipelines, vessels and terminals. Fuel storage and blending facilities that are not fed by pipeline or vessel are considered outside the bulk transfer system.

(22) "Business partner" refers to the second party that participates in a specific transaction involving the regulated party. This can either be the buyer or seller of fuel, whichever applies to the specific transaction.

(23) "Buy/Sell Board" means a section of the Oregon Fuels Reporting System where registered parties can post that they are interested in buying or selling credits.

(24) "Carbon intensity" or "CI" means the amount of lifecycle greenhouse gas emissions per unit of energy of fuel expressed in grams of carbon dioxide equivalent per megajoule (gCO2e/MJ).

(25) "Carryback credit" means a credit that was generated during or before the prior compliance period that a regulated party acquires between January 1st and April 30th of the current compliance period to meet its compliance obligation for the prior compliance period.

(26) "Clean fuel" means a transportation fuel whose carbon intensity is lower than the applicable clean fuel standard which is either:

(a) For gasoline and gasoline substitutes and alternatives, listed in Table 1 under OAR 340-253-8010;

(b) For diesel and diesel substitutes and alternatives, listed in Table 2 under OAR 340-253-8010; or,

(c) For alternative jet fuel, listed in Table 3 under OAR 340-253-8010.

(27) "Clean fuel standard" or "Low carbon fuel standard" means the annual average carbon intensity a regulated party must comply with, as listed in Table 1 under OAR 340-253-8010 for gasoline and gasoline substitutes and in Table 2 under 340-253-8010 for diesel fuel and diesel substitutes.

(28) "Clear diesel" means a light middle or middle distillate grade diesel fuel derived from crude oil that has not been blended with a renewable fuel.

(29) "Clear gasoline" means gasoline derived from crude oil that has not been blended with a renewable fuel.

(30) "Compliance period" means each calendar year(s) during which regulated parties must demonstrate compliance under OAR 340-253-0100.

(31) "Compressed natural gas" or "CNG" means natural gas stored inside a pressure vessel at a pressure greater than the ambient atmospheric pressure outside of the vessel.

(32) "Co-processing" means the processing and refining of renewable or alternative lowcarbon feedstocks intermingled with crude oil and its derivatives at petroleum refineries.

(33) "Credit" means a unit of measure generated when a fuel with a carbon intensity that is less than the applicable clean fuel standard is produced, imported, or dispensed for use in Oregon, such that one credit is equal to one metric ton of carbon dioxide equivalent not emitted as a result of the use of the fuel as compared to a fuel that precisely met the clean fuel standard.

(34) "Credit facilitator" means a person in the Oregon Fuels Reporting System that a regulated party designates to initiate and complete credit transfers on behalf of the regulated party.

(35) "Credit generator" means a person eligible to generate credits by providing clean fuels for use in Oregon and who voluntarily registers to participate in the Clean Fuels Program, described in OAR 340-253-0100(2), and specified by fuel type under OAR 340-253-0320 through 340-253-0340.

(36) "Crude oil" means any naturally occurring flammable mixture of hydrocarbons found in geologic formations.

(37) "Deferral" means a delay or change in the applicability of a scheduled applicable clean fuel standard for a period of time, accomplished pursuant to an order issued under OAR 340-253-2000 or -2100, or under ORS 468A.273 and 468A.274.

(38) "Deficit" means a unit of measure generated when a fuel with a carbon intensity that is more than the applicable clean fuel standard is produced, imported, or dispensed for use in Oregon, such that one deficit is equal to one metric ton of carbon dioxide equivalent that is emitted as a result of the use of the fuel as compared to a fuel that precisely met the clean fuel standard.

(39) "Denatured Fuel Ethanol" or "Ethanol" means nominally anhydrous ethyl alcohol meeting ASTM D 4806 standards. It is intended to be blended with gasoline for use as a fuel in a spark-ignition internal combustion engine. Before it is blended with gasoline, the denatured fuel ethanol is first made unfit for drinking by the addition of substances approved by the Alcohol and Tobacco Tax and Trade Bureau.

(40) "Diesel fuel" or "diesel" means either:

(a) A light middle distillate or middle distillate fuel suitable for compression ignition engines blended with not more than 5 volume percent biodiesel and conforming to the specifications of ASTM D975 or; (b) A light middle distillate or middle distillate fuel blended with at least 5 and not more than 20 volume percent biodiesel suitable for compression ignition engines conforming to the specifications of ASTM D7467.

(41) "Diesel substitute" means a liquid fuel, other than diesel fuel, suitable for use as a compression-ignition piston engine fuel.

(42) "Duty-cycle testing" means a test procedure used for emissions and vehicle efficiency testing.

(43) "E10" means gasoline containing 10 volume percent fuel ethanol.

(44) "Energy economy ratio" or "EER" means the dimensionless value that represents:

(a) The efficiency of a fuel as used in a powertrain as compared to a reference fuel; or

(b) The efficiency of a fuel per passenger mile, for fixed guideway applications.

(45) "Electric Transport Refrigeration Units (eTRUs)" means refrigeration systems powered by electricity designed to refrigerate or heat perishable products that are transported in various containers, including semi-trailers, truck vans, shipping containers, and rail cars.

(46) "Electric Service Supplier" has the same definition as in OAR 860-038-005.

(47) "Emergency period" is the period of time in which an Emergency Action under OAR 340-253-2000 is in effect.

(48) "Export" means to have ownership title to transportation fuel from locations within Oregon, at the time it is delivered to locations outside Oregon by any means of transport, other than in the fuel tank of a motor vehicle for the purpose of propelling the motor vehicle.

(49) "Feedstock transfer document" means a document, or combination of documents, that demonstrates the delivery of specified source feedstocks from the point of origin to the fuel production facility as required under OAR 340-253-0400(7).

(50) "Finished fuel" means a transportation fuel that can legally be used directly in a motor vehicle without requiring additional chemical or physical processing.

(51) "Fixed guideway" means a public transportation facility using and occupying a separate right-of-way for the exclusive use of public transportation using rail, using a fixed catenary system, using an aerial tramway, or for a bus rapid transit system.

(52) "Fossil" means any naturally occurring flammable mixture of hydrocarbons found in geologic formations such as rock or strata. When used as an adjective preceding a type of fuel (e.g., "fossil gasoline," or "fossil LNG"), it means the subset of that type of fuel that is derived from a fossil source.

(53) "Fuel pathway" means a detailed description of all stages of fuel production and use for any particular transportation fuel, including feedstock generation or extraction, production, distribution, and combustion of the fuel by the consumer. The fuel pathway is used to calculate the carbon intensity of each transportation fuel.

(54) "Fuel pathway code" or "FPC" means the identifier used in the Oregon Fuels Reporting System that applies to a specific fuel pathway as approved or issued under OAR 340-253-0400 through 0470.

(55) "Fuel pathway holder" means the entity that has applied for and received a certified fuel pathway code from DEQ, or who has a certified fuel pathway code from the California Air Resources Board that has been approved for use in Oregon by DEQ.

(56) "Fuel production facility" means the facility at which a regulated or opt-in fuel is produced. With respect to biomethane, a fuel production facility means the facility at which the fuel is upgraded, purified, or processed to meet the standards for injection to a natural gas common carrier pipeline or for use in natural gas vehicles.

(57) "Fuel supply equipment" refers to equipment registered in the Oregon Fuels Reporting System that dispenses alternative fuel into vehicles, including but not limited to electric vehicle chargers, hydrogen fueling stations, and natural gas fueling equipment.

(58) "Gasoline" means a fuel suitable for spark ignition engines and conforming to the specifications of ASTM D4814.

(59) "Gasoline substitute" means a liquid fuel, other than gasoline, suitable for use as a spark-ignition engine fuel.

(60) "Green-e" means the certification program run by the Center for Resource Solutions.

(61) "Heavy duty motor vehicle" or "HDV" means any motor vehicle rated at more than 10,000 pounds gross vehicle weight.

(62) "Illegitimate credits" means credits that were not generated in compliance with this division.

(63) "Import" means to have ownership title to transportation fuel at the time it is brought into Oregon from outside the state by any means of transport other than in the fuel tank of a motor vehicle for the purpose of propelling that motor vehicle.

(64) "Importer" means:

(a) With respect to any liquid fuel, the person who imports the fuel; or

(b) With respect to any biomethane, the person who owns the biomethane when it is either physically transported into Oregon or injected into a pipeline located outside of Oregon and delivered for use in Oregon.

(65)"Incremental aggregator" means a qualified entity approved by DEQ under OAR 340-253-0330(10) to earn incremental credits, when those credits would not otherwise be claimed.

(66) "Incremental credit" means a credit that is generated by an action to further lower the carbon intensity of electricity. Incremental credits are calculated from the difference between the carbon intensity of grid electricity and the carbon intensity of renewable electricity.

(67) "Indirect land use change" means the average lifecycle greenhouse gas emissions caused by an increase in land area used to grow crops that is caused by increased use of crop-based transportation fuels, and expressed as grams of carbon dioxide equivalent per megajoule of energy provided (gCO2e/MJ). Indirect land use change values are listed in Table 10 under OAR 340-253-8010.

(a) Indirect land use change for fuel made from corn feedstocks is calculated using the protocol developed by the Argonne National Laboratory.

(b) Indirect land use change for fuel made from sugarcane, sorghum, soybean, canola and palm feedstocks is calculated using the protocol developed by the California Air Resources Board.

(68) "Invoice" means the receipt or other record of a sale transaction, specifying the price and terms of sale, that describes an itemized list of goods shipped.

(69) "Large importer of finished fuels" means any person who imports into Oregon more than 500,000 gallons of finished fuels in a given calendar year.

(70) "Light-duty motor vehicle" or "LDV" means any motor vehicle rated at 8,500 pounds gross vehicle weight or less.

(71) "Lifecycle greenhouse gas emissions" are:

(a) The aggregated quantity of greenhouse gas emissions, including direct emissions and significant indirect emissions, such as significant emissions from changes in land use associated with the fuels;

(b) Measured over the full fuel lifecycle, including all stages of fuel production, from feedstock generation or extraction, production, distribution, and combustion of the fuel by the consumer; and

(c) Stated in terms of mass values for all greenhouse gases as adjusted to CO2e to account for the relative global warming potential of each gas.

(72) "Liquefied compressed natural gas" or "L-CNG" means natural gas that has been liquefied and transported to a dispensing station where it was then re-gasified and compressed to a pressure greater than ambient pressure.

(73) "Liquefied natural gas" or "LNG" means natural gas that has been liquefied.

(74) "Liquefied petroleum gas" or "propane" or "LPG" means a petroleum product composed predominantly of any of the hydrocarbons, or mixture thereof; propane, propylene, butanes and butylenes maintained in the liquid state.

(75) "Material information" means:

(a) Information that would result in a change of the carbon intensity of a fuel, expressed in a gCO2e/MJ basis to two decimal places; or

(b) Information that would result in a change by any whole integer of the number of credits or deficits generated under OAR 340-253-1000 through OAR 340-253-1030.

(76) "Medium duty vehicle" or "MDV" means any motor vehicle rated between 8,501 pounds and 10,000 pounds gross vehicle weight.

(77) "Motor vehicle" means any vehicle, vessel, watercraft, engine, machine, or mechanical contrivance that is self-propelled.

(78) "Multi-family housing" means a structure or facility established primarily to provide housing that provides four or more living units, and where the individual parking spaces that an electric vehicle charger serves, and the charging equipment itself, are not deeded to or owned by a single resident.

(79) "Natural gas" means a mixture of gaseous hydrocarbons and other compounds with at least 80 percent methane by volume.

(80) "Oregon Fuels Reporting System" means the interactive, secured, web-based, electronic data tracking, reporting and compliance system that DEQ develops, manages and operates to support the Clean Fuels Program.

(81) "Oregon Fuels Reporting System reporting deadlines" means the quarterly and annual reporting dates in OAR 340-253-0630 and in 340-253-0650.

(82) "OR-GREET" means the Greenhouse gases, Regulated Emissions, and Energy in Transportation (GREET) model developed by Argonne National Laboratory that DEQ modifies and maintains for use in the Oregon Clean Fuels Program. The most current version is OR-GREET 3.0. DEQ will make available a copy of OR-GREET 3.0 on its website (https://www.oregon.gov/deq/Pages/index.aspx). As used in this rule, OR-GREET refers to both the full model and the fuel-specific simplified calculators that the program has adopted.

(83) "Physical Transport Mode" means the applicable combination of actual fuel delivery methods, such as truck routes, rail lines, pipelines and any other fuel distribution methods through which the regulated party reasonably expects the fuel to be transported under contract from the entity that generated or produced the fuel, to any intermediate entities and ending in Oregon.

(84) "Plug-In Hybrid Electric Vehicle" or "PHEV" means a hybrid vehicle with the capability to charge a battery from an off-vehicle electric energy source that cannot be connected or coupled to the vehicle in any manner while the vehicle is being driven.

(85) "Position holder" means any person that has an ownership interest in a specific amount of fuel in the inventory of a terminal operator. This does not include inventory held outside of a terminal, retail establishments, or other fuel suppliers not holding inventory at a fuel terminal.

(86) "Power Purchase Agreement" means a written agreement between an electricity service supplier and a customer that specifies the source or sources of electricity that will supply the customer.

(87) "Producer" means:

(a) With respect to any liquid fuel and renewable propane, the person who makes the fuel; or

(b) With respect to any biomethane, the person who refines, treats or otherwise processes biogas into biomethane.

(88) "Product transfer document" or "PTD" means a document, or combination of documents, that authenticates the transfer of ownership of fuel between parties and must include all information identified in OAR 340-253-0600(2). A PTD may include bills of lading, invoices, contracts, meter tickets, rail inventory sheets or RFS product transfer documents.

(89) "Public transportation" means regular, continuing shared passenger-transport services along set routes which are available for use by the general public.

(90) "Public transit agency" means an entity that operates a public transportation system.

(91) "Registered party" means a regulated party, credit generator, or aggregator that has a DEQ-approved registration under OAR 340-253-0500 to participate in the Clean Fuels Program.

(92) "Regulated fuel" means a transportation fuel identified under OAR 340-253-0200(2).

(93) "Regulated party" means a person responsible for compliance with requirements listed under OAR 340-253-0100(1).

(94) "Related entity" means any direct parent company, direct subsidiary, or a company with common ownership or control.

(95) "Renewable hydrocarbon diesel" or "renewable diesel", means a diesel fuel that is produced from non-petroleum renewable resources but is not a monoalkylester and which is registered as a motor vehicle fuel or fuel additive under Title 40, part 79 of the Code of Federal Regulations. This includes the renewable portion of a diesel fuel derived from co-processing biomass with a petroleum feedstock.

(96) "Renewable hydrocarbon diesel blend" or "renewable diesel blend" means a fuel comprised of a blend of renewable hydrocarbon diesel with petroleum-based diesel fuel, designated RXX. In the abbreviation RXX, the XX represents the volume percentage of renewable hydrocarbon diesel fuel in the blend.

(97) "Renewable gasoline" means a spark ignition engine fuel that substitutes for fossil gasoline and that is produced from renewable resources.

(98) "Renewable propane" means liquefied petroleum gas (LPG or propane) that is produced from non-petroleum renewable resources.

(99) "Renewable naphtha" means naphtha that is produced from non-petroleum renewable resources.

(100) "Small importer of finished fuels" means any person who imports into Oregon 500,000 gallons or less of finished fuels in a given calendar year. Any fuel imported by persons that are related, or share common ownership or control, shall be aggregated together to determine whether a person meets this definition.

(101) "Specified source feedstocks" are feedstocks for fuel pathways that require chain of custody evidence to be elegibile for a reduced CI associated with the use of a waste, residue, by-product, or similar material under the pathway certification process under OAR 340-253-0400(7).

(102) "Substitute fuel pathway code" means a fuel pathway code that is used to report transactions that are sales or purchases without obligation, exports, loss of inventory, not for transportation use, and exempt fuel use when the seller of a fuel does not pass along the credits or deficits to the buyer and the buyer does not have accurate information on the carbon intensity of the fuel or its blendstocks.

(103) "Tier 1 calculator", "Simplified calculator" or "OR-GREET 3.0 Tier 1 calculator" means the tools used to calculate lifecycle emissions for commonly produced fuels, including the instruction manuals on how to use the calculators. DEQ will make available copies of these simplified calculators on its website (https://www.oregon.gov/deq/Pages/index.aspx). The simplified calculators used in the program are:

(a) Tier 1 Simplified Calculator for Starch and Corn Fiber Ethanol;

(b) Tier 1 Simplified CI Calculator for Sugarcane-derived Ethanol;

(c) Tier 1 Simplified CI Calculator for Biodiesel and Renewable Diesel;

(d) Tier 1 Simplified CI Calculator for LNG and L-CNG from North American Natural Gas;

(e) Tier 1 Simplified CI Calculator for Biomethane from North American Landfills;

(f) Tier 1 Simplified CI Calculator for Biomethane from Anaerobic Digestion of Wastewater Sludge;

(g) Tier 1 Simplified CI Calculator for Biomethane from Food, Green and Other Organic Wastes; and

(h) Tier 1 Simplified CI Calculator for Biomethane from AD of Dairy and Swine Manure.

(104) "Tier 2 calculator" or "OR-GREET 3.0 model" means the tool used to calculate lifecycle emissions for next-generation fuels, including the instruction manual on how to use the calculator. Next-generation fuels include, but are not limited to, cellulosic alcohols, hydrogen, drop-in fuels, or first-generation fuels produced using innovative production processes. DEQ will make available a copy of the Tier 2 calculator on its website (https://www.oregon.gov/deq/Pages/index.aspx).

