

Oregon Department of Environmental Quality Dec. 9 – 10, 2015

Oregon Environmental Quality Commission meeting Rulemaking, Action item G

Clean Fuels Program Updates Rulemaking

DEQ recommendation to the EQC

DEQ recommends that the Environmental Quality Commission adopt the proposed rule amendments in Attachment A1 and Attachment A2 as part of Chapter 340 of the Oregon Administrative Rules.

Overview

Short summary

DEQ proposes to amend Oregon Clean Fuels Program rules under division 253 of chapter 340 of the Oregon Administrative Rules. The proposed rule changes would:

- Implement Senate Bill 324 (2015) by:
 - o Exempting fuels that are used in watercraft, locomotives and construction equipment;
 - o Amending the fuel specification for biodiesel and biodiesel blends; and
 - Clarifying that a small importer, defined as a company that imports less than 500,000 gallons of transportation fuel per year, is exempt from having to meet the clean fuel standards.
- Updating the version of the models used to calculate carbon intensity.
- Incorporating values to quantify the greenhouse gas emissions from indirect land use change.
- Establishing the 2015 baseline for the program and the annual clean fuel standards for 2016 through 2025.
- Streamlining the process to obtain DEQ approval of a carbon intensity for a fuel to be used in the Oregon Clean Fuels Program.

DEQ also will conduct another rulemaking in early 2016 that will focus on developing new and more effective cost containment provisions. That process will involve establishing an advisory committee of subject experts to inform the design of one or more new cost containment mechanisms appropriate for use in Oregon.

DEQ also proposes to amend rules under Division 12 of Chapter 340 of the Oregon Administrative rules to establish enforcement criteria for violations of the Oregon Clean Fuels Program.

Brief history

The 2009 Oregon Legislature passed House Bill 2186 authorizing the Oregon Environmental Quality Commission to adopt rules to reduce lifecycle emissions of greenhouse gases from Oregon's transportation fuels by 10 percent over a 10-year period.

Oregon started fuels reporting (phase 1) of the Clean Fuels Program on Jan. 1, 2013, after EQC adopted rules in December 2012. Phase 1 rules required Oregon fuel producers and importers to register, keep records and report the volumes and carbon intensities of the transportation fuels they provide in Oregon.

The EQC adopted phase 2 rules on Jan. 7, 2015, that:

- Established clean fuel standards to reduce greenhouse gas emissions from Oregon's transportation fuels by 10 percent over a 10-year period.
- Required transportation fuel importers to reduce the average carbon intensity of fuels they
 provide in Oregon to meet the annual clean fuel standards. To meet the standards, regulated
 parties would select the strategy that works best for them, such as incorporating more lowercarbon biofuels, natural gas, biomethane, propane or electricity into their fuel mixes, or by
 purchasing clean fuel credits from clean fuels providers.
- Allowed clean fuels providers to generate and sell clean fuel credits for the fuels they provide in Oregon.
- Established fuel supply and fuel price deferrals to contain the costs of the program.

The 2015 Oregon Legislature passed Senate Bill 324. The bill removed the Dec. 31, 2015, sunset date in House Bill 2186 (2009), made the EQC's adoption of the Oregon Clean Fuels Program mandatory rather than discretionary and directed the EQC to further amend the Oregon Clean Fuels Program as described above.

Regulated parties

The Clean Fuels Program currently regulates 74 businesses. Regulated parties are:

• Importers of Blendstocks

These are businesses that import fuel components that can either be used alone or blended with another fuel component to produce a fuel that can be used in a motor vehicle, referred to as "blendstocks." Examples of blendstocks are gasoline, ethanol, diesel fuel and biodiesel. If a business imports both blendstocks and finished fuels, they must register as an importer of blendstocks with the program. There are currently 27 businesses registered as importers of blendstocks.

Importers of Finished Fuels

These are businesses that only import fuels that can be used directly in a motor vehicle without additional chemical or physical processing, referred to as "finished fuels." Examples of finished fuels are premium gasoline, gasoline blended with 10 percent ethanol, diesel fuel and diesel blended with 5 percent biodiesel.

Importers of finished fuels are further split into two sub-groups based on the volume of finished fuel they import into Oregon. The threshold between large and small importers is 500,000 gallons per year. There are currently 29 businesses registered as large importers of finished fuels and 16 businesses registered as small importers of finished fuels.

• Producers of Transportation Fuels

There are no producers of gasoline or diesel fuel located in Oregon (i.e., no refineries). One business produces ethanol from corn and one produces biodiesel from used cooking oil.

Providers of Clean Fuels – Credit Generators

Clean fuels include natural gas, biomethane, propane, electricity and hydrogen. The program does not require clean fuels providers to participate, but allows participation if the business wants to generate credits. For natural gas, propane and hydrogen, businesses that own the dispensing equipment can participate in the program. For electricity, the owners of the charging stations can participate. For biomethane, the company that converts waste methane from landfills, wastewater treatment plants and anaerobic digesters can participate in the program. Credit generators can include, but are not limited to, public or private fleets, utilities, businesses that provide alternative fuels to their employees and individuals.

Request for other options

During the public comment period, DEQ requested public comment on whether to consider other options for achieving the rules' substantive goals while reducing the rule amendments' negative economic impact on business. Options included:

- The use of different methods to quantify direct and indirect emissions including alternative models used to calculate direct and indirect emissions or alternative sources of information that can be used as inputs to the models;
- Alternate procedures to obtain a carbon intensity; and
- Alternate (more flexible) approaches for regulated parties to comply with the program, especially for importers of finished fuels.

This staff report reflects DEQ's recommendations for changes to the proposed rules from the draft rules as they were originally published in the Notice of Proposed Rulemaking on October 1, 2015. DEQ's recommendations are a result of considering comments received during the rulemaking process.

Overview of the proposed rule changes

There are four primary goals of the proposed rulemaking: 1) to implement the legislative requirements in Senate Bill 324; 2) to update the technical basis of the program for accurately quantifying the lifecycle emissions of Oregon's transportation fuels; 3) to streamline the process for parties to participate in the program; and 4) to provide additional flexibility for regulated parties to comply with the program.

Implementing Senate Bill 324

The 2015 Oregon Legislature adopted Senate Bill 324. The bill does five things:

- 1) Removes the Dec. 31, 2015, sunset date from House Bill 2186. This change will provide regulatory certainty to the fuels industry through 2025.
- 2) Adds additional exemptions for fuels used in watercraft, locomotives and construction equipment. The addition of these exemptions will relieve fuel providers that supply fuel to these users from the requirement to reduce carbon from these fuels.
- 3) Increases the volume threshold that defines "small importers" from 250,000 gallons per year to 500,000 gallons per year and exempts small importers from having to comply with the clean fuel standards. This will decrease the number of small businesses that need to reduce carbon from the fuels they supply.
- 4) Amends the fuel specification for biodiesel and biodiesel blends that wish to participate in the program. This new requirement might lessen the availability of biodiesel and biodiesel blends that can generate credits in the program.
- 5) Requires that the program include mechanisms to manage and contain the cost of complying with the clean fuels program, including by using credits, and repeals the requirement that the program include specific fuel price exemptions and deferrals.

Items 1-4 above are addressed in this proposed rulemaking. The program already includes cost containment provisions in compliance with Item 5, but DEQ will also conduct an additional rulemaking in early 2016 to study, develop, and propose one or more new, more effective cost containment provisions.

Accurately Quantifying Lifecycle Greenhouse Gas Emissions

The Clean Fuels Program uses a lifecycle approach to quantify greenhouse gas emissions from transportation fuels. This approach allows DEQ to consider emissions from the extraction of crude oil, the farming of crops used to produce fuels, transportation of feedstocks to a refinery or other production facility, production, distribution of the finished products, and combustion or use in a vehicle. DEQ uses a mix of technical tools to quantify these emissions which must be periodically updated based on the latest information.

A fuel's carbon intensity is the unit of measurement for the Clean Fuels Program and reflects the sum of direct and indirect greenhouse gas emissions over the lifecycle of a transportation fuel. New

methods and studies to quantify a fuel's carbon intensity are continuously being developed and updated. The section below describes the updates proposed by DEQ in the proposed rule changes.

Direct Emissions

 OR-GREET 2.0 – Oregon uses the Argonne National Laboratory GREET (Greenhouse gases, Regulated Emissions and Energy Use in Transportation) model to calculate the direct greenhouse gas emissions from a transportation fuel's lifecycle. The current version of OR-GREET was based on the Argonne GREET version 1.8b and this rulemaking proposes the OR-GREET 2.0 version of the model.

The update incorporates the latest model refinements and will bring Oregon's model into alignment with California's current version of its model, CA-GREET 2.0, and Argonne's current version of its model, GREET_2014. DEQ has also customized OR-GREET 2.0 to incorporate Oregon's electricity mix and transportation distances to Oregon. OR-GREET 2.0 is available as an Excel spreadsheet from DEQ.

Table 1 provides a summary of changes resulting from the update to OR-GREET 2.0:

Table 1. GREET Values of Selected Fuels (gCO2e/MJ)		
Fuel Type	OR-GREET (current model)	OR-GREET 2.0 (proposed update)
Corn ethanol (MW corn, dry mill, MW production)	68.40	62.29
Sugarcane ethanol (base case)	27.40	39.24
Soybean biodiesel (MW soybeans, MW production)	21.25	29.15
Compressed natural gas (pipeline)	68.00	79.93
Liquefied natural gas (80% efficient)	83.13	94.46

OPGEE 1.1 - While GREET is a good tool for developing default pathways for average fuels, it lacks process-level detail for any particular fuel cycle. In the example of emissions from crude extraction, Stanford University has developed the OPGEE (the Oil Production Greenhouse gas Emissions Estimator) model to better estimate greenhouse gas emissions from the production, processing and transport of crude petroleum.

DEQ uses a combination of both the OPGEE model and the OR-GREET model to calculate the carbon intensity of gasoline and diesel fuel used in Oregon. First, DEQ determines the refining locations for petroleum fuels consumed in Oregon and the sources of the crude oil for each refining location. DEQ then applies the OPGEE 1.1 model to quantify the greenhouse gas emissions from the recovery of crude and the transportation of crudes to the refinery locations. DEQ then replaces the OR-GREET 2.0 values for the crude

recovery/transport to refinery emissions portion of the petroleum fuel's lifecycle with the OPGEE 1.1 model results. OR-GREET 2.0 is used to calculate the other portions of the fuel's lifecycle carbon intensity.

Table 2 shows the changes to emissions from crude recovery/transport to refinery based on the proposed model updates:

Table 2. Crude Recovery/Transport to Refinery Emissions of Petroleum Fuels (gCO2e/MJ)			
Fuel Type OR-GREET OPGEE 1.1 (current values) (proposed values)			
Gasoline	6.14	13.70	
Diesel	6.14	13.61	

Indirect Emissions

• Indirect land use change. In addition to greenhouse gases that are directly emitted from the production and use of biofuels, there are other emissions that result from increased demand for biofuel feedstocks - the crops used to make the fuel - caused by a change in regulatory policies such as clean fuel standards. There is a presumed increase in acreage needed to meet that increased demand that could lead to non-agricultural or underproductive lands being converted to cropland. In the conversion process, carbon that may have remained or otherwise been sequestered in soils and cover vegetation is emitted. This is referred to as indirect land use change or ILUC.

Oregon's Clean Fuels Program doesn't currently include indirect land use change values, although the rules adopted in December 2012 and January 2015 included a placeholder in the carbon intensity lookup tables in anticipation of adding those values at a later date. With the first compliance period starting in 2016, it is essential to include ILUC values at this time to ensure an accurate accounting of total lifecycle emissions from biofuels.

The science of quantifying ILUC has developed over time through several key academic institutions under the direction of the California Air Resources Board and the Argonne National Laboratory. CARB has proposed ILUC values for 6 feedstocks (corn, sorghum, sugarcane, soybean, canola and palm) while Argonne has developed an ILUC value for corn.

DEQ shared its initial thoughts to adopt the CARB ILUC values with its rulemaking advisory committee earlier this year. The advisory committee provided DEQ with their initial feedback, some in favor and some against using CARB's ILUC values. Those in favor cited CARB's rigorous and transparent process to develop the science and work with stakeholders in proposing their latest ILUC values. Those against preferred the Argonne ILUC for corn ethanol because they felt it was more accurate for US corn ethanol production which supplies the Oregon fuels market.

DEQ discussed the feedback with several experts in the field including experts from UC Davis, CARB, the biofuels industry and consultants and received many comments regarding this issue. At this time, DEQ has recommended use of the CARB ILUC values for sugarcane, sorghum, soybeans, canola and palm oil and to use the Argonne ILUC values for corn.