(105) "Transaction date" means the title transfer date as shown on the PTD.

(106) "Transaction quantity" means the amount of fuel reported in a transaction.

(107) "Transaction type" means the nature of the fuel transaction as defined below:

(a) "Produced in Oregon" means the transportation fuel was produced at a facility in Oregon;

(b) "Import within the bulk system" means the transportation fuel was imported into Oregon and placed into the bulk system;

(c) "Import outside the bulk system" means the transportation fuel was imported into Oregon and delivered outside the bulk system;

(d) "Purchased with obligation" means the transportation fuel was purchased with the compliance obligation passing to the purchaser;

(e) "Purchased without obligation" means the transportation fuel was purchased with the compliance obligation retained by the seller;

(f) "Sold with obligation" means the transportation fuel was sold with the compliance obligation passing to the purchaser;

(g) "Sold without obligation" means the transportation fuel was sold with the compliance obligation retained by the seller;

(h) "Position holder sale" means the transportation fuel was sold below the rack without a transfer of the compliance obligation;

(i) "Position holder sale for export" means the transportation fuel was sold below the rack to an entity who exported the fuel.

(j) "Purchase below the rack for export" means the transportation fuel was purchased below the rack and exported.

(k) "Export" means a transportation fuel that was reported under the Clean Fuels Program but was later moved from a location inside of Oregon to a location outside of Oregon;

(1) "Loss of inventory" means the fuel exited the Oregon fuel pool due to volume loss, such as through evaporation or due to different temperatures or pressurization;

(m) "Gain of inventory" means the fuel entered the Oregon fuel pool due to a volume gain, such as through different temperatures or pressurization;

(n) "Not used for transportation" means a transportation fuel that was used in an application unrelated to the movement of goods or people, such as process heat at an industrial facility, home or commercial building heating, or electric power generation.;

(o) "EV charging" means providing electricity to recharge EVs including BEVs and PHEVs;

(p) "LPGV fueling" means the dispensing of liquefied petroleum gas at a fueling station designed for fueling liquefied petroleum gas vehicles;

(q) "NGV fueling" means the dispensing of natural gas at a fueling station designed for fueling natural gas vehicles;

(r) "Exempt fuel use - Aircraft", "Exempt fuel use - Racing Activity Vehicles (ORS 801.404)", "Exempt fuel use - Military tactical and support vehicle and equipment", "Exempt fuel use - Locomotives", "Exempt fuel use - Watercraft", "Exempt fuel use - Farm vehicles, tractors, implements of husbandry", "Exempt fuel use - Motor trucks primary used to transport logs", "Exempt fuel use - Off-highway construction vehicles which must meet OAR 340-253-0250(2)(a)(J)" means that the fuel was delivered or sold into the category of vehicles or fuel users that are exempt under OAR 340-253-0250; or

(s) "Production for Import into Oregon" means the out-of-state production of a fuel that will be imported into Oregon.

(108) "Transportation fuel" means gasoline, diesel, any other flammable or combustible gas or liquid and electricity that can be used as a fuel for the operation of a motor vehicle. Transportation fuel does not mean unrefined petroleum products.

(109) "Unit of fuel" means fuel quantities expressed to the largest whole unit of measure, with any remainder expressed in decimal fractions of the largest whole unit.

(110) "Unit of measure" means either:

(a) The International System of Units defined in NIST Special Publication 811 (2008) commonly called the metric system;

(b) US Customer Units defined in terms of their metric conversion factors in NIST Special Publications 811 (2008); or

(c) Commodity Specific Units defined in either:

(A) The NIST Handbook 130 (2015), Method of Sale Regulation; or

(B) OAR chapter 603 division 027.

(111) "Utility Renewable Electricity Product" means a product where a utility customer has elected to purchase renewable electricity through a product that retires RECs or represents a bundled purchase of renewable electricity and its RECs.

[NOTE: Publications referenced are available from the agency.]

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 **Statutes/Other Implemented:** ORS 468.020 & ORS 468A.265 through 468A.277 **History:**

DEQ 14-2020, amend filed 05/07/2020, effective 05/07/2020 DEQ 13-2019, amend filed 05/16/2019, effective 05/16/2019 DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019 DEQ 160-2018, minor correction filed 04/12/2018, effective 04/12/2018 DEQ 27-2017, amend filed 11/17/2017, effective 11/17/2017 DEQ 13-2015, f. 12-10-15, cert. ef. 1-1-16 DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15 DEQ 8-2014, f. & cert. ef. 6-26-14 DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14 DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-0060 Acronyms

The following acronyms apply to this division:

(1) "AFP" means Alternative Fuel Portal.

(2) "ASTM" means ASTM International (formerly American Society for Testing and Materials).

(3) "BEV" means battery electric vehicle.

(4) "CARB" means the California Air Resources Board.

(5) "CA-GREET" means the California Air Resources Board adopted version of GREET.

(6) "CFP" means the Clean Fuels Program established under OAR chapter 340, division 253.

- (7) "CI" means carbon intensity.
- (8) "CNG" means compressed natural gas.
- (9) "CO2e" means carbon dioxide equivalents.
- (10) "DEQ" means Oregon Department of Environmental Quality.
- (11) "EER" means energy economy ratio.

(12) "EN" means a European Standard adopted by one of the three European Standardization Organizations.

- (13) "EQC" means Oregon Environmental Quality Commission.
- (14) "EV" means electric vehicle.
- (15) "FEIN" means federal employer identification number.
- (16) "FFV" means flex fuel vehicle.
- (17) "FPC" means fuel pathway code.
- (18) "gCO2e/MJ" means grams of carbon dioxide equivalent per megajoule of energy.
- (19) "HDV" means heavy-duty vehicle.
- (20) "HDV-CIE" means a heavy-duty vehicle compression ignition engine.
- (21) "HDV-SIE" means a heavy-duty vehicle spark ignition engine.
- (22) "L-CNG" means liquefied-compressed natural gas.
- (23) "LDV" means light-duty vehicle.
- (24) "LNG" means liquefied natural gas.
- (25) "LPG" means liquefied petroleum gas.
- (26) "LPGV" means liquefied petroleum gas vehicle.
- (27) "MDV" means medium-duty vehicle.
- (28) "mmBtu" means million British Thermal Units.
- (29) "NERC" means the North American Electric Reliability Corporation.
- (30) "NGV" means natural gas vehicle.
- (31) "PHEV" means partial hybrid electric vehicle.

(32) "PTD" means product transfer document.

(33) "REC" means Renewable Energy Certificate.

(34) "RFS" means the Renewable Fuel Standard implemented by the US Environmental Protection Agency.

(35) "scf" means standard cubic foot.

(36) "ULSD" means ultra low sulfur diesel.

(37) "WREGIS" means the Western Renewable Energy Generation Information System run by the Western Electricity Coordinating Council.

(38) "WECC" means the Western Electricity Coordinating Council.

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 Statutes/Other Implemented: ORS 468.020 & ORS 468A.265 through 468A.277 History:

DEQ 14-2020, amend filed 05/07/2020, effective 05/07/2020 DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019 DEQ 161-2018, minor correction filed 04/12/2018, effective 04/12/2018 DEQ 27-2017, amend filed 11/17/2017, effective 11/17/2017 DEQ 13-2015, f. 12-10-15, cert. ef. 1-1-16 DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15 DEQ 8-2014, f. & cert. ef. 6-26-14 DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14 DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-0100 Oregon Clean Fuels Program Applicability and Requirements

(1) Regulated parties.

(a) All persons that produce in Oregon, or import into Oregon, any regulated fuel must comply with the rules in this division.

(b) The regulated parties for regulated fuels are designated under OAR 340-253-0310 and must comply with sections (4) through (8) below;

(c) An out-of-state producer of ethanol, biodiesel, renewable diesel, alternative jet fuel, renewable natural gas, or renewable propane that is not an importer is not required to participate in the program. Any out-of-state producer that is not an importer who chooses voluntarily to participate in the program in order to initially generate credits from the volumes of their fuel that is imported into Oregon must comply with sections (4), (5), (7), (8), and (9) below;

(d) Small importers of finished fuels are exempt from sections (6) and (7) below;

(e) Regulated parties must comply with OAR chapter 340, division 215.

(2) Credit generators.

(a) The following rules designate persons eligible to generate credits for each of the following fuel types:

(A) OAR 340-253-0320 for compressed natural gas, liquefied natural gas, liquefied compressed natural gas, and liquefied petroleum gas;

(B) OAR 340-253-0330 for electricity;

(C) OAR 340-253-0340 for hydrogen fuel or a hydrogen blend; and

(D) OAR 340-253-0350 for alternative jet fuel.

(b) Any person eligible to be a credit generator, and that is not a regulated party, is not required to participate in the program. Any person who chooses voluntarily to participate in the program in order to generate credits must comply with sections (4), (5), (7), (8), and (9) below.

(3) Aggregator.

(a) Aggregators must comply with this section and sections (4), (5), (7), and (8) below.

(b) Aggregators facilitate credit generation and trade credits only if a regulated party or a credit generator has authorized an aggregator to act on its behalf by submitting an Aggregator Designation Form. An eligible credit generator may designate an aggregator for its credit generation. The only exception to that designation by a credit generator is the backstop aggregator designated under OAR 340-253-0330(7). A regulated party or credit generator already registered with the program may also serve as an aggregator for others. An aggregator is responsible for notifying DEQ when its authorization to act on behalf of a credit generator or regulated party has been withdrawn. Aggregator designations and withdrawals may only take effect at the start or end of a full calendar quarter.

(4) Registration.

(a) A regulated party must submit a complete registration application to DEQ under OAR 340-253-0500 for each fuel type on or before the date upon which that party begins producing the fuel in Oregon or importing the fuel into Oregon. The registration application must be submitted using DEQ approved forms.

(b) A credit generator must submit a complete registration application to DEQ under OAR 340-253-0500 for each fuel type before it may generate credits for fuel produced, imported, or dispensed for use in Oregon. DEQ will not recognize credits allegedly generated by any person that does not have an approved, accurate and current registration.

(c) An aggregator must submit a complete registration application to DEQ under OAR 340-253-0500 and an Aggregator Designation Form each time it enters into a new contract with a regulated party, a credit generator, or another aggregator to facilitate credit generation or trade credits. Any violations by the aggregator may result in enforcement against both the aggregator and the party it was designated to act on behalf of.

(5) Records. Regulated parties, credit generators, and aggregators must develop and retain all records OAR 340-253-0600 requires.

(6) Clean fuel standards. Each regulated party must comply with the following standards for all transportation fuel it produces in Oregon or imports into Oregon in each compliance period. Each regulated party may demonstrate compliance in each compliance period either by producing or importing fuel that in the aggregate meets the standard or by obtaining sufficient credits to offset the deficits it has incurred for such fuel produced or imported into Oregon. The initial compliance period is for two years, 2016 and 2017, and after that compliance periods will be for each single calendar year.

(a) Table 1 under OAR 340-253-8010 establishes the Oregon Clean Fuel Standard for Gasoline and Gasoline Substitutes; and

(b) Table 2 under OAR 340-253-8010 establishes the Oregon Clean Fuel Standard for Diesel and Diesel Substitutes.

(7) Quarterly report. Each regulated party, credit generator, and aggregator must submit quarterly reports under OAR 340-253-0630, unless they are exempt under subsection (1)(b) or they are a credit generator solely registered for residential charging of electric vehicles.

(8) Annual report. Each regulated party, credit generator, and aggregator must submit an annual report under OAR 340-253-0650. Each regulated party must submit an annual report for 2016 notwithstanding that the initial compliance period is for 2016 and 2017.

(9) Voluntary participation. The voluntary participation in the program by any person shall conclusively establish that person's consent to be subject to the jurisdiction of the State of Oregon, its courts, and the administrative authority of DEQ to implement this program. If a person does not consent to such jurisdiction, then the person may not participate in the program.

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 **Statutes/Other Implemented:** ORS 468.020 & ORS 468A.265 through 468A.277 **History:**

DEQ 14-2020, amend filed 05/07/2020, effective 05/07/2020 DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019 DEQ 27-2017, amend filed 11/17/2017, effective 11/17/2017 DEQ 13-2015, f. 12-10-15, cert. ef. 1-1-16 DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15 DEQ 8-2014, f. & cert. ef. 6-26-14 DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14 DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-0330 Credit Generators: Providers of Electricity

(1) Applicability. This rule applies to providers of electricity used as a transportation fuel.

(2) For residential charging. For electricity used to charge an electric vehicle at a residence, subsections (a) and (b) determine the person who is eligible to generate credits.

(a) Electric Utility. In order to generate credits for the following year, an electric utility must notify DEQ by October 1 of the current year whether it will generate credits or designate an aggregator to act on its behalf. The utility or its aggregator must have an active registration approved by DEQ under OAR 340-253-0500. Once a utility has made a designation under this section that designation will remain in effect unless the utility requests a change in writing to DEQ.

(b) Backstop and Incremental Aggregators. If an electric utility does not register or designate an aggregator under subsection (a), then backstop and incremental aggregators are eligible to claim any credits that the utility could have generated for the following year under section (6). The backstop aggregator may claim any base credits and the incremental aggregator may claim any incremental credits.

(3) For non-residential charging. For electricity used to charge an electric vehicle at non-residential locations, such as in public, for a fleet, at a workplace, or at multi-family housing sites, subsections (a) through (c) determine the person who is eligible to generate credits.

(a) Owner or service provider of the electric-charging equipment. The owner or service provider of the electric-charging equipment may generate the credits. Only one entity may generate credits from each piece of charging equipment.

(b) Electric Utility. If the owner or service provider of the electric-charging equipment does not generate the credits, then an electric utility or an aggregator designated to act on the utility's behalf is eligible to generate the credits. The utility or its aggregator must have an active registration approved by DEQ under OAR 340-253-0500. Once a utility has made a designation under this section that designation will remain in effect unless the utility requests a change in writing to DEQ.

(c) Backstop and Incremental Aggregators. If an electric utility does not register or designate an aggregator under subsection (b), then backstop and incremental aggregators are eligible to claim any credits.

(4) Public Transit. For electricity used to power fixed guideway vehicles such as light rail systems, streetcars, and aerial trans, or transit buses, a transit agency may generate the credits. The transit agency must have an active registration approved by DEQ under OAR 340-253-0500.

(5) Forklifts. For electricity used to power forklifts, the forklift fleet owner or fleet operator may generate the credits. Only one entity may generate credits from each piece of equipment. The fleet owner has precedence to generate credits or designate an aggregator.

(6) Transportation Refrigeration Units. The fleet owner or fleet operator of the electric transportation refrigeration unit may generate credits for electricity used in transport refrigeration units. Only one entity may generate credits from each piece of equipment. The fleet owner has precedence to generate credits or designate an aggregator.

(7) Electric Cargo Handling Equipment. The owner or service provider of the electriccharging equipment may generate the credits or designate an aggregator. Only one entity may generate credits from each piece of charging equipment.

(8) Electric Ocean-Going Vessel powering. The owner of the equipment that provides electrical power from the shore to the vessel is eligible to generate credits or designate an aggregator.

(9) Responsibilities to generate credits. Any person specified under sections (2) through (8) may generate clean fuel credits by complying with the registration, recordkeeping and reporting requirements of this division.

(10) Backstop Aggregator. The backstop aggregator that serves as the credit generator of electricity credits that have not been claimed by an electric utility, an aggregator designated by an electric utility, or an owner or service provider of electric charging equipment under sections (2) and (3).

(a) To qualify to submit an application to be a backstop aggregator, an organization must:

(A) Be an organization exempt from federal taxation under section 501(c)(3) of the U.S. Internal Revenue Code;

(B) Complete annual independent financial audits.

(b) An entity that wishes to be the backstop aggregator must submit an application with DEQ that includes:

(A) A description of the mission of the organization and how being a backstop aggregator fits into its mission;

(B) A description of the experience and expertise of key individuals in the organization who would be assigned to work associated with being a backstop aggregator;

(C) A plan describing:

(i) How the organization will promote transportation electrification statewide or in specific utility service territories, if applicable;

(ii) Any entities that the organization might partner with to implement its plan;

(iii) How the organization plans to use the revenue from the sale of credits, which may include, without limitation, programs that provide incentives to purchase electric vehicles or

install electric vehicle chargers, opportunities to educate the public about electric vehicles, and anticipated costs to administer its plan; and

(iv) The financial controls that are, or will be put, in place to segregate funds from the sale of credits from other monies controlled by the organization.

(D) Its last three years of independent financial audits and I.R.S. form 990s, and proof that the I.R.S. has certified them as qualifying as an exempt organization under 501(c)(3);

(c) Initial applications to be a backstop aggregator are due to DEQ no later than March 15, 2018, to be eligible to be the backstop aggregator beginning in 2018. If the EQC does not approve the designation of a backstop aggregator under subsection (e), then DEQ may set a new deadline for applications if it decides to undertake a new selection process.

(d) Applications will be evaluated by DEQ with the assistance of relevant experts selected by DEQ. DEQ will evaluate applications based on the likelihood that the applicant will maximize the benefits from the credits it receives to expand the use of alternative fuel vehicles and reduce greenhouse gas emissions from the transportation sector in Oregon.

(e) DEQ may recommend an organization be designated as the initial backstop aggregator to the EQC by May 31, 2018. If DEQ does not recommend an organization to be the backstop aggregator or the EQC does not approve DEQ's recommendation, then DEQ may undertake a new selection process at a later date under the same criteria in subsections (b) and (d).

(f) Following EQC approval of an organization to be the backstop aggregator, DEQ and the organization may enter into a written agreement regarding its participation in the program. A written agreement must be in place prior to the backstop aggregator registering an account in the CFP Online System and receiving credits for the first time. The backstop aggregator must:

(A) By March 31st of each year, submit a report that summarizes the previous year's activity including:

(i) How much revenue was generated from the credits it received;

(ii) A description of activities including the status of each activity, where each activity took place, and each activity's budget, including administrative costs, and an estimate of its outcomes; and

(iii) The results of its most recent independent financial audit.

(B) Maintain records and make them available upon request by DEQ, including records required to be maintained under OAR 340-253-0600 and, in addition, any records relating to its application, the programs it operates using the proceeds from the sale of credits under this program, and any of the organization's financial records.

(g) If DEQ determines that a backstop aggregator is in violation of this division or the agreement that it enters into with DEQ to be the backstop aggregator, DEQ may rescind its designation and solicit applications to select a new backstop aggregator.

(h) If backstop aggregator wishes to terminate its agreement with DEQ, then DEQ may solicit applications to select a new backstop aggregator.

(i) After a backstop aggregator has been in place for three years, DEQ may hold a new selection process to appoint a backstop aggregator for future years. Unless DEQ has rescinded an organization as backstop aggregator under subsection (g), the current backstop aggregator may apply to be re-designated as the backstop aggregator for future years.

(11) Incremental credits. Other than for residential charging, incremental credits may be claimed by the eligible credit generator identified in sections (3)-(8) of this rule or the incremental aggregator. For residential charging, the following entities may claim incremental credits:

(a) The electric utility claiming base credits for the same vehicles under subsection (2)(a) or their designated aggregator if they notify DEQ by June 15 or December 15 that they wish to begin generating incremental credits starting with the charging covered by the next period of residential electric vehicle charging. A utility's election remains in place until they inform DEQ otherwise; or

(b) Incremental Aggregator. The incremental aggregator that serves as the credit generator of incremental electricity credits that have not been claimed by an electric utility, an aggregator designated by an electric utility, or the eligible credit generator under sections (3)-(8). The incremental aggregator will be selected as provided in subsection (c).

(c)(A) To qualify to submit an application to be the incremental aggregator, an organization must:

(i) Be an organization exempt from federal taxation under section 501(c)(3) of the U.S. Internal Revenue Code; and

(ii) Complete annual independent financial audits.

(B) An entity that wishes to be the incremental aggregator must submit an application with DEQ that includes:

(i) A description of the mission of the organization and how being the incremental aggregator fits into its mission;

(ii) A description of the experience and expertise of key individuals in the organization who would be assigned to work associated with being the incremental aggregator;

(iii) How the organization plans to promote transportation electrification statewide in an equitable manner and conduct programs on a statewide basis;

(iv) The financial controls that are, or will be put, in place to segregate funds from the sale of credits from other monies controlled by the organization; and

(v) Its last three years of independent financial audits and I.R.S. form 990s, and proof that the I.R.S. has certified them as qualifying as an exempt organization under 501(c)(3).

(C) Initial applications to be the incremental aggregator are due to DEQ no later than July 1, 2021, to be eligible to be selected by the EQC to be the incremental aggregator beginning with 2020 residential EV crediting. If the EQC does not approve the designation of an incremental aggregator under subsection (11)(e), then DEQ may set a new deadline for applications if it decides to undertake a new selection process.

(D) Applications to be the incremental aggregator will be evaluated by DEQ in partnership with the equity advisory committee selected under subsection (11)(j). DEQ will evaluate applications based on the likelihood that the applicant will use the revenue from the credits it receives to advance transportation electrification statewide with a focus on actions that will help vulnerable populations and communities impacted by air pollution and climate change.

(E) DEQ may recommend that an applicant organization be designated as the initial incremental aggregator to the EQC by August 15, 2021. If DEQ does not recommend an organization to be the incremental aggregator or the EQC does not approve DEQ's recommendation, then DEQ may undertake a new selection process at a later date under the same criteria in paragraphs (11)(c)(A) through (D).

(F) Following EQC approval of an organization to be the incremental aggregator, DEQ and the organization may enter into a written agreement regarding the selected organization's participation in the program. A written agreement must be in place prior to the incremental aggregator receiving credits for the first time. The incremental aggregator must:

(i) By March 31st of each year, submit a report that summarizes the previous year's activity including:

(I) How much revenue was generated from the credits it received;

(II) A description of activities including the status of each activity, where each activity took place, and each activity's budget, including administrative costs, and an estimate of its outcomes; and

(III) The results of its most recent independent financial audit; and

(ii) Maintain records and make them available to DEQ upon request by DEQ, including records required to be maintained under OAR 340-253-0600 and, in addition, any records relating to its application, the programs it operates using the proceeds from the sale of credits under this program, and any of the organization's financial records.

(G) If DEQ determines that an incremental aggregator is in violation of this division or the agreement that it enters into with DEQ to be the incremental aggregator, DEQ may rescind its designation and solicit applications to select a new incremental aggregator.

(H) If the incremental aggregator wishes to terminate its agreement with DEQ, then DEQ may solicit applications to select a new incremental aggregator.

(I) After an incremental aggregator has been in place for three years, DEQ may hold a new selection process to appoint an incremental aggregator for future years. Unless DEQ has rescinded an organization as incremental aggregator under paragraph (11)(c)(G), the current backstop aggregator may apply to be re-designated as the incremental aggregator for future years.

(J) Equity advisory committee. DEQ will appoint and convene an advisory committee to help the agency design projects and programs for the incremental aggregator to implement that prioritize the revenue for transportation electrification projects that equitably distribute benefits and address the needs and interests of impacted communities that are the most vulnerable to the adverse effects of transportation air pollution and climate change. The committee will also advise DEQ in its review of reports on utility spending, and:

(i) The committee will advise DEQ in:

(I) The selection of the incremental aggregator;

(II) Establishing criteria that will be used to set priorities to be carried out by the incremental aggregator;

(III) Developing the annual work plan for the incremental aggregator;

(IV) Identifying areas of need that should be prioritized by utility projects and programs paid for by revenue from CFP incremental credit sales in order to ensure equitable outcomes and benefits;

(V) Reviewing the utility reports submitted under OAR 340-253-0640(9); and

(VI) Reviewing the performance of the incremental aggregator;

(ii) DEQ will solicit applications for residents of the state of Oregon to be appointed to the equity advisory committee. DEQ will seek representatives with the following interests and areas of expertise:

(I) Transportation electrification;

(II) Equity and environmental justice; and

(III) The needs and interests of communities that are most vulnerable to the impacts of climate change, tribes, low-income communities, rural communities, and other under-represented communities; and

(iii) DEQ will solicit applications to serve on the equity advisory committee in May 2021 and may select the committee from those applicants. Committee members may serve terms of three years and DEQ may annually solicit applications and make additional selections to

serve on the committee. Committee members will serve as volunteers, and will not be compensated for their service on the committee.

(K) The incremental aggregator must consult with DEQ and the equity advisory committee to propose an annual workplan to guide its spending for the next year, subject to approval by DEQ. DEQ will not award credits to the incremental aggregator unless DEQ has approved such workplan and the incremental aggregator has followed such workplan. The incremental aggregator and DEQ may mutually agree to modify the annual workplan at any time, after consultation with the equity advisory committee. Projects to be undertaken by the incremental aggregator may include:

(i) Electrification and battery swap programs for school or transit buses;

(ii) Electrification of drayage trucks;

(iii) Investment in public EV charging infrastructure and EV charging infrastructure in multi-family residences;

(iv) Investment in electric mobility solutions, such as EV sharing and ride-hailing programs;

(v) Multilingual marketing, education, and outreach designed to increase awareness and adoption of EVs and clean mobility options that includes information about their benefits to individuals, the environment, and human health;

(vi) Additional rebates and incentives for low-income individuals beyond existing local, federal and state rebates and incentives for:

(I) Purchasing or leasing new or previously owned EVs;

(II) Installing EV charging infrastructure in residences and related electrical work;

(III) Promoting the use of public transit and other clean mobility; and

(IV) Off-setting costs for residential or non-residential EV charging; and

(vii) Other projects that promote transportation electrification in disadvantaged or lowincome communities, rural areas, or for low-income individuals and that are reviewed by the equity advisory committee and approved by DEQ. Individuals and organizations may submit such projects to DEQ for consideration, and the application must include:

(I) A complete description of the project, the demonstration that the project promotes transportation electrification in communities that are most vulnerable to the impacts of climate change, tribes, low-income communities, rural communities, and other underrepresented communities, or that the project provides increased access to electric transportation for low-income individuals; and (II) Evidence that the project was developed in coordination with local environmental justice advocates, local community-based organizations, local units of government, or multiple such entities.

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 **Statutes/Other Implemented:** ORS 468.020 & ORS 468A.265 through 468A.277 **History:**

DEQ 1-2019, minor correction filed 01/03/2019, effective 01/03/2019 DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019 DEQ 27-2017, amend filed 11/17/2017, effective 11/17/2017 DEQ 13-2015, f. 12-10-15, cert. ef. 1-1-16 DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15 DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-0400 Carbon Intensities

(1) OR-GREET. Carbon intensities for fuels must be calculated using OR-GREET 3.0 or a model approved by DEQ. If a party wishes to use a modified or different lifecycle carbon intensity model, it must be approved by DEQ in advance of an application under OAR 340-253-0450.

(2) DEQ review of carbon intensities. Every three years, or sooner if DEQ determines that new information becomes available that warrants an earlier review, DEQ will review the carbon intensities used in the CFP and must consider, at a minimum, changes to:

(a) The sources of crude and associated factors that affect emissions such as flaring rates, extraction technologies, capture of fugitive emissions, and energy sources;

(b) The sources of natural gas and associated factors that affect emissions such as extraction technologies, capture of fugitive emissions, and energy sources;

(c) Fuel economy standards and energy economy ratios;

(d) GREET, OR-GREET, CA-GREET, GTAP, AEZ-EF or OPGEE;

(e) Methods to calculate lifecycle greenhouse gas emissions;

(f) Methods to quantify indirect land use change; and

(g) Methods to quantify other indirect effects.

(3) Statewide carbon intensities.

(a) Regulated parties, credit generators and aggregators must use the statewide average carbon intensities listed in Tables 3 and 4 under OAR 340-253-8010 and -8010 for the following fuels:

(A) Clear gasoline or the gasoline blendstock of a blended gasoline fuel;

(B) Clear diesel or the diesel blendstock of a blended diesel fuel;

(C) Fossil CNG;

(D) Fossil LNG; and

(E) Fossil LPG.

(b) For electricity suppliers,

(A) The statewide average electricity carbon intensity is calculated annually under OAR 340-253-0470 and posted on the DEQ website.

(B) Credit generators or aggregators may use a carbon intensity different from the statewide average under subsection (b)(A) if:

(i) The utility has applied for an individual carbon intensity under OAR 340-253-0470; or

(ii) The party generates lower carbon electricity at the same location as it is dispensed into a motor vehicle consistent with the conditions of the approved fuel pathway code under OAR 340-253-0470(3).

(c) A hydrogen supplier may use the applicable value in Table 4 under OAR 340-253-8010, or apply for a specific carbon intensity under OAR 340-253-0450.

(4) Carbon intensities for established fuel pathways. Except as provided in sections (3) or (5), regulated parties, credit generators, and aggregators can use a carbon intensity that:

(a) CARB has certified for use in the California Low Carbon Fuel Standard program, as adjusted for fuel transportation distances and indirect land use change, and that has been reviewed and approved by DEQ as being consistent with OR-GREET 3.0; or

(b) Matches the description of a fuel pathway listed in Table 4 under OAR 340-253-8010. For Hydrogen produced using biomethane or renewable power, the producer of the hydrogen will have to demonstrate to DEQ that the value in Table 4 is appropriate for its production facility and must submit attestations on an annual basis that the renewable power and biomethane attributes, as applicable, were not claimed in any other program except for the federal RFS. Any such claims under the federal RFS must be made for the same use and volume of biomethane or its derivatives as it is being claimed for in the CFP, or the claim under the CFP is invalid.

(5) Transition to OR-GREET 3.0.

(a) Pathways certified under OR-GREET or CA-GREET 2.0 will be deactivated by DEQ in the Oregon Fuels Reporting System for reporting after the fourth quarter of 2020. Fuel pathway holders with pathways certified under OR-GREET or CA-GREET 2.0 that wish to

keep generating credits from those fuels from January 1, 2021 onward must follow the pathway application and certification process in this rule to obtain a new pathway under OR-GREET 3.0, or request DEQ approval of a CARB-certified CA-GREET 3.0 pathway.

(b) Table 4 pathways. Entities reporting fuels using Table 4 pathways that do not require an application under subsection (a) will have those pathways automatically updated to the OR-GREET 3.0 values on January 1, 2019 for first quarter 2019 reporting.

(c) New pathway applications. DEQ will not consider new applications using OR-GREET 2.0.

(6) Primary alternative fuel pathway classifications. If it is not possible to identify an applicable carbon intensity under either section (3) or (4), then the regulated party, credit generator, or aggregator has the option to develop its own fuel pathway and apply for it to be certified under 340-253-0450. Fuel pathway applications fall into one of two tiers:

(a) Tier 1. Conventionally-produced alternative fuels of a type that have been well-evaluated in the Oregon and California low carbon fuel standards. Tier 1 fuels include:

(A) Starch- and sugar-based ethanol;

(B) Biodiesel produced from conventional feedstocks (plant oils, tallow and related animal wastes and used cooking oil);

(C) Renewable diesel produced from conventional feedstocks (plant oils, tallow and related animal wastes and used cooking oil);

(D) Natural Gas; and

(E) Biomethane from landfills; anaerobic digestion of dairy and swine manure or wastewater sludge; and food, vegetative or other organic waste.

(b) Tier 2. All fuels not included in Tier 1 including but not limited to:

(A) Cellulosic alcohols;

(B) Biomethane from other sources;

(C) Hydrogen;

(D) Renewable hydrocarbons other than renewable diesel produced from conventional feedstocks;

(E) Biogenic feedstocks co-processed at a petroleum refinery

(F) Alternative Jet Fuel;

(G) Renewable propane; and

(H) Tier 1 fuels using innovative methods, including but not limited to carbon capture and sequestration or a process that cannot be accurately modeled using the simplified calculators.

(7) Specified source feedstocks. Fuels that are produced from a specified source feedstock may be eligible for a reduced carbon intensity value when applying under OAR 340-253-0450 so long as they meet all of the following requirements:

(a) Specified source feedstocks are non-primary products of commercial or industrial processes for food, fuel or other consumer products and include, but are not limited to, used cooking oil, animal fats, fish oil, yellow grease, distiller's corn oil, distiller's sorghum oil, brown grease, and other fats, oils, and greases;.

(b) The specified source feedstocks are used in pathways for biodiesel; renewable diesel; alternative jet fuel; co-processed refinery products; biomethane supplied using book and claim accounting and claimed as a feedstock for CNG, LNG, L-CNG; or steam-methane reformation produced hydrogen;

(c) Under OAR 340-253-0450(9)(d), any feedstock can be designated as a specified source feedstock if requested by a supplier using site-specific carbon intensity data or if it is specified in a pathway approval condition; and .

(d) Chain-of-custody evidence must be used to demonstrate the proper characterization and accuracy of the quantity of the specified source feedstocks going into a fuel production facility or claimed as biomethane, subject to all of the following provisions:

(A) Chain-of-custody evidence must be provided to the verifier and to DEQ upon request;

(B) Joint applicants may assume responsibility for different portions of the chain-of-custody evidence;

(C) Fuel pathway applicants using specified source feedstocks must maintain either:

(i) Delivery records that show shipments of feedstock type and quantity directly from the point of origin to the fuel production facility; or

(ii) Information from material balance or energy balance systems that control and record the assignment of input characteristics to output quantities at relevant points along the feedstock supply chain between the point of origin and the fuel production facility; and

(e) In order to maintain the pathway, the fuel production and any joint applicant must meet the following requirements:

(A) Maintain records of the type and quantity of feedstock obtained from each supplier, including feedstock transaction records, feedstock transfer documents pursuant to (f), weighbridge tickets, bills of lading or other documentation for all incoming and outgoing feedstocks;

(B) Maintain records used for material balance and energy balance calculations; and

(C) Ensure DEQ staff and verifier access to audit feedstock suppliers to demonstrate proper accounting of attributes and conformance with certified CI data.

(8) The carbon intensity value certified under OAR 340-253-0450, including any margin of safety requested by the fuel producer, is the maximum carbon intensity value that a fuel can be reported in the CFP. The actual operational carbon intensity of a fuel will be calculated from the most recent production data covering 24 months of the fuel production facility's operation. Registered parties shall not report fuel sales under any CFP carbon intensity unless the actual operational carbon intensity is equal to or less than the certified CI.

(9) Fuel producers labeling fuel sold in Oregon with a carbon intensity under the CFP and registered entities using those labeled carbon intensities to report in the Oregon Fuels Reporting System, must ensure that the fuel so labeled and reported will be found to have an actual operational lifecycle carbon intensity equal to or below its certified carbon intensity.

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 **Statutes/Other Implemented:** ORS 468.020 & ORS 468A.265 through 468A.277 **History:**

DEQ 14-2020, amend filed 05/07/2020, effective 05/07/2020 DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019 DEQ 27-2017, amend filed 11/17/2017, effective 11/17/2017 DEQ 13-2015, f. 12-10-15, cert. ef. 1-1-16 DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15 DEQ 8-2014, f. & cert. ef. 6-26-14 DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14 DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-0450 Obtaining a Carbon Intensity

(1) Fuel producers can apply to obtain a carbon intensity by following the process to obtain a carbon intensity under this rule.