Table 3 provides DEQ's proposed ILUC values for various feedstocks:

Table 3. ILUC Values (gCO2e/MJ)		
Feedstock	Proposed Values	
Corn	7.6	
Sugarcane	11.8	
Sorghum	19.4	
Soybean	29.1	
Canola	14.5	
Palm oil	71.4	

- Other indirect effects. In addition to indirect land use change, there is a general desire to evaluate whether transportation fuels may have other indirect effects. These may include changes related to:
 - induced land development such as the development of infrastructure to access production areas
 - o military involvement such as action to secure oil producing regions
 - o carbon intensity of marginal oil
 - o irregular and unplanned accidental events
 - o the efficiency and output of refineries (co-products)
 - o price effects

However, the science to quantify other indirect effects is even more variable and more uncertain than the science to quantify indirect land use change. Because of this, DEQ is not proposing to adopt any values related to other indirect effects, but will continue to monitor the information as it becomes available.

DEQ also recognizes that the science of lifecycle greenhouse gas emissions will continue to evolve as more accurate models and better data become available. DEQ is committed to collaborate with CARB, Argonne and others to continue to improve the tools to quantify both direct and indirect emissions of transportation fuels over the next few years that will inform the next review of carbon intensities.

Combining the effect of the three proposed changes described above produces Table 4, a summary of the net changes to carbon intensity values of selected fuels.

Table 4. Carbon Intensity Values of Selected Fuels (gCO2e/MJ)			
Fuel Type	Current Values	Proposed Values	Net Change in Values
Gasoline	89.40	100.77	+ 11.37
Gasoline blended with 10 percent ethanol	89.31	97.68	+ 8.37
Diesel	89.00	101.65	+ 12.65
Diesel blended with 5 percent biodiesel	87.09	98.48	+ 11.39
Corn ethanol (MW, dry mill, MW production)	68.40	69.89	+ 1.49
Sugarcane ethanol (base case)	27.40	51.04	+ 23.64
Soybean biodiesel (MW soybean, MW production)	21.25	58.25	+ 37.00
Canola biodiesel	20.00	57.84	+ 37.84
Used cooking oil biodiesel (NW UCO, Oregon production)	18.72	18.12	- 0.60
Corn oil biodiesel	4.00	36.89	+ 32.89
Compressed natural gas (pipeline)	68.00	79.93	+ 11.93
Liquefied natural gas (80% efficient)	83.13	94.46	+ 11.33

For the petroleum fuels, adopting the OPGEE 1.1 model drives the increases in their carbon intensity. For the crop-based biofuels, adding ILUC drives the increases.

Streamlining the Process to Participate in the Clean Fuels Program

DEQ continuously strives to increase the efficiency and certainty to regulated parties about what they need to do to comply with the program. Since many of our regulated parties also participate in low carbon fuel programs in British Columbia and California, it makes regulatory and business sense to align Oregon's tools and processes with the tools and processes used under their programs. DEQ proposes these steps to accomplish this alignment:

- DEQ has already adapted California's web-based reporting tool for use in Oregon and DEQ proposes to expand the use of the tool to facilitate compliance demonstration and credit transactions.
- Since many biofuels producers provide fuel to California and Oregon, DEQ proposes to
 accept carbon intensities that have already been certified for use in California, subject only to
 quick confirmation that California's approval remains consistent with the requirements of
 Oregon's program. Oregon's proposed alignment with CA-GREET 2.0, OPGEE 1.1 and
 California's ILUC values would allow businesses to participate in both markets more
 seamlessly.
- For fuel providers that do not participate in the California program, DEQ proposes to adopt California's latest tools to quantify carbon intensities. The proposed OR-GREET 2.0 Tier 1 calculator would significantly reduce the amount of work compared to running the full GREET model for most conventionally-produced alternative fuels. The proposed OR-

GREET 2.0 Tier 2 process also reduces the amount of work compared to the current process to obtain an individual carbon intensity.

• In addition, DEQ also proposes default carbon intensities for a select group of alternative fuels that would help fill a current gap in information. This would give fuel providers an avenue to quickly obtain a carbon intensity and generate credits in the short-term while they consider whether to develop a more accurate carbon intensity value for long-term use.

Finally, DEQ proposes to allow small importers of finished fuels to use DEQ's EZ-Fuels system for the Greenhouse Gas Reporting program in lieu of the CFP Online System that is required for all other participants in the Clean Fuels Program. The EZ-Fuels system is simpler to use and, since all fuel importers must also report greenhouse gas emissions to DEQ, the small importers would have the option of submitting one report instead of two.

The combined impact of the proposals above would significantly lower the resources businesses need to participate in the program.

Providing Additional Flexibility to Comply

While the current program already contains many options to comply, DEQ proposes the following new opportunities:

- DEQ proposes for the initial compliance period to be two years, 2016 and 2017, to provide businesses additional time to achieve initial compliance. Deficits and credits would be generated and businesses would still be required to file an annual report for 2016, but would not be required to demonstrate compliance until the end of 2017.
- For businesses who have not complied with the clean fuels standard by the end of a calendar year, DEQ proposes to allow them an additional quarter to acquire credits generated in the previous year to meet their compliance obligation.
- For large importers of finished fuels, DEQ proposes to give these businesses the option of complying with the clean fuel standards in 2016 and 2017 or to carry over their compliance obligations for those 2016 and 2017 years until 2018 when the aggregate compliance obligation must be met. This proposal would give these businesses more time to plan for compliance by identifying customers interested in buying fuels that exceed the minimum 10 percent ethanol or five percent biodiesel blending rates, by providing their own clean fuels and generating credits themselves or by negotiating contracts with providers of clean fuels to purchase credits.

The combined impact of the proposals above would provide regulated parties more options to comply and reduce the possibility that parties will violate the rules, especially in the program's early years.

Statement of Need

There are four primary goals of the proposed rulemaking. This table summarizes the need for the proposed rule change, how the proposed rule change addresses the need and how DEQ would know whether the proposed rule change addresses the need.

Goal	Specific Issue	Proposed rule changes	What need would the proposed rule address?	How would the proposed rule address the need?	How would DEQ know the rule addressed the need?
324	Remove the Dec. 31, 2015, sunset date	OAR 340-253-8010 OAR 340-253-8020	Required by statute. Provides certainty about program implementation beyond 2015.	It would establish clean fuels standards beginning in 2016.	Reports would document GHG reductions beginning in 2016.
Senate Bill 3	Exempt fuels used in watercraft, locomotives and construction equipment	OAR 340-253-0250	Required by statute.	It would exempt additional fuel uses from compliance.	Documentation is required to prove exemptions.
Implementing Se	Increase threshold for small importers from 250,000 to 500,000 gallons per year. Exempt small importers from complying with the standards.	OAR 340-253-0100	Required by statute. Mitigates costs to small businesses.	It would exempt more small businesses from having to comply with the standards.	Businesses would need to report annual volume threshold to quality for the exemption.
Im	Amend the fuel specification for biodiesel and biodiesel blends	OAR 340-253-1010	Required by statute	It would establish new fuel specifications for biodiesel and biodiesel blends.	Importers would be required to provide proof of fuel testing to generate credits.
ifying ıse Gas	Direct emissions: OR-GREET	OAR 340-253-0400	The current version of OR-GREET needs to be updated.	It would incorporate the latest science to calculate direct GHG emissions.	OR-GREET 2.0 would be used to calculate carbon intensities of fuels.
itely Quantifying e Greenhouse Ga Emissions	Emissions from crude extraction: OPGEE	OAR 340-253-0400	The current version of OR-GREET needs to be updated.	It would incorporate the latest science to calculate GHG emissions.	OPGEE 1.1 would be incorporated into OR-GREET 2.0.
Accurately Quantifying Lifecycle Greenhouse Gas Emissions	Emissions from indirect land use change: ILUC	OAR 340-253-8030 OAR 340-253-8040	A complete lifecycle assessment needs to consider direct and indirect emissions.	It would provide a more complete accounting of total lifecycle emissions from biofuels.	ILUC would be added to calculate carbon intensities of fuels.

Goal	Specific Issue	Proposed rule changes	What need would the proposed rule address?	How would the proposed rule address the need?	How would DEQ know the rule addressed the need?
e in the	Expand use of web-based reporting tool	OAR 340-253-0620	There needs to be an efficient system to manage credit transactions.	It would expand the use of the CFP Online System to manage credit transactions.	Businesses would use the CFP Online System to transact credits beginning 2016.
to Participate in the rogram	Accept CARB-certified carbon intensities, upon DEQ approval	OAR 340-253-0450			
cess to I	Adopt GREET calculators	OAR 340-253-0450	There needs to be an efficient process to approve carbon intensities of fuel.		Applicants proposing these values would need minimal DEQ review.
g the Process to Partic Clean Fuels Program	Develop default lookup tables	OAR 340-253-0450			
Streamlining the Process Clean Fuels P	Allow small importers of finished fuels to use DEQ's EZ-Fuels	OAR 340-253-0650	There needs to be ways to mitigate costs to small businesses.	It would give small importers the option of using one reporting system to satisfy the reporting requirements from two programs.	Small importers can use the EZ-Fuels instead of the CFP Online System.
exibility to	Make initial compliance period two years long	OAR 340-253-0100	There needs to be flexibility for businesses to comply	It would give businesses extra time to comply.	Businesses would demonstrate compliance for the 2016-17 compliance period.
Providing Additional Flexibility to Comply	Allow extra time to acquire credits to comply: carry back	OAR 340-253-1030	There needs to be flexibility for businesses to comply.	It would give businesses extra time to comply.	After the annual compliance reports are submitted, some businesses may use the extra quarter to comply.
Providing A	Extend compliance period for large importers of finished fuels	OAR 340-253-1030	There needs to be more flexibility for small businesses to comply.	It would give businesses a longer time to comply.	Deficits from 2016 and/or 2017 may be carried over to 2018.

Rules affected, authorities, supporting documents

Lead division

Environmental Solutions Division Air Quality Planning Section

Program or activity

Oregon Clean Fuels Program

Chapter 340 action

Amend	OAR 340-012-0054, OAR 340-012-0135, OAR 340-012-0140, OAR 340-253-0000, OAR 340-253-0040, OAR 340-253-0060, OAR 340-253-0100, OAR 340-253-0200, OAR 340-253-0250, OAR 340-253-0310,OAR 340-253-0320, OAR 340-253-0330, OAR 340-253-0340, OAR 340-253-0400, OAR 340-253-0450, OAR 340-253-0500, OAR 340-253-0600, OAR 340-253-0620, OAR 340-253-0630, OAR 340-253-1020, OAR 340-253-1000, OAR 340-253-1010, OAR 340-253-1020, OAR 340-253-1030, OAR 340-253-1050, OAR 340-253-2000, OAR 340-253-2100, OAR 340-253-2000, OAR 340-253-8020, OAR 340-253-8010, OAR 340-253-8020, OAR 340-253-8030, OAR 340-253-8040, OAR 340-253-8050, OAR 340-253-8060, OAR 340-253-8070, OAR 340-253-8080
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Statutory authority

ORS 468.020; 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3.

Statute implemented

2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3

Legislation

House Bill 2186 (2009) & Senate Bill 324 (2015)

Documents relied on for rulemaking ORS 183.335(2)(b)(D)

Document title	Document location
Senate Bill 324 (2015)	http://www.deq.state.or.us/aq/cleanFuel/docs/SB324.pdf
Oregon Low Carbon Fuel Standards Advisory Committee Process and Program Design Final Report (2010)	http://www.deq.state.or.us/aq/cleanFuel/ruleprocess.ht m
Oregon Clean Fuels Program Phase 1 Rulemaking materials (2012)	http://www.deq.state.or.us/regulations/2012AdoptedRules.htm
Oregon Clean Fuels Program Phase 2 Rulemaking materials (2015)	http://www.oregon.gov/deq/RulesandRegulations/Pages/2014/RCFPPh2.aspx
Oregon Clean Fuels Program Updates Rulemaking Advisory Committee (2015)	http://www.oregon.gov/deq/RulesandRegulations/Page s/Advisory/acleanfuelsupdate.aspx
ICF Task 3 report	http://www.oregon.gov/deq/RulesandRegulations/Doc uments/T3m3.pdf
Applications from registered regulated parties for the Oregon Clean Fuels Program	Program files located at: DEQ Headquarters 811 SW 6th Avenue Portland OR 97204
California Low Carbon Fuel Standard regulation, workgroup and rulemaking documents	http://www.arb.ca.gov/fuels/lcfs/lcfs.htm
Argonne GREET model	https://greet.es.anl.gov/
Stanford University OPGEE model	https://pangea.stanford.edu/researchgroups/eao/research/opgee-oil-production-greenhouse-gas-emissions-estimator

Fee Analysis

This rulemaking does not involve fees.