(2) Applicants seeking approval to use a carbon intensity that is currently approved by the CARB must provide:

(a) The application package submitted to CARB;

(b) The CARB-approved Tier 1 or Tier 2 CA-GREET 3.0 calculator, and the OR-GREET 3.0 equivalent with the fuel transportation and distribution cells modified for that fuel's pathway to Oregon;

(c) The CARB review report for the approved fuel pathway;

(d) Any other supporting materials relating to the pathway, as requested by DEQ; and

(e) If the applicant is seeking to use a provisional pathway approved by CARB, then the applicant must submit to DEQ the ongoing documentation it provides to CARB, and as required in section (6). The applicant must provide DEQ within fourteen days:

(A) Any additional documentation it has submitted to CARB; and

(B) A notification of any changes to the status of its CARB-approved provisional pathway.

(3) Applicants seeking to obtain a carbon intensity using either the Tier 1 or Tier 2 calculator must submit the following information:

(a) Company name and full mailing address.

(b) Company contact person's contact information including the name, title or position, phone number, mobile phone number, facsimile number, email address, and website address.

(c) Facility name (or names if more than one facility is covered by the application).

(d) Facility address (or addresses if more than one facility is covered by the application).

(e) Facility ID for facilities covered by the RFS program.

(f) Facility geographical coordinates (for each facility covered by the application).

(g) Facility contact person's contact information including the name, title or position, phone number, mobile phone number, facsimile number, and email address.

(h) Facility nameplate production capacity in million gallons per year (for each facility covered by the application).

(i) If applicable, consultant's contact information including the name, title or position, phone number, mobile phone number, facsimile number, email address, and website URL.

(j) Declaration whether the applicant is applying for a carbon intensity for a Tier 1 or Tier 2 fuel.

(4) In addition to the items in section (3), applicants seeking to obtain a carbon intensity for a Tier 1 fuel using one of the simplified calculators must submit the following:

(a) The applicable simplified calculator with all necessary inputs completed, following the instructions in the applicable manual for that calculator;

(b) A positive verification statement from an approved verification body, provided in compliance with OAR chapter 340, division 272, stating that it has reviewed and validated all of the data used to form the inputs for the Tier 1 calculator submitted under (a), or the invoices and receipts for all forms of energy consumed in the production process, all fuel sales, all feedstock purchases, and all co-products sold for the most recent 24 months of full commercial production, along with a summary of those invoices and receipts; and

(c) The most recent RFS third party engineering report, if one has been conducted for the facility.

(5) In addition to the items in section (3), applicants seeking to obtain a carbon intensity for a Tier 2 fuel using the full OR-GREET 3.0 model must submit the following:

(a) A positive verification statement from an approved verification body, provided in compliance with OAR chapter 340, division 272, stating that it has reviewed and validated all of the data used to form the inputs for the Tier 2 calculator submitted under (c), or the invoices and receipts for all forms of energy consumed in the production process, all fuel sales, all feedstock purchases, and all co-products sold for the most recent 24 months of full commercial production, and a summary of those invoices and receipts;

(b) The geographical coordinates of the fuel production facility;

(c) A completed Tier 2 model;

(d) Process flow diagrams that depict the complete fuel production process;

(e) Applicable air permits issued for the facility;

(f) A copy of the RFS third party engineering report, if available;

(g) A copy of the RFS fuel producer co-products report; and

(h) A lifecycle analysis report that describes the fuel pathway and describes in detail the calculation of carbon intensity for the fuel. The report shall contain sufficient detail to allow staff to replicate the carbon intensity the applicant calculated. The applicant must describe all inputs to, and outputs from, the fuel production process that are part of the fuel pathway.

(6) Applicants seeking a provisional carbon intensity. If a fuel production facility has been in full commercial production for at least 90 days but less than 24 months, it can apply for a provisional carbon intensity.

(a) The applicant shall submit operating records covering all periods of full commercial operation in accordance with sections (2) through (5).

(b) DEQ may approve the provisional carbon intensity under section (9).

(c) At any time before the plant reaches a full 24 months of full commercial production, DEQ may revise as appropriate the operational carbon intensity based on the required ongoing submittals or other information it learns.

(d) If, after a plant has been in full commercial production for more than 24 months of full commercial production, the facility's operational carbon intensity is higher than the provisionally-certified carbon intensity, DEQ will replace the certified carbon intensity with the operational carbon intensity in the Oregon Fuels Reporting System and adjust the credit balance accordingly.

(e) If the facility's operational carbon intensity appears to be lower than the certified carbon intensity, DEQ will take no action. The applicant may, however, petition DEQ for a new carbon intensity that reflects the operational data. In support of such a petition, the applicant must submit a revised application packet that fully documents the requested reduction.

(7) Applicants employing co-processing at a petroleum refinery. Applicants employing coprocessing of biogenic feedstocks at a petroleum refinery must submit all information required under sections (3) and (5).

(a) For the renewable diesel or other renewable refinery product of the fuel, the applicant must also submit:

(A) The planned proportions of biogenic feedstocks to be processed;

(B) A detailed methodology for the attribution of biogenic feedstocks to the renewable products; and

(C) The corresponding carbon intensities from each biogenic feedstock.

(b) The attribution methodology will be subject to approval by DEQ and may be modified at DEQ's discretion based on ongoing quarterly reporting of production data at the refinery.

(c) DEQ may adjust the carbon intensities applied for under this section as it determines is appropriate.

(8) Temporary Fuel Pathway Codes for Fuels with Indeterminate Carbon Intensities. A regulated party or credit generator that has purchased a fuel without a carbon intensity must submit a request to DEQ for permission to use a temporary fuel pathway code found in Table 9 under OAR 340-253-8010, or a temporary fuel pathway code otherwise approved and posted by DEQ under OAR 340-253-0450(11).

(a) The request must:

(A) Be submitted within 45 days of the end of the calendar quarter for which the applicant is seeking to use a temporary fuel pathway code; and

(B) Explain and document that the production facility is unknown or that the production facility is known but there is no approved fuel pathway code.

(b) Temporary fuel pathway codes may be used for up to two calendar quarters. If more time is needed to obtain a carbon intensity, the party that obtained the temporary fuel pathway must submit an additional request to DEQ for an extension of the authorization to use a temporary fuel pathway code.

(c) If DEQ grants a request to use a temporary fuel pathway code, credits and deficits may be generated subject to the quarterly reporting provisions in OAR 340-253-0630.

(9) Approval process to use carbon intensities for fuels other than electricity.

(a) For applications proposing to use CARB-approved fuel pathways, including provisional pathways, DEQ will:

(A) Confirm that the proposed fuel pathway is consistent with OR-GREET 3.0; and

(B) Review the materials submitted under subsection (2).

(b) For applications proposing to use the Tier 1 or Tier 2 calculators, DEQ may approve the application if it can:

(A) Replicate the calculator outputs; and

(B) Verify the energy consumption and other inputs.

(c) If DEQ has approved or denied the application for a carbon intensity, DEQ will notify the applicant of its determination.

(d) DEQ may impose conditions in its approval of the carbon intensity. Conditions may include specific limitations, recordkeeping or reporting requirements, adherence to protocols to assure carbon reduction or sequestration claims, or operational conditions that DEQ determines should apply to assure the ongoing accuracy of the approved carbon intensity. Failure to meet those conditions may result in the carbon intensity approval being revoked.

(A) For applicants seeking a provisional pathway, DEQ will specify the conditions used to establish the pathway.

(i) In order to maintain an active provisional pathway eligible to generate credits, the applicant must file the annual fuel pathway report and seek third-party verification if required under OAR 340-253-0700.

(ii) At any point during the 24 months following the certification of a provisional pathway, DEQ may revise as appropriate the CI score for the provisional pathway based on new information or a better understanding of the pathway.

(iii) DEQ may remove the provisional status of the pathway after the applicant provides 24 months of operational data with a positive or qualified positive verification status.

(iv) For pathways that are not subject to verification, DEQ may remove the provisional status upon review of 24 months of operational data demonstrating that the pathway data supports the provisional CI.

(B) For a CARB-approved fuel pathway that DEQ has approved for use in Oregon, if at any time the pathway's approval is revoked by CARB then:

(i) The fuel pathway holder must inform DEQ within seven days of the revocation and provide DEQ with documentation related to that decision.

(ii) Upon DEQ request, the fuel pathway holder must provide to DEQ additional documentation.

(iii) DEQ may at its discretion revoke its approval of the pathway's use in Oregon at any time.

(iv) If CARB modifies its approval of the pathway then the fuel pathway holder must notify DEQ of the modification not later than 14 days after CARB's modification and must provide to DEQ any accompanying documentation the fuel pathway holder received from CARB.

(v) Based on the underlying facts that led to CARB's modification of the pathway's status, within 30 days DEQ may modify its approval, take no action, or revoke its approval and will provide the fuel pathway holder with written notice of its decision.

(e) In order to receive and maintain an active fuel pathway code, the producer of any fuel must:

(A) Maintain an active registration with the AFP;

(B) Provide proof of delivery to Oregon through a physical pathway demonstration in the quarter in which the fuel is first reported in the Oregon Fuels Reporting System;

(C) Beginning in calendar year 2021, each fuel pathway holder must submit an annual fuel pathway report into the AFP no later than March 31st of each calendar year. The annual fuel pathway report must include:

(i) The certified version of the simplified OR-GREET or full OR-GREET calculator, as applicable, updated to include the most recent two calendar years of operational data;

(ii) The annual fuel pathway report for renewable electricity and hydrogen lookup table pathways, in lieu of the CI calculator, must include invoices or metering records substantiating the quantity of renewable or low-CI inputs procured from a qualifying source.;

(iii) If the fuel or fuel production process involves biomethane or renewable electricity, the fuel producer must provide the attestation regarding environmental attributes or proof of non-generation or retirement of any RECs as required by OAR 340-253-0640(1)(d) or OAR 340-253-0470(3)(d);

(iv) Any fuel pathway holder, including a joint applicant, who is not subject to site visits by a third party verifier, whose pathway involves the use of renewable or low-CI process energy, must submit invoices for that energy to the AFP. Additionally, for any electricity that is used to reduce the carbon intensity of electricity used as a transportation fuel or hydrogen production via electrolysis, the pathway holder must upload records demonstrating that any renewable energy certificates generated were retired in WREGIS or another comparable, recognized REC tracking system for the purpose of lowering the certified CI, or for credit generation;
(v) Any temporally-variable information that was requested or required by DEQ to be included in the initial application as supplemental information, or any required data or documentation listed in the pathway's operating conditions. The information required to be submitted under this section must cover the same time period as the updated OR-GREET model required under subparagraph (i);

(vi) If the verified operational CI as calculated from the operational data covering the prior two calendar years of production is found to be lower than the certified CI, and a positive verification statement is issued for this period, the fuel pathway holder may elect to keep the original certified CI, or may request to replace the certified CI with the verified operational CI. The pathway holder may elect to add a margin of safety to the new certified CI, and must submit an attestation that the new CI can be maintained through the next reporting period with the acknowledgement that exceeding the newly certified CI in subsequent annual reports or verifications is a violation of the requirements of this division; and

(vii) If the operational CI is found to be greater than the certified CI, the fuel pathway holder is out of compliance with this division and may be subject to investigation and enforcement by DEQ;

(D) Comply with the requirements of this division and OAR chapter 340, division 272. Failure to timely submit an annual fuel pathway report or a required verification statement for a facility's pathways will result in the deactivation of those pathways; and

(E) If a pathway employs carbon capture and sequestration, the fuel pathway holder or joint applicant must submit annual reports of greenhouse gas emissions reductions, project operations, and ongoing monitoring results. Reports must include measurements of relevant parameters sufficient to ensure that the quantification and documentation of CO2 sequestered is replicable and verifiable. DEQ may specify a protocol for measuring and reporting such information in its approval of such an application.

(f) If DEQ determines the proposal for the carbon intensity has not met the criteria in subsection (b), DEQ will notify the applicant that the proposal is denied and identify the basis for the denial.

(g) DEQ may modify an approved fuel pathway's CI or approval conditions upon receipt of a verification statement that shows that the verified operational CI is higher than the certified CI.

(h) Any applicant may include a margin of safety in its application which will increase its certified CI in order to account for potential process variability and to reduce the risk that it will violate this division by having its operational CI exceed its certified CI.

(10) Completeness determination process.

(a) For applications calculated using the Tier 1 or Tier 2 calculator, DEQ will determine whether the proposal is complete within 1 month after receiving a registration application.

(b) If DEQ determines the proposal is complete, DEQ will notify the applicant in writing of the completeness determination.

(c) If DEQ determines the proposal is incomplete, DEQ will notify the applicant of the deficiencies. The applicant has 30 calendar days to address the deficiencies or DEQ will deny the application. Upon request, DEQ may grant an extension of up to 30 additional days.

(d) If the applicant submits supplemental information, DEQ has 30 calendar days to determine if the supplemental submittal is complete, or to notify the party and identify the continued deficiencies. This process may repeat until the application is deemed complete or 180 calendar days have elapsed from the date that the applicant first submitted the registration application.

(11) Issuing additional substitute and temporary fuel pathway codes. For new fuels or new fuel blends being provided within Oregon, registered parties may request that DEQ issue additional fuel pathway codes that can be used in the same manner as those in Tables 8 or 9 (substitute or temporary pathway codes) under OAR 340-253-8010. DEQ may approve such substitute or temporary pathway codes if it concludes they are technically sound and supported by appropriate evidence. If any are approved, DEQ will post these additional pathway codes in the Oregon Fuels Reporting System and on its public website for the Clean Fuels Program. All of the following requirements apply to such requests:

(a) Requests must be made in writing to DEQ.

(b) If DEQ concludes the proposed pathway may be technically sound and supported by appropriate evidence, then it will post the proposed new substitute or temporary pathway codes on its website and take comments for:

(A) 14 calendar days in the case of a substitute fuel pathway code; or

(B) 45 calendar days in the case of a temporary fuel pathway code.

(c) DEQ will consider any comments received, make any modifications, if necessary, and make a final decision on the proposed pathway.

(d) If DEQ concludes the proposed pathway is technically sound and supported by appropriate evidence, then DEQ may approve it and publish its final decision on its website.

(e) Any newly approved substitute or temporary fuel pathway code will be effective for use in the quarter in which it is approved.

(12) Measurement accuracy.

(a) All measurement devices that log or record data for use in a fuel pathway application must comply with the manufacturer-recommended calibration frequency and precision requirements. If manufacturer-recommendations are not provided, the measurement devices must be calibrated at least every six years.

(b) Requests to Postpone Calibration. For units and processes that operate continuously with infrequent outages, it may not be possible to meet manufacturer-recommended calibration deadlines for measurement devices. In such cases, the owner or operator may submit a written request to DEQ to postpone calibration or inspection until the next scheduled maintenance outage. Such postponements are subject to the procedures of paragraphs (A) and (B) below and must be documented in the monitoring plan required under OAR 340-253-0600.

(A) A written request for postponement must be submitted to DEQ not less than 30 days before the required calibration, recalibration or inspection date. DEQ may request additional documentation to validate the operator's claim that the device meets the accuracy requirements of this section. The operator shall provide any additional documentation to DEQ within ten (10) business days of a request for documentation.

(B) The request must include:

(i) The date of the required calibration, recalibration, or inspection;

(ii) The date of the last calibration or inspection;

(iii) The date of the most recent field accuracy assessment, if applicable;

(iv) The results of the most recent field accuracy assessment, if applicable, clearly indicating a pass/fail status;

(v) The proposed date for the next field accuracy assessment, if applicable;

(vi) The proposed date for calibration, recalibration, or inspection which must be during the time period of the next scheduled shutdown. If the next shutdown will not occur within three years, this must be noted and a new request must be received every three years until the shutdown occurs and the calibration, recalibration or inspection is completed; and.

(vii) A description of the meter or other device, including at a minimum the: make, model, installation date, location, parameter measured by the meter or other device, the rate of data capture by the meter or other device, description of how data from the meter or other device is used in a fuel pathway, calibration or inspection procedure, reason for delaying the calibration or inspection, proposed method to ensure that the precision requirements listed by the manufacturer are upheld, and the contact details for an individual at the fuel production facility who can answer questions about the meter or other device.

(C) DEQ will approve or deny the request at its discretion based on whether or not it concludes that the device's calibration is reasonably reliable.

(13) Missing Data Provisions.

(a) Meter Record, Accuracy, or Calibration Requirements Not Met. If a measurement device is not functional, not calibrated within the time period recommended by the manufacturer, or fails a field accuracy assessment, the fuel production facility operator must otherwise demonstrate to a verifier or DEQ that the reported data are accurate within +/-5 percent. The following requirements apply to such demonstration:

(A) If the operator can demonstrate to the verifier or DEQ that reported data are accurate, the data are acceptable. The entity must then provide a detailed plan describing when the measurement device will be brought into calibration. This plan is subject to approval by DEQ; and

(B) If the operator cannot demonstrate to the verifier or DEQ that reported data are accurate, the data is not acceptable and the missing data provisions in subsection (b) apply.

(b) Missing Data Provisions. If missing data exists, the entity must submit for DEQ approval an alternate method of reporting the missing data. Alternate methods shall be evaluated on a case-by-case basis for reasonableness and continuity with the rest of the dataset. DEQ may choose to require a more conservative approach to the missing data if it is concerned that the alternative method may understate actual lifecycle emissions associated with the fuel or fuels produced by the facility.

(c) Force Majeure Events. In the event of a facility shutdown or disruption drastically affecting production attributable to a force majeure event, the fuel pathway applicant or holder must notify DEQ.

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 **Statutes/Other Implemented:** ORS 468.020 & ORS 468A.265 through 468A.277 **History:**

DEQ 14-2020, amend filed 05/07/2020, effective 05/07/2020 DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019 DEQ 27-2017, amend filed 11/17/2017, effective 11/17/2017 DEQ 13-2015, f. 12-10-15, cert. ef. 1-1-16 DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15 DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-0460

Energy Economy Ratio-Adjusted carbon intensity applications

(1) Energy Economy Ratio-Adjusted CI Applications. Applications submitted under this provision are modified Tier 2 pathway applications under OAR 340-253-0450.

(2) The following persons are eligible to submit an application under this rule:

(a) Vehicle owners or operators that would be eligible to generate credits for their vehicles;

(b) Manufacturers of vehicles that would be eligible to generate credits may make a joint application with an owner or operator of their vehicles based in Oregon; and

(c) A single, joint application may be submitted on behalf of, and combining data from, any combination of multiple vehicle owners, operators, and manufacturers.

(3) Applications made under this provision must be for electric vehicles capable of full normal operation using energy from onboard batteries or fuel cells.

(4) Application requirements. In addition to the application requirements for a Tier 2 pathway application under OAR 340-253-0450, the applicant or applicants must include:

(a) A letter of intent to request an Energy Economy Ratio (EER)-adjusted carbon intensity and why the EER values provided in OAR 340-253-8010 are inapplicable;

(b) The applicant must provide a detailed description of the methodology used in its calculations, all assumptions made, and provide all data and references to calculations. The methodology used must compare the useful output from the alternative fuel-vehicle technology under consideration to comparable conventional fuel-vehicle technology;

(c) The applicant must provide supplemental information including records and datasets used to establish any part of the application provided under (b); and

(d) If the applicant or applicants plan to use a value in the lookup table in OAR 340-253-8010 for the carbon intensity of the fuel, or an electricity fuel pathway code issued under OAR 340-253-0470, to request an EER-adjusted carbon intensity then they do not need to provide the fuel facility information required under OAR 340-253-0450(3)(e) through (h) and (5).

(5) Minimum data requirements.

(a) Any application made under this rule must include at least three months of operating data that represents typical usage for each individual vehicle included in the application, except that the application must cover at least 300 hours of operating data for each individual vehicle included in the application.

(b) Notwithstanding (a), an application from a manufacturer may provide data from dutycycle testing. A manufacturer seeking to apply using duty-cycle testing data must consult with DEQ prior to submitting an application and receive written, advanced approval from the agency for the duration and test cycles it is including in the application in addition to or in lieu of operational data.

(6) Application review process.

(a) DEQ will review an application for completeness, soundness of the assumptions and comparison to the conventional fuel technology, and accuracy of the data. DEQ may deny an application without prejudice if it is incomplete. DEQ may deny any application that it believes is adequately covered by an existing EER value in OAR 340-253-8010 or that it believes does not fit the intent and purpose of the Clean Fuels Program.

(b) DEQ may prioritize its review of applications under this provision to those that cover a greater number of entities or that the agency believes are critical to the state's transportation electrification goals.

(c) If DEQ intends to approve an application, it first must present a review report with a proposed EER value and pathway conditions to the applicant or applicants. If the applicant or applicants accept the proposed review report and EER value, DEQ will post the review report and application on its website for a 30-day public comment period. DEQ staff will work with the applicant to aggregate and summarize any submitted data in order to ameliorate concerns regarding trade secrets included in the application. The aggregated data must still allow external stakeholders to understand and replicate the EER value that DEQ is proposing to approve.

(d) Based on comments received during that public comment period, DEQ may move forward with approving the application, deny the application, request additional information from the applicant or applicants, or modify the review report. If DEQ modifies the review report or receives additional information that has a material bearing on the proposed EER value, it will issue the modified review report and any affected supplemental materials for another round of public comment.

(7) Based on its review of the application materials and any comments submitted upon the application, DEQ may issue an EER-adjusted fuel pathway or issue a value that it would post on its website that could be used similarly to the EER values contained in Table 7 of OAR 340-253-8010. Values issued under this rule can only be used by the applicant or applicants for that value.

(8) Adding Joint Applicants after a value is approved. If a value has been issued as part of an application that includes the manufacturer of the vehicle(s), owners or operators who begin to operate the same vehicle(s) covered in that application in Oregon may request to be added as a joint applicant. In order to do so they must provide the following:

(a) A letter from the manufacturer stating that the manufacturer supports the addition of the joint applicant;

(b) Any current operational data by the new joint applicant, or other data elements required to be reported under the value's pathway conditions; and

(c) A statement by the new joint applicant that they understand and accept any and all pathway conditions associated with the value.

(9) Ongoing reporting requirements.

(a) Applicants must annually submit vehicle usage and energy consumption data for each individual vehicle using a value approved under this section to generate credits or deficits in the Clean Fuels Program. DEQ may specify additional data elements that must be reported annually as part of its pathway conditions for an application that is approved under this rule.

(b) Notwithstanding the applicability requirements of OAR chapter 340, division 272, DEQ may require third party verification of the annual fuel pathway report submitted by the applicant or joint applicants. If DEQ determines that third party verification is required, DEQ will include it as a pathway conditions presented to the applicant or applicants under this rule prior.

(10) Modifications to values issued under this provision. Based on the ongoing reported data required under section (9) or additional applications for vehicles that DEQ determines to be in the same category, DEQ may modify any value issued under this provision for reporting beginning with the next full calendar quarter following its notice that the agency is modifying the value. DEQ will provide notice to the applicants prior to doing so, and may request comment from them and the public prior to modifying the value.

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 **Statutes/Other Implemented:** ORS 468.020 & ORS 468A.265 through 468A.277

340-253-0470

Determining the Carbon Intensity of Electricity

(1) Statewide electricity mix. The carbon intensity for the statewide electricity mix will reflect the average carbon intensity of electricity served in Oregon and be calculated by using the carbon-intensity of electricity from the most recent year as submitted to DEQ under OAR chapter 340, division 215. In calculating the statewide mix DEQ will exclude the energy and emissions related to utilities that have received utility-specific carbon intensity values under section (3) of this rule for that year. No later than December 31 of each year, except that DEQ may revise the 2021 value no later than June 15, 2021, DEQ will:

(a) Post the updated statewide electricity mix carbon intensity for the next year on the DEQ webpage;

(b) Post the updated utility-specific carbon intensities for the next year on the DEQ webpage; and

(c) Add the new fuel pathway codes to the Oregon Fuels Reporting System effective for Q1 reporting for the next year.

(2) Retirement of major fossil-fuel generators. For the 2021 and 2022 statewide mixes and any applicable utility-specific mixes, DEQ will replace the direct emissions associated with power from the Boardman coal-fired power plant with an emissions rate of 0.428 metric tons CO2e per megawatt-hour. For indirect emissions, DEQ will continue to use the most recent fuel mix data available.

(3) Utility-specific carbon intensity. An electric utility may apply to obtain a utility-specific carbon intensity under OAR 340-253-0400 that reflects the average carbon intensity of electricity served in that utility district.

(a) The carbon intensity will be calculated by using the carbon intensity of electricity over the most recently reported year.

(b) Once DEQ has calculated a utility-specific carbon intensity, DEQ will propose its draft carbon intensity to the utility.

(A) If the utility does not agree with DEQ's proposed carbon intensity, then it must provide DEQ with an explanation of why it believes the proposed carbon intensity is not accurate within seven days of receiving DEQ's proposal. DEQ will consider whether to change its proposed carbon intensity based on the information it receives from the utility. If DEQ determines not to change it proposed carbon intensity within 30 days, then the utility may choose to accept the proposed carbon intensity or use the statewide electricity mix carbon intensity.

(B) If the utility agrees with DEQ's proposed carbon intensity, then the draft carbon intensity is made final and approved.

(C) If the utility fails to submit a timely objection to the calculation, then the draft carbon intensity is made final and approved.

(c) A utility that wants to discontinue a utility-specific carbon intensity may submit a written request to DEQ by October 31 for the following year. A utility can reapply for a utility-specific carbon intensity at any time in the future.

(4) For on-site generation of electricity using renewable generation systems such as solar or wind, applicants must document that:

(a) The renewable generation system is on-site or directly connected to the electric vehicle chargers;

(b) The fuel pathway codes listed in Table 3 under OAR 340-253-8010 for solar-generated or wind-generated electricity can only be used for the portion of the electricity dispensed from the charger that is generated by that dedicated renewable energy system;

(c) Any grid electricity dispensed from the charger must be reported separately under the statewide electricity mix or utility-specific fuel pathway codes; and

(d) RECs are not generated from the renewable generation system or, if they are, then an equal number of RECs generated from that facility to the number of MWh reported in the Oregon Fuels Reporting System from that facility must be retired in the recognized REC tracking system.

(5) Offsite renewable electricity. In order to lower the carbon intensity of electricity claimed as a vehicle fuel in the Clean Fuels Program, credit generators and aggregators may retire renewable electricity certificates that meet the following qualifications:

(a) Renewable Energy Certificates (RECs) retired in order to claim a carbon intensity other than the statewide mix or utility-specific mix must be certified by Green-e under their Renewable Energy Standard for Canada and the United States version 3.4, or by a certification system approved by DEQ as being substantially equivalent;

(b) RECs must be generated by an electric generator that was placed into service after 2015, or in the case of biogas generators they must meet the new date requirements of the Green-e Standard;

(c) RECs must be generated from facilities located in the Western Electricity Coordinating Council; and

(d) RECs must be recorded and retired in a recognized REC tracking system. In addition to recognizing the Western Renewable Energy Generation Information System, DEQ may recognize additional REC tracking systems upon a request from a registered party. In reviewing those requests, DEQ will consider whether the tracking system is comparable to WREGIS and if it has systems in place to ensure accurate issuance and tracking of RECs.

(6) Carbon intensity of renewable electricity. The carbon intensity of solar, wind, geothermal, hydropower, and ocean power renewable electricity is deemed to be zero. For renewable electricity generated from biomass, biogas, biodiesel, and hydrogen, the generator must file a Tier 1 or Tier 2 fuel pathway application to determine the carbon intensity of their electricity. DEQ may adopt an efficiency adjustment factor for biogas to electricity pathways that include emissions reduction credits in order to maintain the program's incentive for energy efficiency.

(7) Utility Renewable Electricity Products and Power Purchase Agreements. Electric utilities and Electric Service Suppliers may apply via a Tier 2 fuel pathway application for DEQ to assign a carbon intensity to one or more of their renewable electricity products or a specific power purchase agreement, which may then be used to generate credits from charging electric vehicles attributable to the use of such products or agreements.

(a) Notwithstanding OAR 340-253-0450, Tier 2 applications made under this provision must include:

(A) A letter describing the power purchase agreement or Utility Renewable Electricity Product, the existing or planned source, or sources, of electricity and environmental attributes, and the terms by which it is being offered to customers;

(B) Samples or examples of bills, invoices, or other documentation that an entity claiming renewable energy under this product could provide to DEQ to prove that their electric vehicle charging is covered by the product or agreement;

(C) In the case of a Utility Renewable Electricity Product, any filings with, and orders by, the Oregon Public Utility Commission or a local governing board that approves the product; and

(D) An estimate of the amount of electric vehicle charging attributable to customers for the product or agreement.

(b) DEQ will review pathway applications under this provision to determine if they result in a substantially similar environmental outcome to the sources of renewable energy required under section (5) of this rule. In reviewing a utility product or agreement that contains multiple sources of power, DEQ may use the estimate under paragraph (a)(C) of this section to determine if sufficient renewable energy that is substantially similar to the requirements of section (5) is included in the product to cover transportation-related charging that may be

claimed under the CFP. DEQ may revisit this determination annually using the annual fuel pathway report.

(c) Annual Fuel Pathway Report. The annual fuel pathway report for pathways covered by this section must include information to update the sources or sources of electricity or environmental attributes that were used in the prior year and are planned for use in the year in which the report is submitted. It must also update the estimate of the amount of electric vehicle charging attributable to customers using the products or agreements. Fuel pathway reports required by this section are due by June 30, notwithstanding OAR 340-253-0450 (9)(e)(C).

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 **Statutes/Other Implemented:** ORS 468.020 & ORS 468A.265 through 468A.277 **History:**

DEQ 14-2020, amend filed 05/07/2020, effective 05/07/2020 DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019 DEQ 27-2017, adopt filed 11/17/2017, effective 11/17/2017

340-253-0600 Records

(1) Records Retention. Regulated parties, credit generators, and aggregators must retain the following records for at least seven years:

- (a) Product transfer documents as described in section (2);
- (b) Records related to obtaining a carbon intensity described in OAR 340-253-0450;
- (c) Copies of all data and reports submitted to DEQ;
- (d) Records related to each fuel transaction;
- (e) Records used for compliance or credit calculations;
- (f) Records used to establish that feedstocks are specified source feedstocks; and
- (g) Records related to third-party verification, if required under OAR 340-253-0700.

(2) Documenting Fuel Transactions. A product transfer document must prominently state the information specified below.

- (a) Transferor company name, address, and contact information;
- (b) Recipient company name, address, and contact information;
- (c) Transaction date;
- (d) Fuel pathway code;

(e) Carbon intensity;

(f) Volume/amount;

(g) A statement identifying whether the transferor or the recipient has the compliance obligation; and

(h) The EPA fuel production company identification number and facility identification number as registered with the RFS program.

(3) For transactions of clear and blended gasoline and diesel below the rack where the fuel is not destined for export, only the records described in subsections (2)(a), (b), (c), (f), and (g) are required to be retained.

(4) Documenting Credit Transactions. Regulated parties, credit generators, and aggregators must retain the following records related to all credit transactions for at least seven years:

(a) The contract under which the credits were transferred;

(b) Documentation on any other commodity trades or contracts between the two parties conducting the transfer that are related to the credit transfer in any way; and

(c) Any other records relating to the credit transaction, including the records of all related financial transactions.

(5) Review. All data, records, and calculations used by a regulated party, a credit generator, or an aggregator to comply with OAR chapter 340, division 253 are subject to inspection and verification by DEQ. Regulated parties, credit generators, and aggregators must provide records retained under this rule within 60 days after the date DEQ requests a review of the records, unless DEQ specifies otherwise.

(6) Initial 2016 Inventory. All regulated fuels held in bulk storage in the state on January 1, 2016 are subject to the program and must be reported as the initial inventory of fuels by regulated parties.

(7) Information exempt from disclosure. Pursuant to the provisions of the Oregon public records law, ORS 192.410 to 192.505, all information submitted to DEQ is subject to inspection upon request by any person unless such information is determined to be exempt from disclosure under the Oregon public records law or other applicable Oregon law.

(8) Attestations regarding environmental attributes.

(a) An entity reporting any biomethane as a transportation fuel in the CFP, and a fuel pathway holder using biogas or biomethane as process energy, must obtain and keep attestations from each upstream party collectively demonstrating that:

(A) The entity claiming the environmental attributes has the exclusive right to claim environmental attributes associated with the sale or use of the biogas or biomethane; and (B) The environmental attributes have not been used or claimed in any other program or jurisdictions with the exception of the federal RFS. Any such claims under the federal RFS must be made for the same use and volume of biomethane or its derivatives as it is being claimed for in the CFP, or the claim under the CFP is invalid.

(b) Any attestation under subsection (a) must be provided to DEQ within seven days of receiving a request for such attestation by DEQ. Failure to provide such attestations is grounds for credit invalidation under OAR 340-253-0670.