Statement of fiscal and economic impact

Fiscal and Economic Impact

The Oregon Clean Fuels Program is a technology-neutral, market-based regulatory approach to reduce carbon pollution from transportation fuels. The program does not mandate the use of any particular type of fuel or technology. Instead, it defines a performance standard to reduce the average carbon intensity of fuels sold by 10 percent over 10 years. The program offers many strategies for meeting the clean fuel standards by allowing each regulated party the flexibility to use any combination of these strategies to meet its particular circumstance, perspective and business needs.

The scope of this fiscal and economic impact statement is limited to the impact of the proposed rule changes in this rulemaking. The nature of fiscal impacts fall into three main categories: a) changes in the potential market value of lower carbon fuels based on the updated carbon intensities (see the discussion below about the costs to reduce carbon); b) potential costs related to enforcement; and c) cost savings from streamlining program requirements (see the discussion below about the administrative costs).

Statement of Cost of Compliance

General Direct Costs

• Administrative Costs

There is a one-time cost to register with the program if the business is not already registered. There are on-going costs to keep records, submit reports, obtain carbon intensities, and generate and transfer credits.

The proposed rule changes, especially those that aim to streamline the process to obtain a carbon intensity value for a particular fuel, significantly reduce the administrative costs associated with participating in the program.

• Costs Related to Enforcement

There are costs related to being involved in an enforcement action that includes responding to requests for additional information, correcting the violation and the payment of civil penalties if assessed.

The proposed enforcement rule changes would not have an economic impact on businesses, individuals or government entities unless they violate the program rules.

• Costs to Reduce Carbon

To achieve the clean fuel standards, each regulated party could provide greater volumes of lower carbon fuels, blend different types of lower carbon fuels or purchase credits from providers of clean fuels. These options would have varying costs. Many lower carbon fuels are cheaper than the gasoline and diesel fuel they replace while others are more expensive. Many alternative fuels also require investment in dispensing infrastructure or vehicles.

Since clean fuel credits would be bought and sold on the free market and prices negotiated between private businesses, DEQ cannot accurately predict the actual cost impacts related to the credit market. DEQ can, however, provide a general sense of positive or negative fiscal impact based on the proposed changes to carbon intensity values in terms of credit generation potential.

"Credit Generation Potential" is defined as the difference in the carbon intensity of a particular lower carbon fuel relative to the petroleum fuel it substitutes for. For example, ethanol substitutes for gasoline or biodiesel substitutes for diesel. For producers or importers of lower carbon fuels, revenue is derived from selling credits generated by providing those fuels into the market. Changes in the carbon intensity of fuels as a result of the proposed rule changes can change, for better or worse, the credit generation potential of each, and thus change the potential revenue derived from of selling that fuel.

Tables 5 and 6 below provide a summary of changes to the credit generation potentials of selected fuels that substitute for gasoline or diesel.

Table 5. Credit Generation Potential of Gasoline Substitutes (gCO2e/MJ)			
Fuel Type	Current Credit Generation Potential	Proposed Credit Generation Potential	Net Change in Credit Generation Potential
Baseline fue	el: Gasoline blended with	n 10 percent corn ethano	I
Corn ethanol (MW corn, MW production)	20.91	27.79	+ 6.88
Sugarcane ethanol (base case)	61.91	46.64	- 15.27
Compressed natural gas (pipeline)	21.31	17.75	- 3.56
Landfill compressed natural gas	56.28	47.42	- 8.86
Propane	6.26	14.63	+ 8.37
Electricity	57.46	65.83	+ 8.37

Table 6. Credit Generation Potential of Diesel Substitutes (gCO2e/MJ)			
Fuel Type	Current Credit Generation Potential	Proposed Credit Generation Potential	Net Change in Credit Generation Potential
Baseline fue	l: Diesel blended with 5 p	percent soybean biodies	el
Soybean biodiesel (MW soybean, MW production)	65.84	40.23	- 25.61
Canola biodiesel	67.09	40.64	- 26.45
Used cooking oil biodiesel (NW UCO, Oregon production)	68.37	80.36	+ 11.99
Corn oil biodiesel	83.09	61.59	- 21.50
Soybean renewable diesel	66.93	46.23	- 20.70
Tallow renewable diesel	47.76	68.52	+ 20.76
Liquefied natural gas (80% efficiency)	3.96	4.02	+ 0.06
Landfill liquefied natural gas (80% efficiency)	60.78	32.67	- 28.11

A positive change in credit generation potential likely increases revenues for providers of those fuels while a negative change likely decreases revenues. The changes seen here impact both the cost of compliance for regulated parties to reduce their carbon emissions and the benefits to providers of lower carbon fuels. This could also change the fuel types and volumes that are imported into Oregon or whether additional investment to support specific fuel types would be made.

DEQ has analyzed the overall impact that the changing carbon intensities have on the overall availability of credits generated through 2025 and there is still a net positive balance of credits. Therefore, DEQ does not believe there is a significant difference in the overall fiscal impact of the proposed rule changes.

Impact to Regulated Parties

• Importers of Blendstocks

These businesses must register with DEQ, keep records, submit reports and meet the clean fuel standards. Their cost to comply would include Administrative Costs and Costs to Reduce Carbon as described above. For those importers of blendstocks that provide lower carbon fuels, these businesses could also generate credits and benefit from the sale of those credits.

Importers of Finished Fuels

Large importers of finished fuels must register with DEQ, keep records, submit reports and meet the clean fuel standards. Their cost to comply would include Administrative Costs and Costs to Reduce Carbon as described above.

Small importers of finished fuels must register with DEQ, keep records and submit reports but do not have to meet the clean fuel standards. Their cost to comply would be limited to

Administrative Costs as described above.

• Transportation Fuels Producers

These businesses must register with DEQ, keep records and submit reports. However, since the only two producers located in the state produce lower carbon fuels, their cost to comply would be limited to Administrative Costs, as described above. These businesses would also generate credits and benefit from the sale of those credits.

Impact to Providers of Clean Fuels – Credit Generators

The program does not require providers of clean fuels to participate, but allows participation if they want to generate credits. Any business that elects to participate in the program must register with DEQ, keep records and submit reports. Their cost to comply would be limited to Administrative Costs, as described above. These businesses would also generate credits and benefit from the sale of those credits.

The proposed rule changes affect clean fuels providers in different ways, depending on the change in the credit generation potential of different fuel types as described above:

- For fossil liquefied natural gas the net change in credit generation potential is negligible.
- For sugarcane ethanol, soybean biodiesel, canola biodiesel, corn oil biodiesel, soybean renewable diesel and landfill liquefied natural gas, the net change in credit generation potential is a significant decrease.
- For fossil compressed natural gas and landfill compressed natural gas, the net change in credit generation potential is a moderate decrease.
- For used cooking oil biodiesel and tallow renewable diesel, the net change is a significant increase in credit generation potential.
- For corn ethanol, propane and electricity, the net change is a moderate increase in credit generation potential.

Additionally, for businesses that import biodiesel and biodiesel blends, the proposed rule changes would prohibit credit generation from fuels that don't meet the European standard EN 15751 for oxidation stability. DEQ expects that biodiesel producers would need to conduct additional testing to ensure compliance with the proposed standard. Biodiesel producers who cannot meet the standards might still bring their fuel to Oregon but would not be able to generate credits from the Clean Fuels Program. Some producers might need to include additives to their fuel in order to meet the standard at an additional cost to the fuel.

Potential Impact to Fuel Consumers

As described in the Statement of Economic and Fiscal Impact for the Phase 2 Rulemaking (January 2015), fuel consumers could experience both positive and negative impacts as regulated parties pass their savings and costs to their customers. For example, if the price of lower carbon fuels were less than the fuels they replace, then costs should decrease. Conversely, if the price of lower carbon fuels were greater than the fuels they replace or if regulated parties had to purchase credits to comply with

the standards, costs could increase. The proposed rule changes do not change this potential impact of the overall program.

Oregon Department of Environmental Quality

<u>Direct Impacts</u>: DEQ would use the equivalent of 2.5 FTE of existing staff resources to implement the Clean Fuels Program. The staff resources would provide assistance to regulated parties and potential credit generators about how to participate and comply with program rules; develop and maintain the web-based reporting and credit transaction system; audit fuel transactions and reports; and evaluate and approve applications for carbon intensities. The proposed rule changes would reduce DEQ's cost to implement the Clean Fuels Program.

State and federal agencies

<u>Direct Impacts</u>: The proposed rule changes do not impose direct fiscal or economic effects on state or federal agencies, unless the agency imports transportation fuel or provides clean fuels. If so, see the discussions about Providers of Clean Fuels above and General Direct Costs above.

<u>Indirect Impacts</u>: State and federal agencies are fuel consumers. See the discussions about the Potential Impact on Fuel Consumers above.

Local governments

<u>Direct Impacts</u>: The proposed rule changes do not impose direct fiscal or economic effects on local governments, unless the local government imports transportation fuel or provides clean fuels. If so, see the discussions about Providers of Clean Fuels above and General Direct Costs above.

<u>Indirect Impacts</u>: Local governments are fuel consumers. See the discussions about the Potential Impact on Fuel Consumers above.

Public

<u>Direct Impacts</u>: The proposed rule changes do not impose direct fiscal or economic effects on the public.

<u>Indirect Impacts</u>: Members of the public purchase fuel for their personal vehicles. See the discussions about the Potential Impact on Fuel Consumers above.

Large businesses - businesses with more than 50 employees

There are currently 27 large businesses registered with the program as regulated parties. These are primarily fuel terminal operators, biofuel producers and fuel marketers.

Large businesses also provide clean fuels and may voluntarily participate in the program to generate credits. Examples include large businesses that provide workplace charging for their employees' electric vehicles; auto manufacturers that provide free chargers for individuals or fleets that purchase their electric vehicles; utilities that provide liquefied or compressed natural gas. The proposed rule changes do not directly impact the number or type of large businesses subject to the program.

<u>Direct Impacts</u>: See the discussions about General Direct Costs and Providers of Clean Fuels above.

<u>Indirect Impacts:</u> Large businesses are fuel consumers. See the discussions about the Potential Impact on Fuel Consumers above.

Small businesses – businesses with 50 or fewer employees

There are currently 45 small businesses registered with the program as importers of finished fuels. These are primarily fuel distributors and biofuel producers.

<u>Direct Impacts on importers of finished fuels</u>: The proposed rule changes modify the threshold between large and small importer of finished fuels. 16 small businesses are registered as small importers of finished fuels. Small importers of finished fuels would be exempt from having to complying with the clean fuel standards and have the option of using a simpler reporting system. 29 small businesses are registered as large importers of finished fuels. Large importers of finished fuels would have extra time to comply with the clean fuel standards. See also the discussions about General Direct Costs above.

<u>Direct Impacts on providers of clean fuels</u>: Small businesses also provide clean fuels and may voluntarily participate in the program to generate credits. The proposed rule changes do not directly impact the number or type of small businesses subject to the program. See also the discussions about Providers of Clean Fuels above.

<u>Indirect Impacts</u>: Small businesses are fuel consumers. See the discussions about the Potential Impact on Fuel Consumers above.

a. Estimated number of small businesses and types of businesses and industries with small businesses subject to proposed rule.	There are currently 45 small businesses registered with the program, primarily fuel distributors and biofuel producers.
b. Projected reporting, recordkeeping and other administrative activities, including costs of professional services, required for small businesses to comply with the proposed rule.	The proposed rule changes would reduce the administrative costs to the 16 small businesses that are also small importers of finished fuels by allowing for alternative reporting. There would be no change for the 29 small businesses that are large importers of finished fuels.
c. Projected equipment, supplies, labor and increased administration required for small businesses to comply with the proposed rule.	The proposed rule changes would not affect these costs.
d. Describe how DEQ involved small businesses in developing this proposed rule.	DEQ convened a 20-member advisory committee that included small businesses to discuss the proposed rule changes.

Documents relied on for fiscal and economic impact

Document title	Document location
	Program files located at:
Registration and reporting information	DEQ headquarters
from the registered regulated parties	811 SW 6 th Avenue
	Portland OR 97204
Clean Fuels Program Phase 1	http://www.deq.state.or.us/about/eqc/agendas/attach
Rulemaking materials, Dec. 2012	ments/2012dec/ItemN_Attachments.pdf
Clean Fuels Program Phase 2	http://www.oregon.gov/deq/EQC/Documents/2015/
Rulemaking, Jan. 2015	0115ItemFCleanFuels.pdf
Task 3 – Updated Compliance	http://www.oregon.gov/deq/RulesandRegulations/D
Scenarios (ICF International, 2014)	ocuments/T3m3.pdf

Advisory committee

DEQ appointed an advisory committee to provide input on the proposed rules and make recommendations on this fiscal and economic impact statement.

As ORS 183.333 requires, DEQ asked for the committee's recommendations on:

- Whether the proposed rules would have a fiscal impact,
- The extent of the impact, and
- Whether the proposed rules would have a significant impact on small businesses and complies with ORS 183.540.

The committee reviewed the draft fiscal and economic impact statement. Its findings are stated in the approved minutes dated Aug. 25, 2015 at: <u>Advisory Committee Minutes</u>. The committee determined the proposed rules would have an impact on businesses, both large and small in Oregon. Some impacts may be beneficial while others might be negative. The committee did not offer any additional suggestions to mitigate the economic impact on small businesses.

The following advisory committee work was instrumental to the design of the Oregon Clean Fuels Program.

2015

From July through August 2015, DEQ worked with a 20-member advisory committee that included small businesses. The committee discussed updates to the program proposed in this rulemaking. Membership and meeting summaries are at: 2015 Advisory Committee Information.

2014

From June through August 2014, DEQ worked with a 21-member advisory committee that included small businesses. The committee discussed phase 2 design of the Clean Fuels Program. Membership and meeting summaries are at: 2014 Advisory Committee.

2013

During the first half of 2013, DEQ conducted extensive outreach to fuel importers and producers

across the state to determine who was regulated and non-regulated. This included small businesses. Outreach included a web-based survey, individual phone conversations and in-person meetings in Portland, Eugene, Salem, Medford, Bend and Pendleton.

2012

In May 2012, DEQ convened an advisory committee to focus on the fiscal and economic impact of implementing phase 1. Membership and the meeting summary are at: 2012 Advisory Committee.

2009-2010

From November 2009 through November 2010, DEQ worked with a 29-member advisory committee that included small businesses. The committee discussed the design of the Oregon Clean Fuels Program. Membership and meeting summaries are at: 2009 Advisory Committee.

Housing cost

As ORS 183.534 requires, DEQ evaluated whether the proposed rules would have an effect on the development cost of a 6,000-square-foot parcel and construction of a 1,200-square-foot detached, single-family dwelling on that parcel. DEQ determined the proposed rules would have no effect on the development costs because the proposed rules only affect transportation fuels used in Oregon.

Federal relationship

Relationship to federal requirements

This section satisfies the requirements of <u>OAR 340-011-0029</u> and <u>ORS 468A.327</u> to clearly identify the relationship between the proposed rules and applicable federal requirements.

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 and 2015 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 state wide 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
 - o 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 do not affect land use under OAR 340-018-0030 or DEQ's State Agency Coordination Program.

Stakeholder and public involvement

Advisory committee

Background

DEQ convened the Clean Fuels Program Updates Rulemaking advisory committee which met three times between July and Aug. 2015. The committee included importers of various transportation fuels - gasoline, diesel, ethanol, biodiesel, natural gas and propane; large and small businesses that may be regulated parties, credit generators or brokers; the general public and conservation organizations with members that may be impacted by the program. The committee's web page is located here: Advisory Committee.

The committee members were:

Name	Representing
Mark Reeve, Chair	
Darren Engle, primary member	Blue Star Gas
Ryan Lamberg, alternate	California Biodiesel Initiative
Ralph Poole, primary member	Campo & Poole Distributing
Jeff Rouse, primary member	Carson Oil Co., Inc.
Micah Berry, primary member	Chevron
Nick Economides, alternate	Chevron
Todd Campbell, primary member	Clean Energy Fuels
Ryan Kenny, alternate	Clean Energy Fuels
Kristen Sheeran, alternate	Climate Solutions
Todd Ellis, primary member	Imperium Renewables
Shelby Neal, primary member	National Biodiesel Board
Simon Mui, primary member	Natural Resources Defense Council
Shanna Brownstein, primary member	Northwest Natural Gas
Jana Gastellum, primary member	Oregon Environmental Council
Tom Koehler, primary member	Pacific Ethanol
Dan Sinks, primary member	Phillips 66
Alvin Dunn, alternate	Phillips 66
Geoff Cooper, primary member	Renewable Fuels Association
Jessica Hoffman, primary member	RPMG
Connor Nix, primary member	Shell Oil Products US
Gavin Carpenter, primary member	SeQuential Biodiesel
Terese Tyler, primary member	Space Age Fuel
Miles Heller, primary member	Tesoro

Name	Representing
Derek Regal, alternate	Tesoro
Jeremy Martin, alternate	Union for Concerned Scientists
Joshua Skov, primary member	University of Oregon
Frank Holmes, primary member	Western States Petroleum Association

Meeting notifications

To notify people about advisory committee's activities, DEQ sent GovDelivery bulletins, a free email subscription service, to the following lists:

- DEQ sent a one-time notice to Oregon Clean Fuels subscribers to describe how to sign up for advisory committee meeting notices. ORS 192.640.
- People who signed up for the Updates Rulemaking Advisory Committee list.

Committee input is in the advisory committee meeting summaries. The committee also reviewed the statement of fiscal and economic impact.

EQC prior involvement

DEQ shares general rulemaking information with EQC through the monthly Director's Report. DEQ shared information about this rulemaking:

- On June 10-11, 2015, in the Director's Report at the meeting in Salem.
- On April 15-16, 2015, in the Director's Report at the meeting in Portland.

Public notice

DEQ provided notice of the proposed rulemaking and rulemaking hearing on September 15, 2015 by:

- Filing notice with the Oregon Secretary of State for publication in the Oregon Bulletin on Oct. 1, 2015,
- Posting the Notice, Invitation to Comment and Draft Rules on the web page for this rulemaking, located at: <u>Clean Fuels Program Update Rulemaking</u>
- Emailing interested parties on the following DEQ lists through GovDelivery:
 - o Oregon Clean Fuels Program 2,491 subscribers
 - o Clean Fuels Program Updates Rulemaking 424 subscribers
 - o DEQ Rulemaking 6,743 subscribers
- Emailing the following key legislators required under ORS 183.335:
 - o Senator Chris Edwards, Chair, Senate Environment and Natural Resources Committee
 - o Representative Jessica Vega-Pederson, Chair, House Energy and Environment Committee
 - o Senator Lee Beyer

Request for other options

During the public comment period, DEQ requested public comment on whether to consider other options for achieving the rules' substantive goals while reducing the rules' negative economic impact on business. Attachment B includes a summary of comments and DEQ responses.

Public hearings and comment

DEQ held one public hearing and received five public comments.

Meeting location: DEQ Headquarters Office EQC Conference Room

Meeting date and time: October 19, 2015 9:30 a.m.

Presiding Officer: Kevin Downing

The presiding officer convened the hearing and summarized procedures for the hearing. The presiding officer asked people who wanted to present verbal comments to complete a registration form or, if attending by conference call to indicate their intent to present comments.

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

DEQ added all names, addresses and affiliations of participants who presented testimony to the commenter section of this staff report. DEQ added all oral comments presented at the hearing to the summary of comments and agency responses in Attachment B.

Summary of comments and DEQ responses

For public comments received by the close of the public comment period, Attachment B organizes comments into 86 categories with cross references to the commenter number. DEQ's response follows the summary. Original comments are on file with DEQ.

Commenters

Comments received by close of public comment period

The table below lists 40 people and organizations that submitted public comments about the proposed rules by the deadline. Original comments are on file with DEQ.

Commenter ID	Commenter	Organization
1	Robert Russell	Oregon Trucking Association
2	Shannon Baker-Branstetter	Consumers Union
3	Marie-Helene Labrie	Enerkem
4	Geoff Cooper	Renewable Fuels Association

5	Jessica Hoffmann	RPMG
7	Steven Harrington	Oregon Dept of Agriculture
8	Stephanie Searle	International Center for Clean Transportation
9	Ian Thomson	Western Canada Biodiesel Association
10	Daniel Sinks	Phillips 66
11	Mike Freese	Associated Oregon Industries
12	Simon Mui	Natural Resources Defense Council
13	Chris Blyly	Growth Energy
14	Stephanie Batchelor	Biotechnology Industry Organization
15	Charlie Peters	Clean Air Performance Professionals
16	Chris Hagerbaumer	Oregon Environmental Council
17	Gavin Carpenter	SeQuential Biodiesel
18	Graham Noyes	Low Carbon Fuels Coalition
19	Jennifer Dresler	Oregon Farm Bureau
20	Kristen Sheeran	Climate Solutions
21	Graham Noyes	Emerald Biofuels
22	Jan Koninckx	DuPont
23	Nik Blosser	Citizen
24	Thomas Wheatley	Renew Oregon
25	Jessica Spiegel	Western States Petroleum Association
26	Tom Koehler	Pacific Ethanol
27	Jeremy Martin	Union of Concerned Scientists
28	Ryan Kenny	Clean Energy
29	Rebecca Deehr	Environmental Entrepreneurs
30	Harrison Pettit	Pacific Ag
31	Shelby Neal	National Biodiesel Board
32	Carrie Nyssen	American Lung Association in Oregon
33	Colin Murphy	Next Gen Climate
34	Gary Neal	Port of Morrow
35	Dayne Delahoussaye	Neste US, Inc.
36	Kristen Sheeran	Climate Solutions
37	Chris Hagerbaumer	Oregon Environmental Council
38	Frank Holmes	Western States Petroleum Association
39	Miles Heller	Tesoro
40	Jamie Painter	Union of Concerned Scientists

Implementation

The proposed rules would become effective Jan. 1, 2016.

NOTIFICATION

- DEQ would notify affected parties via email using the Clean Fuels Program GovDelivery list.
- DEQ would update its webpage to reflect the current information.
- DEQ would publish the adopted rules in the Oregon Bulletin.

OUTREACH

- DEQ would conduct additional outreach to new potential regulated parties and credit generators.
- DEQ would provide technical assistance about program requirements to regulated parties, credit generators and brokers.
- DEQ would provide general education to decision makers, interested stakeholders and the general public about changes to the program.

REPORTING SYSTEMS

• DEQ would modify the CFP Online System to incorporate these rule changes.

Requirement

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

Exemption from five-year rule review

The Administrative Procedures Act, ORS 183.405(4), exempts all of the proposed rules from the five-year review because the proposed rules would amend or repeal an existing rule.

DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION 12

ENFORCEMENT PROCEDURE AND CIVIL PENALTIES

340-012-0054

Air Quality Classification of Violations

- (1) **Class I**:
- (a) Constructing a new source or modifying an existing source without first obtaining a required New Source Review/Prevention of Significant Deterioration (NSR/PSD) permit;
- (b) Operating a major source, as defined in OAR 340-200-0020, without first obtaining the required permit;
- (c) Exceeding a Plant Site Emission Limit (PSEL);
- (d) Failing to install control equipment or meet performance standards as required by New Source Performance Standards under OAR 340 division 238 or National Emission Standards for Hazardous Air Pollutant Standards under OAR 340 division 244;
- (e) Exceeding a hazardous air pollutant emission limitation;
- (f) Failing to comply with an Emergency Action Plan;
- (g) Exceeding an opacity or emission limit (including a grain loading standard) or violating an operational or process standard, that was established pursuant to New Source Review/Prevention of Significant Deterioration (NSR/PSD);
- (h) Exceeding an emission limit or violating an operational or process standard that was established to limit emissions to avoid classification as a major source, as defined in OAR 340-200-0020;
- (i) Exceeding an emission limit, including a grain loading standard, by a major source, as defined in OAR 340-200-0020, when the violation was detected during a reference method stack test;
- (j) Failing to perform testing or monitoring, required by a permit, rule or order, that results in failure to show compliance with a Plant Site Emission Limit (PSEL) or with an emission limitation or a performance standard set pursuant to New Source Review/Prevention of Significant Deterioration (NSR/PSD), National Emission Standards for Hazardous Air Pollutants (NESHAP), New Source Performance Standards (NSPS), Reasonably Available Control Technology (RACT), Best Achievable Control

Technology (BACT), Maximum Achievable Control Technology (MACT), Typically Achievable Control Technology (TACT), Lowest Achievable Emission Rate (LAER) or adopted pursuant to section 111(d) of the Federal Clean Air Act;