(9) Monitoring plan for entities and fuel producers who are required to obtain third-party verification services under OAR 340-253-0700.. Each entity responsible for obtaining third-party verification of their data under OAR chapter 340, division 272 must complete and retain a written monitoring plan for review by a verifier or DEQ. If a fuel production facility is required to complete and maintain a monitoring plan by the California LCFS, the same monitoring plan may be used to meet the requirements of this rule unless there are substantive differences between the two programs' treatment of the fuel production process. A monitoring plan must include the following, as applicable:

(a) All of the following general items are required for all monitoring plans:

(A) Information to allow DEQ and the verification team to develop a general understanding of boundaries and operations relevant to the entity, facility, or project, including participation in other markets and other third-party audit programs;

(B) Reference to management policies or practices applicable to reporting pursuant to this division, including recordkeeping;

(C) Explanation of the processes and methods used to collect necessary data for reporting pursuant to this subarticle, including identification of changes made after January 1, 2020;

(D) Explanations and queries of source data to compile summary reports of intermediate and final data necessary for reporting pursuant to this division;

(E) Reference to one or more simplified block diagrams that provide a clear visual representation of the relative locations and positions of measurement devices and sampling locations, as applicable, required for calculating reported data (e.g., temperature, total pressure, LHV or HHV, fuel consumption); the diagram(s) must include storage tanks for raw material, intermediate products, and finished products, fuel sources, combustion units, and production processes, as applicable;

(F) Clear identification of all measurement devices supplying data necessary for reporting pursuant to this subarticle, including identification of low flow cutoffs as applicable, with descriptions of how data from measurement devices are incorporated into the submitted report;

(G) Descriptions of measurement devices used to report CFP data and how acceptable accuracy is demonstrated, e.g., installation, maintenance, and calibration method and frequency for internal meters and financial transaction meters; this provision does not apply

to data reported in the Oregon Fuels Reporting System for generating credits for EV charging;

(H) Description of the procedures and methods that are used for quality assurance, maintenance, and repair of all continuous monitoring systems, flow meters, and other instrumentation used to provide data for CFP reports;

(I) Original equipment manufacturer (OEM) documentation or other documentation that identifies instrument accuracy and required maintenance and calibration requirements for all measurement devices used to collect necessary data for reporting pursuant to this division;

(J) The dates of measurement device calibration or inspection, and the dates of the next required calibration or inspection;

(K) Requests for postponement of calibrations or inspections of internal meters and subsequent approvals by DEQ. The entity must demonstrate that the accuracy of the measured data will be maintained pursuant to the measurement accuracy requirements of OAR 340-253-0450(12);

(L) A listing of the equation(s) used to calculate flows in mass, volume, or energy units of measurement, and equations from which any non-measured parameters are obtained, including meter software, and a description of the calculation of weighted average transport distance;

(M) Identification of job titles and training practices for key personnel involved in CFP data acquisition, monitoring, reporting, and report attestation, including reference to documented training procedures and training materials;

(N) Records of corrective and subsequent preventative actions taken to address verifier and DEQ findings of past nonconformance and material misstatements;

(O) Log of modifications to a fuel pathway report conducted after attestation in response to review by third-party verifier or DEQ staff;

(P) Written description of an internal audit program that includes data report review and documents ongoing efforts to improve the entity's CFP reporting practices and procedures, if such an internal audit program exists; and

(Q) Methodology used to allocate the produced fuel quantity to each fuel pathway code;

(b) Any monitoring plan related to a fuel pathway carbon intensity or reporting quantities of fuels must also include the following elements specific to fuel pathway carbon intensity calculations and produced quantities of fuels per fuel pathway code:

(A) Explanation of the processes and methods used to collect necessary data for fuel pathway application and annual fuel pathway reports and all site-specific OR-GREET 3.0 inputs, as well as references to source data;

(B) Description of steps taken and calculations made to aggregate data into reporting categories, for example aggregation of quarterly fuel transactions per fuel pathway code;

(C) Methodology for assigning fuel volumes by fuel pathway code, if not using a method prescribed by DEQ. If using a DEQ prescribed methodology, the methodology should be referenced;

(D) Methodologies for testing conformance to specifications for feedstocks and produced fuels, particularly describing physical testing standards and processes;

(E) Description of procedure taken to ensure measurement devices are performing in accordance with the measurement accuracy requirements of OAR 340-253-0450(12);

(F) Methodology for monitoring and calculating weighted average feedstock transport distance and modes, including the specific documentation records that will be collected and retained on an ongoing basis;

(G) Methodology for monitoring and calculating fuel transport distance and modes, including the specific documentation records that will be collected and retained on an ongoing basis;

(H) References to contracts and accounting records that confirm fuel quantities were delivered into Oregon for transportation use in carbon intensity determination, and confirm feedstock and finished fuel transportation distance; and

(I) All documentation required pursuant to OAR 340-253-0600(10) for specified source feedstocks, defined in OAR 340-253-0400(7); and)

(c) The monitoring plan must also include documentation that can be used to justify transaction types reported for fuel in the Oregon Fuels Reporting System, including the production amount, sale/purchase agreements and final fuel dispensing records. Such documentation must be specific to quarterly fuel transactions reports for importers of blendstocks, importers of finished fuels, Oregon producers, credit generators, aggregators, and out-of-state producers.

(10) Feedstock Transfer Documents. A feedstock transfer document for specified source feedstocks must prominently state the following information:

(a) Transferor company name, address and contact information;

(b) Recipient company name, address and contact information;

(c) Type and amount of feedstock, including units; and

(d) Transaction date.

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 **Statutes/Other Implemented:** ORS 468.020 & ORS 468A.265 through 468A.277

History:

DEQ 14-2020, amend filed 05/07/2020, effective 05/07/2020 DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019 DEQ 27-2017, amend filed 11/17/2017, effective 11/17/2017 DEQ 13-2015, f. 12-10-15, cert. ef. 1-1-16 DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15 DEQ 8-2014, f. & cert. ef. 6-26-14 DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14 DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-0640 Specific Requirements for Reporting

(1) For natural gas or biomethane (inclusive of CNG, LNG, and L-CNG), any registered party must report the following as applicable:

(a) For CNG and L-CNG, the amount of fuel in therms dispensed per reporting period for all LDV and MDV, HDV-CIE, and HDV-SIE.

(b) For LNG, the amount of fuel dispensed in gallons per compliance period for all LDV and MDV, HDV-CIE, and HDV-SIE.

(c) For CNG, L-CNG, and LNG, the carbon intensity as listed in 4 under OAR 340-253-8040.

(d) For biomethane-based CNG, LNG, and L-CNG, the carbon intensity as approved under OAR 340-253-0450 and the EPA production company identification number and facility identification number. Additionally, the registered party must submit the following attestation at the time of filing the annual report:

"I certify that to the extent that the gas used in the fuel pathway or supplied as transportation fuel is characterized as biomethane, ______ (registered party name) owns the exclusive rights to the corresponding environmental attributes. ______ (registered party name) has not sold, transferred, or retired those environmental attributes in any program or jurisdiction other than the federal RFS. Based on diligent inquiry and review of contracts and attestations from our business partners, I certify under penalty of perjury under the laws of the State of Oregon that no other party has or will sell, transfer, or retire the environmental attributes corresponding to the biomethane for which _____(registered party name) claims credit in the CFP program."

(2) For electricity, any registered party must report the following as applicable:

(a) The information specified for electricity in Table 5 under OAR 340-253-8010;

(b) For each public access charging facility, fleet charging facility, workplace private access charging facility, or multi-family dwelling, the amount of electricity dispensed in kilowatt hours to vehicles;

(c) For each public transit agency, the amount of electricity dispensed to or consumed by vehicles used for public transportation in kilowatt hours. The report must be:

(A) Separated by use for light rail, streetcars, aerial trams, or electric transit buses; and

(B) Separated by electricity used in portions of their system placed in service before and after January 1, 2012;

(d) To claim a carbon intensity other than a statewide or utility-specific mix, or directly connected renewable power under the Lookup Table in OAR 340-253-8010, a registered party must:

(A) Submit documentation that qualifying RECs were retired in a recognized renewable electricity tracking system at the same time as the submittal of the Quarterly report for the specific purpose of covering that charging; or

(B) Submit documentation at least annually that the electric vehicle chargers are covered by a Utility Renewable Electricity Product or a power purchase agreement that has been approved by DEQ for a carbon intensity. The carbon intensity assigned to the product or agreement can only be used for reporting if the electric vehicle chargers are covered by that same product or agreement for the time period which is being reported;

(e) Any entity that claims a carbon intensity using paragraph (2)(d)(A) must annually submit a verification report from Green-e for the RECs used to generate incremental credits. Failure to submit a report is grounds for DEQ to invalidate any incremental credits issued to the entity under the procedures of OAR 340-253-0670; and

(f) For entities reporting forklift charging, the amount of electricity dispensed to or consumed by forklifts. The report must be separated by electricity used to charge forklifts built before model year 2015 and electricity used to charge forklifts built in model year 2015 and after.

(3) For renewable hydrocarbon diesel or gasoline co-processed at a petroleum refinery, any registered party must report the following information as applicable:

(a) If the registered party is also the producer, then DEQ may require the registered party to report the ongoing information required under OAR 340-253-0450.

(b) If the registered party is not the producer, and the producer has not met its obligations under OAR 340-253-0450, then DEQ may require the registered party to report the volume of fuel under a temporary fuel pathway code or the fuel pathway code for clear gasoline or diesel, as applicable.

(4) Temperature Correction. All liquid fuel volumes reported in the Oregon Fuels Reporting System must be adjusted to the standard temperature conditions of 60 degrees Fahrenheit as follows:

(a) For ethanol, using the formula: Standardized Volume = Actual volume * ((-0.0006301 * T) + 1.0378), where standardized volume refers to the volume of ethanol in gallons at 60°F, actual volume refers to the measured volume in gallons, and T refers to the actual temperature of the batch in °F.

(b) For Biodiesel, one of the following two methodologies must be used:

(A) Standardized Volume = Actual Volume * ((-0.00045767 * T) + 1.02746025), where Standardized Volume refers to the volume in gallons at 60°F, Actual Volume refers to the measured volume in gallons, and T refers to the actual temperature of the batch in °F; or

(B) The standardized volume in gallons of biodiesel at 60°F, as calculated using the American Petroleum Institute Refined Products Table 6B, as referenced in ASTM 1250-08.

(c) For other liquid fuels, the volume correction to standard conditions must be calculated by the methods described in the American Petroleum Institute Manual of Petroleum Measurement Standards Chapter 11 – Physical Properties Data, the ASTM Standard Guide for the Use of Petroleum Measurement Tables (ASTM D1250-08), or the API Technical Data Book, Petroleum Refining Chapter 6 – Density.

(d) If a registered party believes the methods in (a) through (c) are inappropriate, they may request to use a different method and DEQ may approve that method if it finds that it is at least as accurate as the methods in (a) through (c).

(5) Reporting Exempt Gallons. When a registered party is reporting that it sold gallons of fuel to exempt fuel users as defined in OAR 340-253-0250, the registered party must designate in the transaction description field of the Oregon Fuels Reporting System the categories of exempt fuel users to which the registered party delivered fuel and the number of gallons delivered. For blended fuels, all components must be reported as exempt.

(6) Reporting "Not For Transportation" Gallons. When reporting that fuel was sold as not for transportation in the Oregon Fuels Reporting System, the registered party must report in the transaction description field of the Oregon Fuels Reporting System which stationary source, or category of stationary fuel combustion, the fuel was sold to and the number of gallons sold. For blended fuels, all components must be reported as not being used for transportation.

(7) Reporting Position Holder Transactions.

(a) Registered parties that are position holders must report fuel sold below the rack.

(b) Registered parties that are position holders that sell fuel to entities not registered in the CFP may aggregate and report those sales in a single transaction using the "Undefined" business partner descriptor.

(c) Registered parties that are position holders that sell fuel below the rack for export must identify each recipient of such fuel that is registered in the CFP.

(8) Reporting Below the Rack Exports. Purchasers of fuel from a position holder that is directly exported without modification must report such fuel using the "Purchase below the rack for export" transaction category.

(9) Annual reporting of utility credit revenue. Starting in 2021, all electric utilities that receive base or incremental credits must annually report the following items to DEQ no later than April 30th. Failure to file such a report will result in the backstop aggregator or the incremental aggregator receiving credits for that utility until the utility files any past-due reports. Each utility must report the following information, for the prior calendar year:

(a) Total revenue from the sale of base and incremental credits attributable to residential vehicle charging, if applicable;

(b) The percentages that result when dividing the utility's CFP-related administrative costs, including but not limited to submitting reports, selling credits, and to administer any programs that were funded by CFP revenue from the utility's sale of incremental credits, including but not limited to project management and development and management of contracts to operate such programs by the amount of revenue reported under subsection (a);

(c) A description of the programs that were funded by CFP revenue the utility received from its sale of base credits and the amount spent in each category; and

(d) A description of the programs that were funded by CFP revenue from incremental credits, the amount spent in each category, a description of the class of individuals or listing of organizations that benefited from the programs, and any other data elements that DEQ informs each utility receiving incremental credits that it will require following consultations with the Equity Advisory Committee created under OAR 340-253-0330(9)(j).

Statutory/Other Authority: OAR 468.020, 468A.266, 468A.268 & 468A.277 **Statutes/Other Implemented:** OAR 468.020 & ORS 468A.265 through 468A.277 **History:**

DEQ 14-2020, amend filed 05/07/2020, effective 05/07/2020 DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019 DEQ 27-2017, adopt filed 11/17/2017, effective 11/17/2017

340-253-1000 Credit and Deficit Basics

(1) Carbon intensities.

(a) Except as provided in subsections (b),(c), or (d), when calculating carbon intensities, regulated parties, credit generators, and aggregators must use a carbon intensity approved by DEQ under OAR 340-253-0450.

(b) If a regulated party, credit generator, or aggregator has an approved provisional carbon intensity approved under OAR 340-253-0450, the regulated party, credit generator, or aggregator must use the DEQ-approved provisional carbon intensity.

(c) If a regulated party, credit generator, or aggregator has an approved temporary carbon intensity under OAR 340-253-0450, the regulated party, credit generator, or aggregator must use the temporary carbon intensity for the period which it has been approved, unless DEQ has subsequently approved a permanent carbon intensity for that fuel.

(d) If a registered party purchases a blended finished fuel and the seller does not provide carbon intensity information, then the registered party must:

(A) Use the applicable substitute fuel pathway code in Table 8 under OAR 340-253-8010 or otherwise approved and posted by DEQ under OAR 340-253-0450(11) if the fuel is exported, not used for transportation, or used in an exempt fuel use; and

(B) Report the volume using the applicable Table 8 fuel pathway code, or a fuel pathway code otherwise approved and posted by DEQ under OAR 340-253-0450(11), for the fossil fuel and the applicable substitute fuel pathway code for the biofuel or biofuels if the finished fuel blend is not listed.

(2) Fuel quantities. Regulated parties, credit generators, and aggregators must express fuel quantities in the unit of fuel for each fuel.

(3) Compliance period. The annual compliance period is January 1 through December 31 of each year, except:

(a) The initial compliance period is January 1, 2016, through December 31, 2017; and

(b) The initial compliance period for large importers of finished fuels is January 1, 2016 through December 31, 2018.

(4) Metric tons of CO2 equivalent. Regulated parties, credit generators, and aggregators must express credits and deficits to the nearest whole metric ton of carbon dioxide equivalent.

(5) Deficit and credit generation.

(a) Credit generation. A clean fuel credit is generated when fuel is produced, imported, or dispensed for use in Oregon, as applicable, and the carbon intensity of the fuel approved for use under OAR 340-253-0400 through -0470 is less than the clean fuel standard for gasoline and gasoline substitutes in Table 1 under OAR 340-253-8010, for diesel fuel and diesel substitutes in Table 2 under 340-253-8010, or for alternative jet fuel in Table 3 under 340-253-8010. Credits are generated when a valid and accurate quarterly report is submitted in the Oregon Fuels Reporting System.

(b) Deficit generation. A clean fuel deficit is generated when fuel is produced, imported, or dispensed for use in Oregon, as applicable, and the carbon intensity of the fuel approved for use under OAR 340-253-0400 through -0470 is more than the clean fuel standard for gasoline and gasoline substitutes in Table 1 under OAR 340-253-8010 or for diesel fuel and diesel substitutes in Table 2 under 340-253-8010. Deficits are generated when a valid and accurate quarterly report is submitted in the Oregon Fuels Reporting System.

(c) No credits may be generated or claimed for any transactions or activities occurring in a quarter for which the quarterly reporting deadline has passed, unless the credits are being generated for residential charging of electric vehicles or for claiming incremental credits by a utility or the incremental aggregator.

(6) Mandatory retirement of credits. When filing the annual report at the end of a compliance period, a registered party that possesses credits must retire a sufficient number of credits such that:

(a) Enough credits are retired to completely meet the registered party's compliance obligation for that compliance period, or

(b) If the total number of the registered party's credits is less than the total number of the regulated party's deficits, the registered party must retire all of its credits.

(7) Credit Retirement Hierarchy. The Oregon Fuels Reporting System will use the following default hierarchy to retire credits for the purposes of meeting a compliance obligation, first retiring credits under subsection (a), next retiring credits under subsection (b), and last retiring credits under subsection (c):

(a) Credits acquired or generated in a previous compliance period prior to credits generated or acquired in the current compliance period;

(b) Credits with an earlier completed transfer "recorded date" before credits with a later completed transfer "recorded date;" and

(c) Credits generated in an earlier quarter before credits generated in a later quarter.

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 Statutes/Other Implemented: ORS 468.020 & ORS 468A.265 through 468A.277 History: DEO 14 2020, amend filed 05/07/2020, effective 05/07/2020

DEQ 14-2020, amend filed 05/07/2020, effective 05/07/2020 DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019 DEQ 27-2017, amend filed 11/17/2017, effective 11/17/2017 DEQ 13-2015, f. 12-10-15, cert. ef. 1-1-16 DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15 DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-1010 Fuels to Include in Credit and Deficit Calculation

(1) Fuels included. Credits and deficits must be calculated for all regulated fuels and clean fuels, except that:

(a) Credits may be generated only for B100 that complies with an oxidation stability induction period of not less than 8 hours as determined by the test method described in the European standard EN 15751;

(b) B100 that does not comply with subsection (a) can still be imported into Oregon and must be reported, but cannot generate credits for the CFP.

(2) Fuels exempted. Except as provided in sections (3), (4), and (5), credits and deficits may not be calculated for fuels exempted under OAR 340-253-0250.

(3) Voluntary inclusion. A regulated party, credit generator, or aggregator may choose to include in its credits and deficits calculations fuel that is exempt under OAR 340-253-0250(1) and fuel that is sold to an exempt fuel user in Oregon under 340-253-0250(2), provided that the credit and deficit calculation includes all fuels listed on the same invoice.

(4) When fuels are exported from Oregon:

(a) Any bulk quantity of fuel that is exported must be reported by the person who holds title to the fuel when it is exported;

(b) If the exporter purchased the fuel with the compliance obligation, the exported fuels will not generate deficits or credits;

(c) If credits or deficits were generated and separated from the fuel through a transfer without obligation, the exporter will incur credits or deficits, as appropriate, to balance out the deficits or credits detached from the fuel; and

(d) If the fuel was imported in one quarter and exported in another quarter, the exporter will incur credits or deficits, as appropriate, to balance out the deficits or credits, respectively, associated with the fuel when it was imported in the prior quarter.