- (k) Causing emissions that are a hazard to public safety;
- (1) Violating a work practice requirement for asbestos abatement projects;
- (m) Improperly storing or openly accumulating friable asbestos material or asbestoscontaining waste material;
- (n) Conducting an asbestos abatement project, by a person not licensed as an asbestos abatement contractor;
- (o) Violating an OAR 340 division 248 disposal requirement for asbestos-containing waste material;
- (p) Failing to hire a licensed contractor to conduct an asbestos abatement project;
- (q) Openly burning materials which are prohibited from being open burned anywhere in the state by OAR 340-264-0060(3), or burning materials in a solid fuel burning device, fireplace, trash burner or other device as prohibited by OAR 340-262-0900(1);
- (r) Failing to install certified vapor recovery equipment;
- (s) Delivering for sale a noncompliant vehicle by an automobile manufacturer in violation of Oregon Low Emission Vehicle rules set forth in OAR 340 division 257;
- (t) Exceeding an Oregon Low Emission Vehicle average emission limit set forth in OAR 340 division 257;
- (u) Failing to comply with Zero Emission Vehicle (ZEV) sales requirements set forth in OAR 340 division 257;
- (v) Failing to obtain a Motor Vehicle Indirect Source Permit as required in OAR 340 division 257; or
- (w) Selling, leasing, or renting a noncompliant vehicle by an automobile dealer or rental car agency in violation of Oregon Low Emission Vehicle rules set forth in OAR 340 division 257; or-
- (x) Failing to comply with any of the clean fuel standards set forth in OAR 340-253-0100(6), OAR 340-253-8010 (Table 1) and OAR 340-253-8020 (Table 2).
- (2) Class II:

- (a) Constructing or operating a source required to have an Air Contaminant Discharge Permit (ACDP) or registration without first obtaining such permit or registration, unless otherwise classified:
- (b) Violating the terms or conditions of a permit or license, unless otherwise classified;
- (c) Modifying a source in such a way as to require a permit modification from DEQ without first obtaining such approval from DEQ, unless otherwise classified;
- (d) Exceeding an opacity limit, unless otherwise classified;
- (e) Exceeding a Volatile Organic Compound (VOC) emission standard, operational requirement, control requirement or VOC content limitation established by OAR 340 division 232;
- (f) Failing to timely submit a complete ACDP annual report;
- (g) Failing to timely submit a certification, report, or plan as required by rule or permit, unless otherwise classified;
- (h) Failing to timely submit a complete permit application or permit renewal application;
- (i) Failing to comply with the open burning requirements for commercial, construction, demolition, or industrial wastes in violation of OAR 340-264-0080 through 0180;
- (j) Failing to comply with open burning requirements in violation of any provision of OAR 340 division 264, unless otherwise classified; or burning materials in a solid fuel burning device, fireplace, trash burner or other device as prohibited by OAR 340-262-0900(2).
- (k) Failing to replace, repair, or modify any worn or ineffective component or design element to ensure the vapor tight integrity and efficiency of a stage I or stage II vapor collection system;
- (l) Failing to provide timely, accurate or complete notification of an asbestos abatement project;
- (m) Failing to perform a final air clearance test or submit an asbestos abatement project air clearance report for an asbestos abatement project;
- (n) Violating on road motor vehicle refinishing rules contained in OAR 340-242-0620; or
- (o) Failing to comply with an Oregon Low Emission Vehicle reporting, notification, or warranty requirement set forth in OAR division 257.

- (p) Failing to register as a regulated party in the Oregon Clean Fuels Program under OAR 340-253-0100(1) and (4), when the person is a producer or importer of blendstocks, as those terms are defined in OAR 340-253-0040;
- (q) Failing to submit a broker designation form under OAR 340-253-0100(3) and (4)(c);
- (r) Failing to keep records under OAR 340-253-0600 when the records relate to obtaining a carbon intensity under OAR 340-253-0450; or
- (s) Failing to keep records related to obtaining a carbon intensity under OAR 340-253-0450; or
- (t) Failing to submit an annual compliance report under OAR 340-253-0100(8).
- (3) Class III:
- (a) Failing to perform testing or monitoring required by a permit, rule or order where missing data can be reconstructed to show compliance with standards, emission limitations or underlying requirements;
- (b) Constructing or operating a source required to have a Basic Air Contaminant Discharge Permit without first obtaining the permit;
- (c) Modifying a source in such a way as to require construction approval from DEQ without first obtaining such approval from DEQ, unless otherwise classified;
- (d) Failing to revise a notification of an asbestos abatement project when necessary, unless otherwise classified:
- (e) Submitting a late air clearance report that demonstrates compliance with the standards for an asbestos abatement project; or
- (f) Licensing a noncompliant vehicle by an automobile dealer or rental car agency in violation of Oregon Low Emission Vehicle rules set forth in OAR 340 division 257;
- (g) Failing to register as a regulated party in the Oregon Clean Fuels Program under OAR 340-253-0100(1) and (4), when the person is an importer of finished fuels, as those terms are defined in OAR 340-253-0040;
- (h) Failing to keep records under OAR 340-253-0600, except as provided in subsection (2)(r); or
- (i) Failing to submit quarterly progress reports under OAR 340-253-0100(7).

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

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Stat. Auth.: ORS 468.020, 468A.025 & 468A.045 Stats. Implemented: ORS 468.020 & 468A.025

Hist.: DEQ 78, f. 9-6-74, ef. 9-25-74; DEQ 5-1980, f. & ef. 1-28-80; DEQ 22-1984, f. & ef. 11-8-84; DEQ 22-1988, f. & cert. ef. 9-14-88; DEQ 4-1989, f. & cert. ef. 3-14-89; DEQ 15-1990, f. & cert. ef. 3-30-90; DEQ 31-1990, f. & cert. ef. 8-15-90; DEQ 2-1992, f. & cert. ef. 1-30-92; DEQ 21-1992, f. & cert. ef. 8-11-92; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 20-1993(Temp), f. & cert. ef. 11-4-93; DEQ 4-1994, f. & cert. ef. 3-14-94; DEQ 13-1994, f. & cert. ef. 5-19-94; DEQ 21-1994, f. & cert. ef. 10-14-94; DEQ 22-1996, f. & cert. ef. 10-22-96; DEQ 19-1998, f. & cert. ef. 10-12-98; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; Renumbered from 340-012-0050, DEQ 4-2005, f. 5-13-05, cert. ef. 6-1-05; DEQ 4-2006, f. 3-29-06, cert. ef. 3-31-06; DEQ 6-2006, f. & cert. ef. 6-29-06; DEQ 2-2011, f. 3-10-11, cert. ef. 3-15-11; DEQ 1-2014, f. & cert. ef. 1-6-14

340-012-0135

Selected Magnitude Categories

- (1) Magnitudes for selected Air Quality violations will be determined as follows:
- (a) Opacity limit violations:
- (A) Major Opacity measurements or readings of 20 percent opacity or more over the applicable limit, or an opacity violation by a federal major source as defined in OAR 340-200-0020;
- (B) Moderate Opacity measurements or readings greater than 10 percent opacity and less than 20 percent opacity over the applicable limit; or
- (C) Minor Opacity measurements or readings of 10 percent opacity or less over the applicable limit.
- (b) Operating a major source, as defined in OAR 340-200-0020, without first obtaining the required permit: Major if a Lowest Achievable Emission Rate (LAER) or Best Achievable Control Technology (BACT) analysis shows that additional controls or offsets are or were needed, otherwise apply OAR 340-012-0130.
- (c) Exceeding an emission limit established pursuant to New Source Review/Prevention of Significant Deterioration (NSR/PSD): Major if exceeded the emission limit by more than 50 percent of the limit, otherwise apply OAR 340-012-0130.
- (d) Exceeding an emission limit established pursuant to federal National Emission Standards for Hazardous Air Pollutants (NESHAPs): Major if exceeded the Maximum Achievable Control Technology (MACT) standard emission limit for a directly-measured hazardous air pollutant (HAP), otherwise apply OAR 340-012-0130.

- (e) Air contaminant emission limit violations for selected air pollutants: Magnitude determinations under this subsection shall will be made based upon significant emission rate (SER) amounts listed in OAR 340-200-0020 (Tables 2 and 3).
- (A) Major:
- (i) Exceeding the annual emission limit as established by permit, rule or order by more than the annual SER; or
- (ii) Exceeding the short-term (less than one year) emission limit as established by permit, rule or order by more than the applicable short-term SER.
- (B) Moderate:
- (i) Exceeding the annual emission limit as established by permit, rule or order by an amount from 50 up to and including 100 percent of the annual SER; or
- (ii) Exceeding the short-term (less than one-year) emission limit as established by permit, rule or order by an amount from 50 up to and including 100 percent of the applicable short-term SER.
- (C) Minor:
- (i) Exceeding the annual emission limit as established by permit, rule or order by an amount less than 50 percent of the annual SER; or
- (ii) Exceeding the short-term (less than one year) emission limit as established by permit, rule or order by an amount less than 50 percent of the applicable short-term SER.
- (f) Violations of Emergency Action Plans: Major Major magnitude in all cases.
- (g) Violations of on road motor vehicle refinishing rules contained in OAR 340-242-0620: Minor Refinishing 10 or fewer on road motor vehicles per year.
- (h) Asbestos violations These selected magnitudes apply unless the violation does not cause the potential for human exposure to asbestos fibers:
- (A) Major More than 260 linear feet or more than 160 square feet of asbestoscontaining material or asbestos-containing waste material;
- (B) Moderate From 40 linear feet up to and including 260 linear feet or from 80 square feet up to and including 160 square feet of asbestos-containing material or asbestos-containing waste material; or
- (C) Minor Less than 40 linear feet or 80 square feet of asbestos-containing material or asbestos-containing waste material.

- (D) The magnitude of the asbestos violation may be increased by one level if the material was comprised of more than five percent asbestos.
- (i) Open burning violations:
- (A) Major Initiating or allowing the initiation of open burning of 20 or more cubic yards of commercial, construction, demolition and/or industrial waste; or 5 or more cubic yards of prohibited materials (inclusive of tires); or 10 or more tires;
- (B) Moderate Initiating or allowing the initiation of open burning of 10 or more, but less than 20 cubic yards of commercial, construction, demolition and/or industrial waste; or 2 or more, but less than 5 cubic yards of prohibited materials (inclusive of tires); or 3 to 9 tires; or if DEQ lacks sufficient information upon which to make a determination of the type of waste, number of cubic yards or number of tires burned; or
- (C) Minor Initiating or allowing the initiation of open burning of less than 10 cubic yards of commercial, construction, demolition and/or industrial waste; or less than 2 cubic yards of prohibited materials (inclusive of tires); or 2 or less tires.
- (D) The selected magnitude may be increased one level if DEQ finds that one or more of the following are true, or decreased one level if DEQ finds that none of the following are true:
- (i) The burning took place in an open burning control area;
- (ii) The burning took place in an area where open burning is prohibited;
- (iii) The burning took place in a non-attainment or maintenance area for PM10 or PM2.5; or
- (iv) The burning took place on a day when all open burning was prohibited due to meteorological conditions.
- (j) Oregon Low Emission Vehicle Non-Methane Gas (NMOG) or Green House Gas (GHG) fleet average emission limit violations:
- (A) Major Exceeding the limit by more than 10 percent; or
- (B) Moderate Exceeding the limit by 10 percent or less.
- (k) Oregon Clean Fuels Program violations:
- (A) Exceeding the clean fuel standards set forth in OAR 340-253-0100(6), OAR 340-253-8010 (Table 1) and OAR 340-253-8020 (Table 2) by:
- (i) Major more than 15 percent;

- (ii) Moderate more than 10 percent but less than 15 percent;
- (iii) Minor 10 percent or less.
- (B) Failing to register under OAR 340-253-0100(1) and (4): Minor producers and importers of blendstocks;
- (C) Failing to submit broker designation form under OAR 340-253-0100(3) and (4)(c): Minor; or
- (D) Failing to keep records as set forth in OAR 340-253-0600, when the records relate to obtaining a carbon intensity under OAR 340-253-04500600: Minor; or
- (E) Failing to submit annual compliance reports under OAR 340-253-0100(8): Moderate.
- (2) Magnitudes for selected Water Quality violations will be determined as follows:
- (a) Violating wastewater discharge permit effluent limitations:
- (A) Major:
- (i) The dilution (D) of the spill or technology based effluent limitation exceedance was less than two, when calculated as follows: D = ((QR/4) + QI)/QI, where QR is the estimated receiving stream flow and QI is the estimated quantity or discharge rate of the incident:
- (ii) The receiving stream flow at the time of the water quality based effluent limitation (WQBEL) exceedance was at or below the flow used to calculate the WQBEL; or
- (iii) The resulting water quality from the spill or discharge was as follows:
- (I) For discharges of toxic pollutants: CS/D was more than CAcute, where CS is the concentration of the discharge, D is the dilution of the discharge as determined under (2)(a)(A)(i), and CAcute is the concentration for acute toxicity (as defined by the applicable water quality standard);
- (II) For spills or discharges affecting temperature, when the discharge temperature is at or above 32 degrees centigrade after two seconds from the outfall; or
- (III) For BOD5 discharges: (BOD5)/D is more than 10, where BOD5 is the concentration of the five-day Biochemcial Oxygen Demand of the discharge and D is the dilution of the discharge as determined under (2)(a)(A)(i).
- (B) Moderate:

- (i) The dilution (D) of the spill or the technology based effluent limitation exceedance was two or more but less than 10 when calculated as follows: D = ((QR/4) + QI)/QI, where QR is the estimated receiving stream flow and QI is the estimated quantity or discharge rate of the discharge; or
- (ii) The receiving stream flow at the time of the WQBEL exceedance was greater than, but less than twice, the flow used to calculate the WQBEL.
- (C) Minor:
- (i) The dilution (D) of the spill or the technology based effluent limitation exceedance was 10 or more when calculated as follows: D = ((QR/4) + QI)/QI, where QR is the receiving stream flow and QI is the quantity or discharge rate of the incident; or
- (ii) The receiving stream flow at the time of the WQBEL exceedance was twice the flow or more of the flow used to calculate the WQBEL.
- (b) Violating numeric water quality standards:
- (A) Major:
- (i) Increased the concentration of any pollutant except for toxics, dissolved oxygen, pH, and turbidity, by 25 percent or more of the standard;
- (ii) Decreased the dissolved oxygen concentration by two or more milligrams per liter below the standard:
- (iii) Increased the toxic pollutant concentration by any amount over the acute standard or by 100 percent or more of the chronic standard;
- (iv) Increased or decreased pH by one or more pH units from the standard; or
- (v) Increased turbidity by 50 or more nephelometric turbidity units (NTU) over background.
- (B) Moderate:
- (i) Increased the concentration of any pollutant except for toxics, pH, and turbidity by more than 10 percent but less than 25 percent of the standard;
- (ii) Decreased dissolved oxygen concentration by one or more, but less than two, milligrams per liter below the standard;
- (iii) Increased the concentration of toxic pollutants by more than 10 percent but less than 100 percent of the chronic standard;

- (iv) Increased or decreased pH by more than 0.5 pH unit but less than 1.0 pH unit from the standard; or
- (v) Increased turbidity by more than 20 but less than 50 NTU over background.
- (C) Minor:
- (i) Increased the concentration of any pollutant, except for toxics, pH, and turbidity, by 10 percent or less of the standard;
- (ii) Decreased the dissolved oxygen concentration by less than one milligram per liter below the standard;
- (iii) Increased the concentration of toxic pollutants by 10 percent or less of the chronic standard;
- (iv) Increased or decreased pH by 0.5 pH unit or less from the standard; or
- (v) Increased turbidity by 20 NTU or less over background.
- (c) The selected magnitude under (2)(a) or (b) may be increased one or more levels if the violation:
- (Ai) Occurred in a water body that is water quality limited (listed on the most current 303(d) list) and the discharge is the same pollutant for which the water body is listed;
- (iBi) Depressed oxygen levels or increased turbidity and/or sedimentation in a stream in which salmonids may be rearing or spawning as indicated by the beneficial use maps available at OAR 340-041-0101 through 0340;
- (iiCi) Violated a bacteria standard either in shellfish growing waters or during the period from June 1 through September 30; or
- (Div) Resulted in a documented fish or wildlife kill.
- (3) Magnitudes for selected Solid Waste violations will be determined as follows:
- (a) Operating a solid waste disposal facility without a permit or disposing of solid waste at an unpermitted site:
- (A) Major The volume of material disposed of exceeds 400 cubic yards;
- (B) Moderate The volume of material disposed of is greater than or equal to 40 cubic yards and less than or equal to 400 cubic yards; or
- (C) Minor The volume of materials disposed of is less than 40 cubic yards.

- (D) The magnitude of the violation may be raised by one magnitude if the material disposed of was either in the floodplain of waters of the state or within 100 feet of waters of the state.
- (b) Failing to accurately report the amount of solid waste disposed:
- (A) Major The amount of solid waste is underreported by 15 percent or more of the amount received;
- (B) Moderate The amount of solid waste is underreported by 5 percent or more, but less than 15 percent, of the amount received; or
- (C) Minor The amount of solid waste is underreported by less than 5 percent of the amount received.
- (4) Magnitudes for selected Hazardous Waste violations will be determined as follows:
- (a) Failure to make a hazardous waste determination;
- (A) Major Failure to make the determination on five or more waste streams;
- (B) Moderate Failure to make the determination on three or four waste streams; or
- (C) Minor Failure to make the determination on one or two waste streams.
- (b) Hazardous Waste treatment, storage and disposal violations of OAR 340-012-0068(1)(b), (c), (h), (k), (l), (m), (p), (q) and (r):
- (A) Major:
- (i) Treatment, storage, or disposal of more than 55 gallons or 330 pounds of hazardous waste; or
- (ii) Treatment, storage, or disposal of at least one quart or 2.2 pounds of acutely hazardous waste.
- (B) Moderate:
- (i) Treatment, storage, or disposal of 55 gallons or 330 pounds or less of hazardous waste; or
- (ii) Treatment, storage, or disposal of less than one quart or 2.2 pounds of acutely hazardous waste.
- (c) Hazardous waste management violations classified in OAR 340-012-0068(1)(d), (e)
- (f), (g), (i), (j), (n), (s) and (2)(a), (b), (d), (e), (h), (i), (k), (m), (n), (o), (p), (r) and (s):

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- (A) Major:
- (i) Hazardous waste management violations involving more than 1,000 gallons or 6,000 pounds of hazardous waste; or
- (ii) Hazardous waste management violations involving at least one quart or 2.2 pounds of acutely hazardous waste.
- (B) Moderate:
- (i) Hazardous waste management violations involving more than 250 gallons or 1,500 pounds, up to and including 1,000 gallons or 6,000 pounds of hazardous waste; or
- (ii) Hazardous waste management violations involving less than one quart or 2.2 pounds of acutely hazardous waste.
- (C) Minor:
- (i) Hazardous waste management violations involving 250 gallons or 1,500 pounds or less of hazardous waste and no acutely hazardous waste.
- (5) Magnitudes for selected Used Oil violations (OAR 340-012-0072) will be determined as follows:
- (a) Used Oil violations set forth in OAR 340-012-0072(1)(f), (h), (i), (j); and (2)(a) through (h):
- (A) Major Used oil management violations involving more than 1,000 gallons or 7,000 pounds of used oil or used oil mixtures;
- (B) Moderate Used oil management violations involving more than 250 gallons or 1,750 pounds, up to and including 1,000 gallons or 7,000 pounds of used oil or used oil mixture; or
- (C) Minor Used oil management violations involving 250 gallons or 1,750 pounds or less of used oil or used oil mixtures.
- (b) Used Oil spill or disposal violations set forth in OAR 340-012-0072(1)(a) through (e), (g) and (k).
- (A) Major A spill or disposal involving more than 420 gallons or 2,940 pounds of used oil or used oil mixtures;
- (B) Moderate A spill or disposal involving more than 42 gallons or 294 pounds, up to and including 420 gallons or 2,940 pounds of used oil or used oil mixtures; or

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(C) Minor — A spill or disposal of used oil involving 42 gallons or 294 pounds or less of used oil or used oil mixtures.

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

Stat. Auth.: ORS 468.065 & 468A.045

Stats. Implemented: ORS 468.090 - 468.140 & 468A.060

Hist.: DEQ 21-1992, f. & cert. ef. 8-11-92; DEQ 4-1994, f. & cert. ef. 3-14-94; DEQ 19-1998, f. & cert. ef. 10-12-98; DEQ 1-2003, f. & cert. ef. 1-31-03; Renumbered from 340-012-0090, DEQ 4-2005, f. 5-13-05, cert. ef. 6-1-05; DEQ 4-2006, f. 3-29-06, cert. ef. 3-31-06; DEQ 6-2006, f. & cert. ef. 6-29-06; DEQ 1-2014, f. & cert. ef. 1-6-14

340-012-0140

Determination of Base Penalty

- (1) Except for Class III violations and as provided in OAR 340-012-0155, the base penalty (BP) is determined by applying the class and magnitude of the violation to the matrices set forth in this section. For Class III violations, no magnitude determination is required.
- (2) \$12,000 Penalty Matrix:
- (a) The \$12,000 penalty matrix applies to the following:
- (A) Any violation of an air quality statute, rule, permit or related order committed by a person that has or should have a Title V permit or an Air Contaminant Discharge Permit (ACDP) issued pursuant to New Source Review (NSR) regulations or Prevention of Significant Deterioration (PSD) regulations, or section 112(g) of the federal Clean Air Act.
- (B) Open burning violations as follows:
- (i) Any violation of OAR 340-264-0060(3) committed by an industrial facility operating under an air quality permit.
- (ii) Any violation of OAR 340-264-0060(3) in which 25 or more cubic yards of prohibited materials or more than 15 tires are burned, except when committed by a residential owner-occupant.
- (C) Any violation of the Oregon Low Emission Vehicle rules (OAR 340-257) by an automobile manufacturer.
- (D) Any violation of ORS 468B.025(1)(a) or (1)(b), or of 468B.050(1)(a) by a person without a National Pollutant Discharge Elimination System (NPDES) permit, unless otherwise classified.

- (E) Any violation of a water quality statute, rule, permit or related order by:
- (i) A person that has an NPDES permit, or that has or should have a Water Pollution Control Facility (WPCF) permit, for a municipal or private utility sewage treatment facility with a permitted flow of five million or more gallons per day.
- (ii) A person that has a Tier 1 industrial source NPDES or WPCF permit.
- (iii) A person that has a population of 100,000 or more, as determined by the most recent national census, and either has or should have a WPCF Municipal Stormwater Underground Injection Control (UIC) System Permit, or has an NPDES Municipal Separated Storm Sewer Systems (MS4) Stormwater Discharge Permit.
- (iv) A person that installs or operates a prohibited Class I, II, III, IV or V UIC system, except for a cesspool.
- (v) A person that has or should have applied for coverage under an NPDES Stormwater Discharge 1200-C General Permit for a construction site that disturbs 20 or more acres.
- (F) Any violation of the ballast water statute in ORS Chapter 783 or ballast water management rule in OAR 340, division 143.
- (G) Any violation of a Clean Water Act Section 401 Water Quality Certification by a 100 megawatt or more hydroelectric facility.
- (H) Any violation of a Clean Water Act Section 401 Water Quality Certification for a dredge and fill project except for Tier 1, 2A or 2B projects.
- (I) Any violation of an underground storage tanks statute, rule, permit or related order committed by the owner, operator or permittee of 10 or more UST facilities or a person who is licensed or should be licensed by DEQ to perform tank services.
- (J) Any violation of a heating oil tank statute, rule, permit, license or related order committed by a person who is licensed or should be licensed by DEQ to perform heating oil tank services.
- (K) Any violation of ORS 468B.485, or related rules or orders regarding financial assurance for ships transporting hazardous materials or oil.
- (L) Any violation of a used oil statute, rule, permit or related order committed by a person who is a used oil transporter, transfer facility, processor or re-refiner, off-specification used oil burner or used oil marketer.
- (M) Any violation of a hazardous waste statute, rule, permit or related order by:
- (i) A person that is a large quantity generator or hazardous waste transporter.