(5) Alternative jet fuel. Alternative jet fuel may be reported by the producer or importer of the fuel and any registered parties that hold title to it, so long as the fuel is loaded into airplanes in Oregon. If a gallon of alternative jet fuel that has been reported to the Clean Fuels Program as imported or produced is later exported, lost, or otherwise not used for transportation it must be reported as such.

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 **Statutes/Other Implemented:** ORS 468.020 & ORS 468A.265 through 468A.277 **History:**

DEQ 14-2020, amend filed 05/07/2020, effective 05/07/2020 DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019 DEQ 27-2017, amend filed 11/17/2017, effective 11/17/2017 DEQ 13-2015, f. 12-10-15, cert. ef. 1-1-16 DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15 DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-1020 Calculating Credits and Deficits

(1) Except as provided in sections (2) and (3), credit and deficit generation must be calculated for all fuels included in OAR 340-253-1010:

(a) Using credit and deficit basics as directed in OAR 340-253-1000;

(b) Calculating energy in megajoules by multiplying the amount of fuel by the energy density of the fuel in Table 6 under OAR 340-253-8010;

(c) Calculating the adjusted energy in megajoules by multiplying the energy in megajoules from section (2) by the energy economy ratio of the fuel listed in Table 7 under OAR 340-253-8010 or as approved by DEQ under OAR 340-253-0460, as applicable;

(d) Calculating the carbon intensity difference by subtracting the fuel's carbon intensity as approved under OAR 340-253-0400 through -0470, adjusted for the fuel application's energy economy ratio as listed in Table 7 under OAR 340-253-8010 or as approved under OAR 340-253-0460 as applicable, from the clean fuel standard for gasoline or gasoline substitutes listed in Table 1 under OAR 340-253-8010 or diesel fuel and diesel substitutes listed in Table 2 under OAR 340-253-8010, as applicable;

(e) Calculating the grams of carbon dioxide equivalent by multiplying the adjusted energy in megajoules in section (3) by the carbon intensity difference in section (4);

(f) Calculating the metric tons of carbon dioxide equivalent by dividing the grams of carbon dioxide equivalent calculated in section (5) by 1,000,000; and

(g) Determining under OAR 340-253-1000(5) whether credits or deficits are generated.

(2) For electricity used to power fixed guideway vehicles on track placed in service prior to 2012 and forklifts from model year 2015 and earlier, credit and deficit generation must be calculated by:

(a) Using credit and deficit basics as directed in OAR 340-253-1000;

(b) Calculating energy in megajoules by multiplying the amount of fuel by the energy density of the fuel in Table 6 under OAR 340-253-8010;

(c) Calculating the carbon intensity difference by subtracting the fuel's carbon intensity as approved under OAR 340-253-0400 through -0470, adjusted for the fuel application's energy economy ratio listed in Table 7 under OAR 340-253-8010 as applicable, from the clean fuel standard for gasoline or gasoline substitutes listed in Table 1 under OAR 340-253-8010 or diesel fuel and diesel substitutes listed in Table 2 under OAR 340-253-8010, as applicable;

(d) Calculating the grams of carbon dioxide equivalent by multiplying the adjusted energy in megajoules in section (3) by the carbon intensity difference in section (4);

(e) Calculating the metric tons of carbon dioxide equivalent by dividing the grams of carbon dioxide equivalent calculated in section (5) by 1,000,000; and

(f) Determining under OAR 340-253-1000(5) whether credits or deficits are generated.

(3) For electricity used in residential charging of electric vehicles, credit calculations must be based on the total electricity dispensed (in kilowatt hours) to vehicles, measured by:

(a) The use of direct metering (either sub-metering or separate metering) to measure the electricity directly dispensed to all vehicles at each residence; or

(b) For residences where direct metering has not been installed, DEQ will calculate the total electricity dispensed as a transportation fuel based on analysis of the total number of BEVs and PHEVs in a utility's service territory based on Oregon Department of Motor Vehicles records. DEQ will perform this analysis at least twice a year and issue credits based on it. DEQ will select one of the following methods for estimating the amount of electricity charged based on its analysis of which is more accurate and feasible at the time it is performing the analysis:

(A) An average amount of electricity consumed by BEVs and PHEVs at residential chargers, based on regional or national data; or

(B) An analysis of the average electric vehicles miles traveled by vehicle type or make and model, which compares the total amount of estimated charging for those electric vehicle miles travelled with the total reported charging in those territories in order to determine the amount of unreported charging that can be attributed to residential charging. The analysis may be done on a utility territory specific or statewide basis.

(c) If DEQ determines after the issuance of residential electric vehicle credits that the estimate under (b) contained a significant error that led to one or more credits being incorrectly generated, the error will be corrected by withholding an equal number of credits to the erroneous amount from the next generation of residential electric vehicle credits.

(d) A credit generator or aggregator may propose an alternative method, subject to the approval of DEQ upon its determination that the alternative method is more accurate than either of the methods described in subsection (b).

(e) Credits generated under this subsection will be calculated by DEQ under section 1 of this rule using the estimated amount of electricity under subsection (3)(b) and issued at least twice per year into the Oregon Fuels Reporting System account of the utility, its designated aggregator, or the backstop aggregator within three months of the close of that year.

(f) Registered parties eligible to generate credits for the 2018 year also will generate credits for 2016 and 2017 residential electric vehicle charging.

(4) Incremental Credits. In calculating incremental credits for actions that lower the carbon intensity of electricity, the credit calculations must be performed based on section (1) of this rule, except that the carbon intensity difference is calculated based on the carbon intensity of the renewable power and the carbon intensity used to calculate the base credits for that electric vehicle or charging equipment.

(a) Incremental credits for non-residential charging are generated upon the retirement of RECs that qualify under OAR 340-253-0470(5) by the credit generator, its aggregator, or the

incremental aggregator. For credit generators and their aggregators, RECs must be retired prior to or at the same time as the submittal as the quarterly report where the charging is being reported and REC retirement records must be submitted with the quarterly report as supplemental documentation. For incremental credits generated using a Utility Green Power Product or Power Purchase Agreement, evidence that the chargers were covered by such a product must be submitted along with the quarterly report. For the incremental aggregator, incremental credits are generated when it retires RECs on behalf of non-residential electric vehicle charging.

(b) Incremental credits for residential charging are generated by a utility, its aggregator, or the incremental aggregator when RECs are retired on behalf of that charging, or when a utility demonstrates to DEQ that EVs are being charged by customers enrolled in its Utility Renewable Electricity Products.

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 **Statutes/Other Implemented:** ORS 468.020 & ORS 468A.265 through 468A.277 **History:**

DEQ 14-2020, amend filed 05/07/2020, effective 05/07/2020 DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019 DEQ 27-2017, amend filed 11/17/2017, effective 11/17/2017 DEQ 13-2015, f. 12-10-15, cert. ef. 1-1-16 DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15 DEQ 8-2012, f. & cert. ef. 12-11-12

340-253-1055 Public Disclosure

(1) List of DEQ-approved registered parties. DEQ will maintain a current list of DEQapproved registered parties and will make that list publicly available on its website. The list will include, at a minimum, the name of the party and whether the registered party is an importer of blendstocks, a large importer of finished fuels, a small importer of finished fuels, a producer, a credit generator, or an aggregator.

(2) Monthly credit trading activity report. DEQ must post on its webpage, by no later than the last day of the month immediately following the month for which the calculation is completed, a credit trading activity report that:

(a) Summarizes the aggregate credit transfer information for the:

(A) Most recent month,

- (B) Previous three months,
- (C) Previous three quarters, and
- (D) Previous compliance periods;
- (b) Includes, at a minimum

(A) The total number of credits transferred,

(B) The number of transfers,

(C) The number of parties making transfers, and

(D) The formula used by DEQ to calculate the volume-weighted average price of that month's transfers, exclusive of transactions that fall two standard deviations outside of the mean credit price for the month or that are transferred without a price;

(c) Is based on the information submitted into the CFP Online System; and

(d) Presents aggregated information on all fuel transacted within the state and does not disclose individual parties' transactions.

(3) Quarterly data summary. DEQ must post on its webpage at least quarterly:

(a) An aggregate data summary of credit and deficit generation for the most recent quarter and all prior quarters; and

(b) Information on the contribution of credit generation by different fuel types.

(4) Clean Fuels Program Annual Report. DEQ must post on its webpage by April 15th of each year, the following information from the previous year:

(a) The average cost or cost-savings per gallon of gasoline, per gallon of diesel, or any other fuel types, and the formulas used to calculate such costs or cost-savings; and

(b) The total greenhouse gas emissions reductions.

(5) Utility Reports. DEQ will post the utility reports it receives under OAR 340-253-0640(9) to its website.

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 Statutes/Other Implemented: ORS 468.020 & ORS 468A.265 through 468A.277 History: DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019

DEQ 179-2017, adopt filed 11/17/2017, effective 01/01/2019

340-253-1100 Advance Crediting

(1) General Provisions.

(a) Advance Credits are used to advance the state's transportation electrification goals.

(b) All advance credits represent actual reductions of greenhouse gas emissions against the clean fuel standards.

(c) Vehicles must be registered in the State of Oregon to be eligible to earn advanced credits.

(2) Eligibility to generate Advance Credits.

(a) The following entities may apply for advance credits:

(A) Public Transit Agencies;

(B) Political subdivisions of the State of Oregon;

(C) Tribes;

(D) School Districts; and

(E) Companies under contract to provide services to a political subdivision of the State of Oregon or an Oregon School District may apply if the political subdivision endorses the application, and the vehicles covered by the application are intended to provide contracted services to the public.

(b) The entities identified in subsection (a) may earn apply to earn advance credits for the purchase and use of the following vehicle types:

(A) Medium and Heavy Duty vehicles; and

(B) Light-duty vehicles if they are part of an organization's plan to fully electrify its fleet within a 15-year time period.

(3) Applications for Advance Credits.

(a) Applications for advance crediting will be accepted by DEQ at least once per year. DEQ will notify stakeholders when applications will be accepted and will provide application materials and guidance about how it will process and consider applications.

(b) Applicants must supply the following information to DEQ:

(A) A letter describing the activities or purchases that they want to receive advance crediting for, including the number of vehicles, charging equipment, and estimated timeframes for when those vehicles and equipment will be put into useful service;

(B) A detailed estimate of the potential credit generation from the electric vehicles and charging equipment that they want to receive advance crediting for. In the case of electric vehicles, that detailed estimate must at least include the number of miles each vehicle will travel within Oregon annually and an estimated amount of charging for each vehicle;

(C) If covered electric vehicles will mainly use existing charging equipment, details on the ownership of that charging equipment, and how the applicant will ensure that another entity will not generate credits, and will not attempt to general credits, from that vehicle until it has exited the payback period;

(D) Information on where the electric vehicles will be charged, if they will be charged using grid or renewable electricity, and, if applicable, the utility-specific CI for where the charging equipment will be located;

(E) A proposed number of credits to be advanced for each vehicle; and

(F) An attestation that the applicant will remain the owner or lessee of the vehicle or charging equipment until the vehicle has paid back the advanced credits, or that, if the vehicle is sold prior to the end of the payback period, that the applicant will buy and retire credits against the remaining unearned amount.

(c) If the applicant is a company under contract to provide school bus services to an Oregon School District, it must also provide:

(A) A contract with the Oregon School District that the school buses will be serving that shows they will be the provider of school bus services to that district for at least three years following their purchase or lease of the school buses covered by the Advance Crediting Agreement; and

(B) A letter from the school district that is endorsing their application for advance crediting.

(d) If the applicant is a company under a multi-year contract with a political subdivision of the State of Oregon, it must also provide:

(A) A contract with the political subdivision showing how the electric vehicles will be used and that they will be used in state for at least three years following their purchase or lease; and

(B) A letter endorsing the application from the political subdivision.

(e) In considering applications under this rule, DEQ will prioritize applications where the vehicles or charging equipment will reduce emissions in vulnerable communities disproportionately impacted by climate change, air toxics, and criteria air pollution.

(f) DEQ may request additional documentation from an applicant prior to making a decision on the application. If the applicant does not provide the requested documentation, then DEQ may deny the application without prejudice.

(4) Approval of Advance Credits. DEQ will negotiate with the applicant to issue advance credits based on all of the following considerations and requirements:

(a) A clear and objective milestone for issuing advance credits that represents when the vehicles and equipment covered by the application are placed into useful service;

(b) The number of credits being advanced in total or per vehicle;

(c) The length of the payback period, which must be one year longer than the number of years of credits that will be advanced;

(d) An attestation from the applicant that it understands that the advanced credits must represent real reductions and that if the activity covered by the agreement does not generate sufficient credits within the payback period that it is responsible for retiring a sufficient number of credits to make up the difference. The attestation must also include a statement that the applicant understands that it is responsible for making up the difference in credits if it sells or relocates covered vehicles outside of Oregon.

(e) An attestation from the applicant that it will ensure that actual credits are not generated from charging equipment serving these vehicles until the credits have been paid back.

(5) Issuance of Advance Credits.

(a) DEQ will issue advance credits to the applicant only after the vehicles or equipment are placed into useful service as agreed to under section (4) of this rule.

(b) Credits will only be issued to the applicant named in the agreement.

(c) DEQ may advance no more than six years of credits for any single vehicle or piece of infrastructure.

(6) Payback Period.

(a) The payback period for a vehicle or charging equipment will be specified in the agreement between DEQ and the applicant, except that the payback period may not exceed nine years. The payback period must be at least one year longer than the number of years of credits advanced to the applicant.

(b) In the event that the number of advanced credits was not realized during the payback period, the recipient is responsible for acquiring and retiring sufficient credits to ensure the environmental integrity of the program.

(c) If a vehicle or charging equipment is sold to another entity prior to the close of the payback period, the applicant is responsible for purchasing and retiring credits against the volume of advanced credits that has not yet been covered by actual credit generation.

(7) Reporting Requirements.

(a) The applicant that has been issued advance credits must file quarterly reports to DEQ showing the amount of charging going into the individual electric vehicles covered by the agreement.

(b) This charging must not generate additional credits until the advanced credits are paid back. DEQ and the applicant will monitor the amount of charging and credits that would have been generated to determine when an equal number of credits has been generated to the number of credits advanced.

(8) Overall limitation on advance credits. DEQ may not issue more advance credits in any one year than an amount equal to five percent of the number of deficits generated in the

prior compliance year. DEQ will process applications, negotiate and issue advance credits on a first-come, first served basis, and will stop working on any pending applications when it has issued advance credits equal to five percent of the number of deficits generated in the prior compliance year.

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 Statutes/Other Implemented: ORS 468.020 & ORS 468A.265 through 468A.277

340-253-8010 Tables

(1) Table 1 — Oregon Clean Fuel Standard for Gasoline and Gasoline Substitutes

(2) Table 2 — Oregon Clean Fuel Standard for Diesel Fuel and Diesel Substitutes

(3) Table 3 — Oregon Clean Fuel Standard for Alternative Jet Fuel

(4) Table 4 — Oregon Carbon Intensity Lookup Table

(5) Table 5 - Summary Checklist of Quarterly Progress and Annual Compliance Reporting Requirements

(6) Table 6 - Oregon Energy Densities of Fuels

(7) Table 7 - Oregon Energy Economy Ratio Values

(8) Table 8 – Oregon Substitute Fuel Pathway Codes

(9) Table 9 – Oregon Temporary Fuel Pathway Codes

(10) Table 10 – Indirect Land-Use Change Values

[ED. NOTE: To view attachments referenced in rule text, click here to view rule.]