- (ii) A person that has or should have a treatment, storage or disposal facility permit.
- (N) Any violation of an oil and hazardous material spill and release statute, rule, or related order committed by a covered vessel or facility as defined in ORS 468B.300 or by a person who is engaged in the business of manufacturing, storing or transporting oil or hazardous materials.
- (O) Any violation of a polychlorinated biphenyls (PCBs) management and disposal statute, rule, permit or related order.
- (P) Any violation of ORS Chapter 465, UST or environmental cleanup statute, rule, related order or related agreement.
- (Q) Unless specifically listed under another penalty matrix, any violation of ORS Chapter 459 or any violation of a solid waste statute, rule, permit, or related order committed by:
- (i) A person that has or should have a solid waste disposal permit.
- (ii) A person with a population of 25,000 or more, as determined by the most recent national census.
- (R) Any violation of the Oregon Clean Fuels Program under OAR 340 division 253 by a person registered as an importer of blendstocks.
- (b) The base penalty values for the \$12,000 penalty matrix are as follows:
- (A) Class I:
- (i) Major \$12,000;
- (ii) Moderate \$6,000;
- (iii) Minor \$3,000.
- (B) Class II:
- (i) Major \$6,000;
- (ii) Moderate \$3,000;
- (iii) Minor \$1,500.
- (C) Class III: \$1,000.
- (3) \$8,000 Penalty Matrix:

- (a) The \$8,000 penalty matrix applies to the following:
- (A) Any violation of an air quality statute, rule, permit or related order committed by a person that has or should have an ACDP permit, except for NSR, PSD and Basic ACDP permits, unless listed under another penalty matrix.
- (B) Any violation of an asbestos statute, rule, permit or related order except those violations listed in section (5) of this rule.
- (C) Any violation of a vehicle inspection program statute, rule, permit or related order committed by an auto repair facility.
- (D) Any violation of the Oregon Low Emission Vehicle rules (OAR 340-257) committed by an automobile dealer or an automobile rental agency.
- (E) Any violation of a water quality statute, rule, permit or related order committed by:
- (i) A person that has an NPDES Permit, or that has or should have a WPCF Permit, for a municipal or private utility sewage treatment facility with a permitted flow of two million or more, but less than five million, gallons per day.
- (ii) A person that has a Tier 2 industrial source NPDES or WPCF Permit.
- (iii) A person that has or should have applied for coverage under an NPDES or a WPCF General Permit, except an NPDES Stormwater Discharge 1200-C General Permit for a construction site of less than five acres in size or 20 or more acres in size.
- (iv) A person that has a population of less than 100,000 but more than 10,000, as determined by the most recent national census, and has or should have a WPCF Municipal Stormwater UIC System Permit or has an NPDES MS4 Stormwater Discharge Permit.
- (v) A person that owns, and that has or should have registered, a UIC system that disposes of wastewater other than stormwater or sewage or geothermal fluids.
- (F) Any violation of a Clean Water Act Section 401 Water Quality Certification by a less than 100 megawatt hydroelectric facility.
- (G) Any violation of a Clean Water Act Section 401 Water Quality Certification for a Tier 2A or Tier 2B dredge and fill project.
- (H) Any violation of an UST statute, rule, permit or related order committed by a person who is the owner, operator or permittee of five to nine UST facilities.
- (I) Unless specifically listed under another penalty matrix, any violation of ORS Chapter 459 or other solid waste statute, rule, permit, or related order committed by:

- (i) A person that has or should have a waste tire permit; or
- (ii) A person with a population of more than 5,000 but less than or equal to 25,000, as determined by the most recent national census.
- (J) Any violation of a hazardous waste management statute, rule, permit or related order committed by a person that is a small quantity generator.
- (K) Any violation of an oil and hazardous material spill and release statute, rule, or related order committed by a person other than a person listed in OAR 340-012-0140(2)(a)(N) occurring during a commercial activity or involving a derelict vessel over 35 feet in length.
- (L) Any violation of the Oregon Clean Fuels Program under OAR 340 division 253 by a person registered as a credit generator.
- (b) The base penalty values for the \$8,000 penalty matrix are as follows:
- (A) Class I:
- (i) Major \$8,000.
- (ii) Moderate \$4,000.
- (iii) Minor \$2,000.
- (B) Class II:
- (i) Major \$4,000.
- (ii) Moderate \$2,000.
- (iii) Minor \$1,000.
- (C) Class III: \$ 700.
- (4) \$3,000 Penalty Matrix:
- (a) The \$3,000 penalty matrix applies to the following:
- (A) Any violation of any statute, rule, permit, license, or order committed by a person not listed under another penalty matrix.
- (B) Any violation of an air quality statute, rule, permit or related order committed by a person not listed under another penalty matrix.

- (C) Any violation of an air quality statute, rule, permit or related order committed by a person that has or should have a Basic ACDP or an ACDP or registration only because the person is subject to Area Source NESHAP regulations.
- (D) Any violation of OAR 340-264-0060(3) in which 25 or more cubic yards of prohibited materials or more than 15 tires are burned by a residential owner-occupant.
- (E) Any violation of a vehicle inspection program statute, rule, permit or related order committed by a natural person, except for those violations listed in section (5) of this rule.
- (F) Any violation of a water quality statute, rule, permit, license or related order not listed under another penalty matrix and committed by:
- (i) A person that has an NPDES permit, or has or should have a WPCF permit, for a municipal or private utility wastewater treatment facility with a permitted flow of less than two million gallons per day.
- (ii) A person that has or should have applied for coverage under an NPDES Stormwater Discharge 1200-C General Permit for a construction site that is more than one, but less than five acres.
- (iii) A person that has a population of 10,000 or less, as determined by the most recent national census, and either has an NPDES MS4 Stormwater Discharge Permit or has or should have a WPCF Municipal Stormwater UIC System Permit.
- (iv) A person who is licensed to perform onsite sewage disposal services or who has performed sewage disposal services.
- (v) A person, except for a residential owner-occupant, that owns and either has or should have registered a UIC system that disposes of stormwater, sewage or geothermal fluids.
- (vi) A person that has or should have a WPCF individual stormwater UIC system permit.
- (vii) Any violation of a water quality statute, rule, permit or related order committed by a person that has or should have applied for coverage under an NPDES 700-PM General Permit for suction dredges.
- (G) Any violation of an onsite sewage disposal statute, rule, permit or related order, except for a violation committed by a residential owner-occupant.
- (H) Any violation of a Clean Water Act Section 401 Water Quality Certification for a Tier 1 dredge and fill project.
- (I) Any violation of an UST statute, rule, permit or related order if the person is the owner, operator or permittee of two to four UST facilities.

- (J) Any violation of a used oil statute, rule, permit or related order, except a violation related to a spill or release, committed by a person that is a used oil generator.
- (K) Any violation of a hazardous waste management statute, rule, permit or related order committed by a person that is a conditionally exempt generator, unless listed under another penalty matrix.
- (L) Any violation of ORS Chapter 459 or other solid waste statute, rule, permit, or related order committed by a person with a population less than 5,000, as determined by the most recent national census.
- (M) Any violation of the labeling requirements of ORS 459A.675 through 459A.685.
- (N) Any violation of rigid pesticide container disposal requirements by a conditionally exempt generator of hazardous waste.
- (O) Any violation of ORS 468B.025(1)(a) or (b) resulting from turbid discharges to waters of the state caused by non-residential uses of property disturbing less than one acre in size.
- (P) Any violation of an oil and hazardous material spill and release statute, rule, or related order committed by a person not listed under another matrix.
- (Q) Any violation of the Oregon Clean Fuels Program under OAR 340 division 253 by a person registered as an importer of finished fuels.
- (b) The base penalty values for the \$3,000 penalty matrix are as follows:
- (A) Class I:
- (i) Major \$3,000;
- (ii) Moderate \$1,500;
- (iii) Minor \$750.
- (B) Class II:
- (i) Major \$1,500;
- (ii) Moderate \$750;
- (iii) Minor \$375.
- (C) Class III: \$250.

- (5) \$1,000 Penalty Matrix:
- (a) The \$1,000 penalty matrix applies to the following:
- (A) Any violation of an open burning statute, rule, permit or related order committed by a residential owner-occupant at the residence, not listed under another penalty matrix.
- (B) Any violation of visible emissions standards by operation of a vehicle.
- (C) Any violation of an asbestos statute, rule, permit or related order committed by a residential owner-occupant.
- (D) Any violation of an onsite sewage disposal statute, rule, permit or related order of OAR chapter 340, division 44 committed by a residential owner-occupant.
- (E) Any violation of an UST statute, rule, permit or related order committed by a person who is the owner, operator or permittee of one UST facility.
- (F) Any violation of an HOT statute, rule, permit or related order not listed under another penalty matrix.
- (G) Any violation of OAR chapter 340, division 124 or ORS 465.505 by a dry cleaning owner or operator, dry store owner or operator, or supplier of perchloroethylene.
- (H) Any violation of ORS Chapter 459 or other solid waste statute, rule or related order committed by a residential owner-occupant.
- (I) Any violation of a statute, rule, permit or order relating to rigid plastic containers, except for violation of the labeling requirements under OAR 459A.675 through 459A.685.
- (J) Any violation of a statute, rule or order relating to the opportunity to recycle.
- (K) Any violation of OAR chapter 340, division 262 or other statute, rule or order relating to solid fuel burning devices, except a violation related to the sale of new or used solid fuel burning devices or the removal and destruction of used solid fuel burning devices.
- (L) Any violation of an UIC system statute, rule, permit or related order by a residential owner-occupant, when the UIC disposes of stormwater, sewage or geothermal fluids.
- (M) Any Violation of ORS 468B.025(1)(a) or (b) resulting from turbid discharges to waters of the state caused by residential use of property disturbing less than one acre in size.
- (b) The base penalty values for the \$1,000 penalty matrix are as follows:

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- (A) Class I:
- (i) Major \$1,000;
- (ii) Moderate \$500;
- (iii) Minor \$250.
- (B) Class II:
- (i) Major \$500;
- (ii) Moderate \$250;
- (iii) Minor \$125.
- (C) Class III: \$100.

Stat. Auth.: ORS 468.020 & 468.090 - 468.140
Stats. Implemented: ORS 459.995, 459A.655, 459A.660, 459A.685 & 468.035
Hist.: DEQ 4-1989, f. & cert. ef. 3-14-89; DEQ 15-1990, f. & cert. ef. 3-30-90; DEQ 33-1990, f. & cert. ef. 8-15-90; DEQ 21-1992, f. & cert. ef. 8-11-92; DEQ 4-1994, f. & cert. ef. 3-14-94; DEQ 9-1996, f. & cert. ef. 7-10-96; DEQ 19-1998, f. & cert. ef. 10-12-98; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; Renumbered from 340-012-0042, DEQ 4-2005, f. 5-13-05, cert. ef. 6-1-05; DEQ 4-2006, f. 3-29-06, cert. ef. 3-31-06; DEQ 6-2006, f. & cert. ef. 6-29-06; DEQ 2-2011, f. 3-10-11, cert. ef. 3-15-11; DEQ 1-2014, f. & cert. ef. 1-6-14

DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION 253

OREGON CLEAN FUELS PROGRAM

340-253-0000

Overview

- (1) Context. The Oregon Legislature found that climate change poses a serious threat to the economic well-being, public health, natural resources and environment of Oregon. Section 1, chapter 907, Oregon Laws 2007. The Oregon Clean Fuels Program will reduce Oregon's contribution to the global levels of greenhouse gas emissions and the impacts of those emissions in Oregon in concert with other greenhouse gas reduction policies and actions by local governments, other states and the federal government.
- (2) Purpose. The purpose of the Oregon Clean Fuels Program is to reduce the amount of lifecycle greenhouse gas emissions per unit of energy by a minimum of 10 percent below 2010 levels over a 10-year period by 2025. This reduction goal applies to the average of all transportation fuels used in Oregon, not to individual fuels. A fuel user does not violate the standard by possessing fuel that has higher carbon content than the clean fuel standard allows.
- (3) Background. The 2009 Oregon Legislature adopted House Bill 2186 enacted as chapter 754 of Oregon Laws 2009. The law authorizes the Environmental Quality Commission to adopt low carbon fuel standards for gasoline, diesel fuel and fuels used as substitutes for gasoline or diesel fuel. Sections 6 to 9 of chapter 754, Oregon Laws 2009 is printed as a note following ORS 468A.270 in the 2011 Edition. The 2015 Oregon Legislature amended those provisions when it adopted Senate Bill 324 (chapter 4, Oregon Laws 2015). OAR division 253 of chapter 340 implements section 6 of the law.
- (4) Program Review. EQC expects DEQ to periodically review and assess the Oregon Clean Fuels Program and make recommendations to EQC for improvement. DEQ will conduct two periodic reviews between 2015–2016 and 2025. Review and assessment may include:
- (a) The program's progress towards meeting its targets;
- (b) Adjustments to the compliance schedule, if needed;
- (c) The costs and benefits that complying with Clean Fuels Program rules cause for regulated parties and credit generators;
- (d) The costs and benefits that complying with Clean Fuels Program rules cause for Oregon fuel consumers and Oregon's economy;

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- (e) The rate of climate change and the costs of environmental and economic damage due to climate change;
- (f) The current and projected availability of clean fuels;
- (g) The progress and adoption rates of clean fuels, clean fuel infrastructure and clean fuel vehicles;
- (h) Identifying hurdles or barriers to implementing the Clean Fuels Program (e.g., permitting issues, infrastructure adequacy, research funds) and recommendations for addressing such hurdles or barriers;
- (i) The mechanisms to provide exemptions and deferrals necessary to mitigate the cost of complying with the program;
- (j) The methods to quantify lifecycle direct and indirect emissions from transportation fuels including land use change and other indirect effects;
- (k) The latest information on low carbon fuel policies and related legal issues;
- (l) The status of federal, state and regional programs that address the carbon content of transportation fuel; and
- (m) Whether there are the necessary resources to implement the program.
- (5) LRAPA. Notwithstanding Lane Regional Air Pollution Agency authorization in OAR 340-200-0010(3), DEQ administers this division in all areas of the State of Oregon.

Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3 Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

340-253-0040

Definitions

The definitions in OAR 340-200-0020 and this rule apply to this division. If this rule and 340-200-0020 define the same term, the definition in this rule applies to this division.

- (1) "Actual PADD 5" means Petroleum Administration for Defense District 5, which includes Oregon, Washington, Arizona, Nevada, Hawaii, California and Alaska.
- (2) "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.