Statutory/Other Authority: ORS 468.020, 468A.266, 468A.268 & 468A.277 Statutes/Other Implemented: ORS 468.020 & ORS 468A.265 through 468A.277 **History:** DEQ 14-2020, amend filed 05/07/2020, effective 05/07/2020 DEQ 13-2019, amend filed 05/16/2019, effective 05/16/2019 DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019 DEQ 27-2017, amend filed 11/17/2017, effective 11/17/2017

DEQ 8-2016, f. & cert. ef. 8-18-16

DEO 5-2016(Temp), f. & cert. ef. 4-22-16 thru 9-1-16

DEQ 13-2015, f. 12-10-15, cert. ef. 1-1-16

DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15



Table 1

Oregon Clean Fuel Standard for Gasoline and Gasoline Substitutes

| Calendar Year | Oregon Clean Fuel Standard (gCO2e per MJ) | | | | |
|------------------------|--|---------------|--|--|--|
| 2015 | None (Gasoline Baseline is 98.62 for 2016-2017, 98.64 for 2018, and 98.06 for 2019 and beyond) | | | | |
| 2016* | 98.37 | 0.25 percent | | | |
| 2017 | 98.13 | 0.50 percent | | | |
| 2018 | 97.66 | 1.00 percent | | | |
| 2019 | 96.59 | 1.50 percent | | | |
| 2020 | 95.61 | 2.50 percent | | | |
| 2021 | 94.63 | 3.50 percent | | | |
| 2022 | 93.15 | 5.00 percent | | | |
| 2023 | 91.68 | 6.50 percent | | | |
| 2024 | 90.21 | 8.00 percent | | | |
| 2025 and beyond | 88.25 | 10.00 percent | | | |
| *Initial compliance pe | riod is a two-year period for 2016 and | 2017. | | | |



Table 2

State of Oregon Department of Environmental

Oregon Clean Fuel Standard for Diesel Fuel and Diesel Substitutes

| and the second se | | | | | |
|---|--|-------------------|--|--|--|
| Calendar Year | Oregon Clean Fuel Standard (gCO2e per MJ) | Percent Reduction | | | |
| 2015 | None (Diesel Baseline is 99.64 for 2016-2017, 99.61 for 2018, and 98.74 for 2019 and beyond) | | | | |
| 2016* | 99.39 | 0.25 percent | | | |
| 2017 | 99.14 | 0.50 percent | | | |
| 2018 | 98.61 | 1.00 percent | | | |
| 2019 | 97.26 | 1.50 percent | | | |
| 2020 | 96.27 | 2.50 percent | | | |
| 2021 | 95.29 | 3.50 percent | | | |
| 2022 | 93.81 | 5.00 percent | | | |
| 2023 | 92.32 | 6.50 percent | | | |
| 2024 | 90.84 | 8.00 percent | | | |
| 2025 and beyond | 88.87 | 10.00 percent | | | |
| *Initial compliance period is a two-year period for 2016 and 2017. | | | | | |



Table 3

Oregon Clean Fuel Standard for Alternative Jet Fuel

| Calendar Year | Oregon Clean Fuel Standard (gCO2e per MJ) |
|-----------------|---|
| 2015 | None (Diesel Baseline is 99.64 for 2016-2017, 99.61 for 2018, and 98.74 for 2019 and beyond. The fossil jet baseline is 90.97.) |
| 2019 | 90.80 |
| 2020 | 90.80 |
| 2021 | 90.80 |
| 2022 | 90.80 |
| 2023 | 90.80 |
| 2024 | 90.80 |
| 2025 and beyond | 88.87 |



OAR 340-253-8010 Table 4

Oregon Carbon Intensity Lookup Table

| Fuel | Pathway | Pathway Description | Carbon Intensity Values (gCO2e/MJ) | |
|-------------------------------|------------|--|---------------------------------------|--|
| | Identifier | | Total Lifecycle Emissions | |
| | ORGAS001 | Clear gasoline - based on a weighted average of gasoline supplied to Oregon | 100.14 | |
| Gasoline | ORGAS002 | Imported blended gasoline (E10) – 90% clear gasoline & 10% corn ethanol based on Midwest average. Cannot be used to report exports except when the specific gallon was also imported under this fuel pathway code. | 98.06 | |
| | ORULSD001 | Clear diesel, based on a weighted average of diesel fuel supplied to Oregon | 100.74 | |
| Diesel | ORULSD002 | Imported blended diesel (B5) – 95% clear diesel & 5% soybean biodiesel. Cannot be used to report exports except when the specific gallon was also imported under this fuel pathway code. | 98.74 | |
| | ORULSD003 | Imported blended diesel (B20) – 80% clear diesel & 20% soybean biodiesel. Cannot be used to report exports except when the specific gallon was also imported under this fuel pathway code. | 92.68 | |
| Compressed Natural Gas | ORCNG001 | North American NG delivered via pipeline; compressed in OR | 79.98 | |
| Liquefied Natural Gas | ORLNG001 | North American NG delivered via pipeline; liquefied in OR using liquefaction with 80% efficiency | 86.88 | |
| Liquefied Petroleum Gas | ORLPG001 | Liquefied petroleum gas | 80.88 | |
| Electricity | ORELEC100 | Solar power, produced at or directly connected to the site of the | 0 | |



State of Oregon Department of Environmental

OAR 340-253-8010 Table 4

Oregon Carbon Intensity Lookup Table

| Fuel | Pathway | Pathway Description | Carbon Intensity Values (gCO2e/MJ) | |
|-----------|-----------|---|---------------------------------------|--|
| Identifie | | | Total Lifecycle Emissions | |
| | | charging station in Oregon, subject to OAR 340-253-0470 (3). | | |
| | ORELEC101 | Wind power, produced at or directly connected to the site of the charging station in Oregon, subject to OAR 340-253-0470 (3). | 0 | |
| | ORELEC200 | Renewable power deemed to have a carbon intensity of zero under OAR 340-253-0470 and meeting the provisions of (5). | 0 | |
| Hydrogen | ORHYF | Compressed H2 produced in Oregon from central steam methane reformation of North American fossil-based NG | 120.68 | |
| | ORHYFL | Liquefied H2 produced in Oregon from central steam methane reformation of North American fossil-based NG | 157.29 | |
| | ORHYB | Compressed H2 produced in Oregon from central steam methane reformation of biomethane (renewable feedstock) from North American landfills | 116.76 | |
| | ORHYBL | Liquefied H2 produced in Oregon from central steam methane reformation of biomethane (renewable feedstock) from North American landfills | 149.70 | |
| | ORHYEG | Compressed H2 produced in Oregon from electrolysis using Oregon average grid electricity | 205.38 | |
| | ORHYEB | Compressed H2 produced in Oregon from electrolysis using BPA average grid electricity | 31.65 | |

| OAR 340-253-8010 DEQ State of Oregon Department of Environmental Quality | | | | | |
|---|-----------------------|---|---------------------------------------|--|--|
| Fuel | Pathway Identifier | Pathway Description | Carbon Intensity Values (gCO2e/MJ) | | |
| | | | Total Lifecycle Emissions | | |
| | ORHYER | Compressed H2 produced in Oregon from electrolysis using solar- or wind-generated electricity | 13.11 | | |



Table 5

State of Oregon Department of Environmental Quality

| Parameters to Report | Gasoline & Diesel Fuel | Ethanol, Biodiesel & Renewable Diesel | CNG, LNG & LPG | Electricity | Hydrogen & Hydrogen Blends |
|--|---------------------------|---|-------------------|-------------|----------------------------------|
| Company or organization name | Х | Х | Х | х | х |
| Reporting period | Х | Х | х | Х | х |
| Fuel pathway code | Х | Х | х | х | х |
| Transaction type | Х | Х | х | Х | х |
| Transaction date | Х | Х | х | Х | х |
| Business Partner | Х | Х | х | Х | х |
| Production Company ID and Facility ID | n/a | Х | n/a | n/a | х |
| Physical transport mode code | Х | Х | х | х | х |
| Aggregation | X | X | х | X | х |
| Application / EER | Х | Х | Х | Х | х |



OAR 340-253-8010 Table 5

Summary Checklist of Quarterly Progress and Annual Compliance Reporting Requirements

| | | | | | l de la companya de l |
|---|---------------------------|---|-------------------|-------------|---|
| Parameters to Report | Gasoline & Diesel Fuel | Ethanol, Biodiesel & Renewable Diesel | CNG, LNG & LPG | Electricity | Hydrogen & Hydrogen Blends |
| Amount of each fuel used as gasoline replacement | Х | х | х | x | x |
| Amount of each fuel used as diesel fuel replacement | X | х | X | x | x |
| *Credits/deficits generated per quarter (MT) | Х | х | х | x | x |
| | | | | | |

For Annual Compliance Reporting (in addition to the items above)

| *Credits and Deficits generated per year (MT) | Х | Х | х | х | х |
|--|---|---|---|---|---|
| *Credits/deficits carried over from the previous year (MT), if any | Х | Х | Х | Х | х |
| *Credits acquired from another party (MT), if any | Х | Х | х | х | x |
| *Credits sold to another party (MT), if any | Х | х | х | х | x |
| *Credits retired within LCFS (MT) to meet compliance obligation, if any | X | X | X | X | X |
| DEQ |
|----------------------------------|
| State of Oregon Department of |

Table 6Oregon Energy Densities of Fuels

| Environmental Quality | |
|--|----------------------------|
| Fuel (unit) | MJ/unit |
| Gasoline (gallon) | 122.48 (MJ/gallon) |
| Diesel fuel (gallon) | 134.48 (MJ/gallon) |
| Compressed natural gas (therm) | 105.5 (MJ/therms) |
| Electricity (kilowatt hour) | 3.60 (MJ/kilowatt hour) |
| Denatured ethanol (gallon) | 81.51 (MJ/gallon) |
| Clear biodiesel (gallon) | 126.13 (MJ/gallon) |
| Liquefied natural gas (gallon) | 78.83 (MJ/gallon) |
| Hydrogen (kilogram) | 120.00 (MJ/kilogram) |
| Liquefied petroleum gas (gallon) | 89.63 (MJ/gallon) |
| Renewable hydrocarbon diesel (gallon) | 129.65 (MJ/gallon) |
| Undenatured anhydrous ethanol (gallon) | 80.53 (MJ/gallon) |
| Alternative Jet Fuel (gallon) | 126.37 (MJ/gallon) |
| Renewable naphtha (gallon) | 117.66 (MJ/gallon) |



Table 7

Oregon Energy Economy Ratio Values for Fuels

| State of Oregon |
|-----------------|
| Department of |
| Environmental |
| Quality |

| Light/Medium Duty Applications (Fuels used as gasoline replacements) | | Heavy-Duty/Off-Road Applications (Fuels used as diesel replacements) | | Aviation Applications (Fuels used as jet fuel replacements) | |
|--|--------------------------------------|--|------------------------------------|---|--|
| Fuel/Vehicle Combination | EER Value Relative to Gasoline | Fuel/Vehicle Combination | EER Value Relative to Diesel | Fuel/Vehicle Combination | EER Value Relative to conventional jet |
| Gasoline (including E10) or any other gasoline-ethanol blend | 1 | Diesel fuel (including B5) or any other blend of diesel and biodiesel or renewable hydrocarbon diesel | 1 | Alternative Jet Fuel | 1 |
| CNG Internal Combustion Engine Vehicle (ICEV) | 1 | CNG, LNG, or LPG (Spark-Ignition Engines) | 0.9 | | |
| Electricity/Battery Electric Vehicle or Plug-In Hybrid Electric Vehicle | 3.4 | CNG,LNG, or LPG(Compression- Ignition Engines) | 1 | | |
| Electricity/On-Road Electric Motorcycle | 4.4 | Electricity/Battery Electric Vehicle or Plug-In Hybrid Electric Vehicle | 5 | - | |
| Propane/Propane Forklift | 0.9 | Electricity/Battery Electric or Plug-in Hybrid Transit Bus | 5 | | |
| Hydrogen/Fuel Cell Vehicle | 2.5 | Electricity/Fixed Guideway Light Rail | 3.3 | | |
| | | Electricity/Fixed Guideway Streetcar | 2.1 | | |
| | | Electricity/Fixed Guideway Aerial Tram | 2.6 | | |
| | | Electricity/Electric Forklift | 3.8 | | |



Table 7

Oregon Energy Economy Ratio Values for Fuels

| Light/Medium Duty Applications (Fuels used as gasoline replacements) | | B Heavy-Duty/Off-Road Applications (Fuels used as diesel replacements) | | Aviation A (Fuels use replac | applications ed as jet fuel ements) |
|--|--------------------------------------|--|------------------------------------|------------------------------------|--|
| Fuel/Vehicle Combination | EER Value Relative to Gasoline | Fuel/Vehicle Combination | EER Value Relative to Diesel | Fuel/Vehicle Combination | EER Value Relative to conventional jet |
| | | Electricity/Electric TRU (eTRU) | 3.4 | | |
| | | Hydrogen/Fuel Cell Vehicle | 1.9 | | |
| | | Hydrogen/Fuel Cell Forklift | 2.1 | | |
| | | Electricity/Cargo Handling Equipment | 2.7 | | |
| | | Electricity/Ocean Going Vessels | 2.6 | | |



Table 8

Oregon Substitute Fuel Pathway Codes

| Fuel | Fuel Pathway code | CI (gCO2e/MJ) | |
|--|-------------------|---|--|
| Substitute CI for Ethanol. This pathway may only be used to report transactions that are sales or purchases without obligation, exports, loss of inventory, not for transportation use, and exempt fuel use. | ETH0116 | 40 | |
| Substitute CI for Biodiesel. This pathway may only be used to report transactions that are sales or purchases without obligation, exports, loss of inventory, not for transportation use, and exempt fuel use. | BIOD0116 | 15 | |
| Substitute CI for Renewable Diesel. This pathway may only be used to report transactions that are sales or purchases without obligation, exports, loss of inventory, not for transportation use, and exempt fuel use. | RNWD0116 | 15 | |
| Substitute CI for E10 Gasoline. This pathway may only be used to report transactions that are sales or purchases without obligation, exports, loss of inventory, not for transportation use, and exempt fuel use. | ORGAS0116 | For 2019: 96.59 For 2020 and beyond: 96.00 | |
| Substitute CI for B5 Diesel. This pathway may only be used to report transactions that are sales or purchases without obligation, exports, loss of inventory, not | ORULSD01165 | For 2019: 97.26 For 2020 and beyond: 96.71 | |



Table 8

Oregon Substitute Fuel Pathway Codes

| Quality | | |
|---|-------------------|---------------|
| Fuel | Fuel Pathway code | CI (gCO2e/MJ) |
| for transportation use, and exempt fuel use. | | |
| Substitute CI for B20 Diesel. This pathway may only be used to report transactions that are sales or purchases without obligation, exports, loss of inventory, not for transportation use, and exempt fuel use. | ORULSD011620 | 84.45 |



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Table 9

Oregon Temporary Fuel Pathway Codes for Fuels with Indeterminate CIs

| Fuel | Feedstock | Process Energy | FPC | CI (gCO₂e/MJ) |
|---------------------|---|--|------------|---------------|
| | Corn | Grid electricity, natural gas, and/or renewables | ORETH100T | 77.8 |
| | Sorghum | Grid electricity, natural gas, and/or renewables | ORETH101T | 95 |
| Ethanol | Sugarcane and Molasses | Bagasse and straw only, no grid electricity | ORETH102T | 55 |
| | Any starch or sugar feedstock | Any | ORETH103T | 100.14 |
| | Corn Stover, Wheat Straw, or Sugarcane Straw | As specified in OR- Greet 2.0 | ORETH104T | 50 |
| Biodiesel | Any feedstock derived from animal fats, corn oil, or a waste stream | Grid electricity, natural gas, and/or renewables | ORBIOD200T | 45 |
| | Any feedstock derived from plant oils except for Palm-derived oils | Grid electricity, natural gas, and/or renewables | ORBIOD201T | 65 |
| | Any feedstock | Any | ORBIOD202T | 100.74 |
| Renewable Diesel | Any feedstock derived from animal fats, corn oil, or a waste stream | Grid electricity, natural gas, and/or renewables | ORRNWD300T | 45 |
| | Any feedstock derived from plant oils except for Palm-derived oils | Grid electricity, natural gas, and/or renewables | ORRNWD301T | 65 |
| | Any feedstock | Any | ORRNWD302T | 100.74 |



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Table 9

Oregon Temporary Fuel Pathway Codes for Fuels with Indeterminate CIs

| Fuel | Feedstock | Process Energy | FPC | CI (gCO₂e/MJ) |
|----------------------------------|---|--|------------|---------------|
| | Landfill or Digester Gas | Grid electricity, natural gas, and/or renewables | ORCNG500T | 70 |
| Biomethane CNG | Municipal Wastewater sludge, Food Waste, Green Waste, or Other Organic Waste | Grid electricity, natural gas, and/or parasitic load | ORCNG501T | 45 |
| | Landfill or Digester Gas | Grid electricity, natural gas, and/or renewables | ORLNG501T | 85 |
| Biomethane LNG | Municipal Wastewater sludge, Food Waste, Green Waste, or Other Organic Waste | Grid electricity, natural gas, and/or parasitic load | ORLNG502T | 60 |
| | Landfill or Digester Gas | Grid electricity, natural gas, and/or renewables | ORLCNG502T | 90 |
| Biomethane L-CNG | Municipal Wastewater sludge, Food Waste, Green Waste, or Other Organic Waste | Grid electricity, natural gas, and/or parasitic load | ORLCNG503T | 65 |
| Biomethane CNG, LNG, L-CNG | Dairy and Swine Manure | Grid electricity, natural gas, and/or parasitic load | ORLCNG504T | -150 |
| Renewable LPG | Fats, Oils, and Grease residues | Grid electricity, natural gas, and/or renewables | ORRNWP400T | 45 |
| | Any feedstock derived from plant oils (excluding palm | Grid electricity, natural gas, and/or renewables | ORRNWP401T | 65 |



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Table 9

Oregon Temporary Fuel Pathway Codes for Fuels with Indeterminate CIs

| Fuel | Feedstock | Process Energy | FPC | CI (gCO ₂ e/MJ) |
|--|---|-----------------------------------|------------|----------------------------|
| | and palm derivatives) | | | |
| Electricity | Coal, Natural Gas, Hydroelectric Dams, Wind Mills, etc. | Oregon average electricity mix | ORELEC600T | 135.00 |
| Any Gasoline Substitute Feedstock- Fuel Combination Not Included Above | Any | Any | ORSG800T | 100.14 |
| Any Diesel Substitute Feedstock- Fuel Combination Not Included Above | Any | Any | ORSD801T | 100.74 |

| DEO |
|-----|

Table 10

State of Oregon Summary of Indirect Land-Use Change Values for Crop-Based Biofuels

| Feedstock | ILUC Value (gCO₂e/MJ) |
|---------------------------------------|-----------------------|
| Corn Ethanol | 7.60 |
| Sorghum Ethanol | 19.40 |
| Sugarcane Ethanol | 11.80 |
| Soybean Biodiesel or Renewable Diesel | 29.10 |
| Canola Biodiesel or Renewable Diesel | 14.50 |
| Palm Biodiesel or Renewable Diesel | 71.40 |