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- (3) "Application" means the type of vehicle where the fuel is consumed, shown as either LDV/MDV or HDV.
- (4) "B5" means diesel fuel containing 5 percent biodiesel.
- (5) "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.
- (26) "Bill of lading" means a document issued that lists goods being shipped and specifies the terms of their transport.
- (37) "Bio-based" means a fuel produced from non-petroleum, biological renewable resources.
- (4) "Biodiesel" means a diesel substitute that consists of mono alkyl esters of long chain fatty acids derived from plant or animal matter that complies with ASTM D6751.
- (8) "Biodiesel" means a fuel comprised of mono-alkyl esters of long chain fatty acids derived from non-petroleum sourced oils or fats, designated B100 and conforming to the specifications of ASTM D6751-15a, "Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels."
- (510) "Biodiesel blend" means a blend of biodiesel with petroleum-based diesel fuel containing at least 6 percent and not more than 20 percent biodiesel by volume, designated BXX where XX represents the volume percentage of biodiesel fuel in the blend, and conforming to the specifications of ASTM D7467-13, "Standard Specification for Diesel Fuel Oil, Biodiesel Blend (B6 to B20).":
- (611) "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.
- (712) "Biomethane" means refined biogas 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.
- (13) "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.
- (<u>814</u>) "Broker" means a person who is not a regulated party or a credit generator and who voluntarily registers to participate in the clean fuels program, described in OAR 340-253-0100(3), to facilitate credit generation and to trade credits with regulated parties, credit generators and other brokers.

- (15) "Broker designation form" means a DEQ-approved document that specifies that a regulated party or a credit generator has designated a broker to act on its behalf for specified transactions.
- (16) "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.
- (917) "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/per-MJ).
- (18) "Carryback credits" means a credit that a regulated party acquires between January 1st and March 31st to meet its compliance obligation for the prior compliance period and that was generated during or before the prior compliance period. Credits generated between January 1st and March 31st may not be used as carryback credits to meet a regulated party's compliance obligation for the prior compliance period.
- (1019) "CFP Online System" means the interactive, secured, internet web-based, elean fuels program electronic data tracking, reporting and compliance system that DEQ developed, developes, manages and operates to support the Clean Fuels Program.
- (20) "CFP Online System reporting deadlines" means the quarterly and annual reporting dates in OAR 340-253-0630 and in 340-253-0650.
- (1121) "Clean fuel" means a transportation fuel whose carbon intensity-value is lower than the applicable clean fuel standard for gasoline and gasoline substitutes <u>listed</u> in Table 1 under OAR 340-253-8010 or for diesel and diesel substitutes <u>listed</u> in Table 2 under OAR 340-253-8020.
- (1222) "Clean 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 340-253-8020 for diesel fuel and diesel substitutes.
- (1323) "Clear gasoline" means gasoline <u>derived from crude oil</u> that has not been blended with a renewable fuel.
- (1424) "Clear diesel" means <u>a light middle or middle distillate grade</u> diesel <u>fuel derived from</u> crude oil that has not been blended with a renewable fuel.
- (1525) "Compliance period" means a calendar year and is the period of time within which regulated parties must demonstrate compliance under OAR 340-253-0100. The initial compliance period is for two calendar years, 2016 and 2017, and subsequent compliance periods are each for single calendar year.
- (1626) "Compressed natural gas" or "CNG" means natural gas stored inside a pressure vessel at compressed to a pressure greater than the ambient atmospheric pressure outside of the vessel.

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- (1727) "Credit" means a unit of measure that is generated when the carbon intensity value of a fuel that is produced, imported, dispensed or used in Oregon is less than the clean fuel standard. Credits are expressed in units of metric tons of carbon dioxide equivalent and are calculated under Table 2 under OAR 340-253-1020.
- (28) "Credit facilitator" means a person a regulated party designates, in the CFP Online System, to initiate and complete credit transfers on behalf of the regulated party.
- (1829) "Credit generator" means any person eligible to generate credits by providing clean fuels for use in Oregon and who voluntarily registers to participate in the clean Clean fuels Fuels program described in OAR 340-253-0100(2), and specified by fuel type in Tables 1-4 under OAR 340-253-0310-0320 through 340-253-0340.
- (19) "Credit transfer document" or "CTD" means an invoice, bill of lading, purchase contract or any other proof of credit ownership transfer.
- (30) "Crude oil" means any naturally occurring flammable mixture of hydrocarbons found in geologic formations.
- (2031) "Deficit" means a unit of measure that is generated when the carbon intensity value of a fuel that is produced, or imported, dispensed or used in Oregon exceeds the clean fuel standard. Deficits are expressed in units of metric tons of carbon dioxide equivalent and are calculated under OAR 340-253-1020.
- (32) "Denatured fuel ethanol" means fuel ethanol made unfit for beverage use by the addition of denaturants under formula(s) approved by the applicable regulatory agency to prevent the imposition of beverage alcohol tax and conforming to the specifications of ASTM D4806, "Standard Specification for Denatured Fuel Ethanol for Blending with Gasolines for Use as Automotive Spark-Ignition Engine Fuel" commonly identified as "E100."
- (2133) "Diesel fuel" or "diesel" means either:
- (a) A light middle distillate or middle distillate fuel suitable for a compression ignition engines blended with not more than 5 volume percent biodiesel and fuel conforming to the specifications of either-ASTM D975-15b, "Standard Specification for Diesel Fuel Oils" or;
- (b) A light middle distillate or middle distillate fuel blended with at least 6 and not more than 20 volume percent biodiesel suitable for compression ignition engines conforming to the specifications of ASTMD7467-15b, "Standard Specifications for Diesel Fuel Oil, Biodiesel Blend (B6-B20)." or ASTM D7467.
- (2234) "Diesel substitute" means a <u>liquidny</u> fuel, other than diesel fuel, <u>suitable for use as a</u> compression-ignition piston engine fuelthat may be used in an engine designed for diesel use.
- (35) "E10" means gasoline containing 10 volume percent fuel ethanol.

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- (23) "Ethanol," or "Denatured fuel ethanol" means nominally anhydrous ethyl alcohol meeting ASTM D4806 standards that is blended with gasoline for use in a spark-ignition internal combustion engine.
- (36) "Energy economy ratio" or "EER" means the dimensionless value that represents the efficiency of a fuel as used in a powertrain as compared to a reference fuel, as listed in Table 7 under OAR 340-253-8070 for gasoline and gasoline substitutes and in Table 8 under 340-253-8080 for diesel fuel and diesel substitutes.
- (37) "Ethanol" means ethyl alcohol, the chemical compound C2H5OH.
- (2438) "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. Fuel exported from Oregon does not carry any obligation except for recordkeeping under OAR 340-253-0600.
- (25) "Feedstock" means the material from which a fuel is made.
- (39) "Finished fuel" means a transportation fuel used directly in a motor vehicle without requiring additional chemical or physical processing.
- (2640) "Fossil" means any naturally-occurring flammable mixture of hydrocarbons found in geologic formations such as rock or strataderived solely from petroleum or fossil sources such as oil fields and coal beds.
- (41) "Fuel ethanol" means undenatured ethanol with other components common to its production that do not affect the use of the product as a blending component for automotive spark-ignition engine fuels.
- fpcc(27) "Fuel type" means any unique fuel feedstock and production process combination.
- (42) "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.
- (2843) "Fuel pathway code" or "FPC" means the identifier used in the a code that represents a unique fuel type. The fuel pathway code is a field in the CFP Online System that applies to a specific fuel pathway as approved under OAR 340-253-0500(3) used to represent a specific type of fuel that has an assigned carbon intensity value.
- (44) "Fuel 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.

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(2945) "Gasoline" means a spark ignition engine fuel conforming to the specifications defined inof ASTM D4814-15a, "Standard Specification for Automotive Spark-Ignition Fuel."-

(3046) "Gasoline substitute" means any <u>liquid</u> fuel, other than gasoline, <u>suitable for that may be</u> used in as a spark-ignition engine <u>fueldesigned for gasoline use</u>.

(3147) "Heavy duty motor vehicle" or "HDV" means any motor vehicle rated at more than 10,000 pounds gross vehicle weight.

(48) "Hybrid electric vehicle" or "HEV" means any vehicle that can draw propulsion energy from both of the following on-vehicle sources of stored energy:

(a) A consumable fuel and

(b) An energy storage device such as a battery, capacitor or flywheel.

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

(3250) "Import" means to have ownership title to transportation fuel from locations outside of Oregon at the time it is brought into the State of Oregon by any means of transport other than in the fuel tank of a motor vehicle for the purpose of propelling the motor vehicle.

(33<u>51</u>) "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 trucked either physically transported into Oregon or injected into a pipeline located outside of Oregon and delivered for use in Oregon.
- (52) "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 for fuel made from corn feedstocks is calculated using the protocol developed by the Argonne National Laboratory. Indirect land use change for fuel made from sugarcane, sorghum, soybean, canola and palm feedstocks is calculated using the protocol developed by CARB.
- (3453) "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.

(3554) "Large importer of finished fuels" means any person who imports into Oregon more than 250500,000 gallons of transportation finished fuels in a given calendar year.

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(3655) "Light-duty motor vehicle" or "LDV" means any motor vehicle rated at 8,500 pounds gross vehicle weight or less.

(3756) "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.
- (38) "Liquefied natural gas" or "LNG" means natural gas that has been liquefied.
- (3957) "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.
- (58) "Liquefied natural gas" or "LNG" means natural gas that has been liquefied.
- (4059) "Liquefied petroleum gas" or "propane" or "LPG" means a petroleum product composed predominantly of any of the hydrocarbons, or mixture thereof; propane, propylene, normal or iso butanes, and butylenes, or mixtures thereof, maintained in the liquid state.
- (4160) "Medium duty vehicle" or "MDV" means any motor vehicle rated between 8,501 pounds and 10,000 pounds gross vehicle weight.
- (4261) "Motor vehicle" means any vehicle, vessel, watercraft, engine, machine, or mechanical contrivance that is propelled by internal combustion engine or motor has the same meaning as defined under OAR 603 027 0410.
- (4362) "Natural gas" means a mixture of gaseous hydrocarbons and other compounds with at least 80 percent methane by volume.
- (4463) "OR-GREET" means the Greenhouse gases, Regulated Emissions, and Energy in Transportation (GREET) Argonne National Laboratory model that DEQ <u>modifies-develops</u> and maintains for use in Oregon. <u>The most current version is OR-GREET 2.0.</u> DEQ will provide <u>a copyeopies</u> of OR-GREET <u>2.0</u> upon request.
- (45) "Physical transport mode code" means how a fuel physically enters Oregon. Physical transport mode code is a field in the CFP Online System used to represent how a fuel was imported.

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(64) "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.

(4665) "Producer" means:

- (a) With respect to any liquid fuel, the person who makes the fuel in Oregon; or
- (b) With respect to any biomethane, the person who refines, treats or otherwise processes biogas into biomethane in Oregon.
- (47<u>66</u>) "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.conveys information about the transfer of ownership of fuel from a regulated party to the recipient of the fuel.
- (4867) "Regulated fuel" means a transportation fuel identified under OAR 340-253-0200(2).
- (49<u>68</u>) "Regulated party" means a person responsible for compliance with <u>requirements listed</u> <u>under the clean fuel standards identified under OAR 340-253-03100100(1)</u>.
- (5069) "Renewable <u>hydrocarbon</u> diesel" means <u>a hydrocarbon oil diesel fuel conforming to the specifications of ASTM D975-15b, "Standard Specification for Diesel Fuel Oils" produced from derived from vegetable oils, animal fats or other non-petroleum-renewable resources.</u>
- (70) "Renewable gasoline" means a spark ignition engine fuel conforming to the specifications of ASTM D4814, "Standard Specification for Automotive Spark-Ignition Engine Fuel" produced from renewable resources.
- (5171) "Small importer of finished fuels" means any person who imports into Oregon 250500,000 gallons or less of transportation 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.
- (5272) "Statutory PADD 5" means the Petroleum Administration for Defense District 5 states: Oregon, Washington, Arizona and Nevada.
- (73) "Tier 1 calculator" or "OR-GREET 2.0 Tier 1 calculator" means the tool used to calculate lifecycle emissions for common conventionally produced first-generation fuels (starch- and sugar-based ethanol, biodiesel, renewable diesel, CNG and LNG).
- (74) "Tier 2 calculator" or "OR-GREET 2.0 Tier 2 calculator" means the tool used to calculate lifecycle emissions for next-generation fuels, including, but not limited to, cellulosic alcohols,

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hydrogen, drop-in fuels, or first-generation fuels produced using innovative production processes.

- (75) "Transaction date" means the title transfer date as shown on the PTD.
- (76) "Transaction quantity" means the amount of fuel reported in a transaction.
- (5377) "Transaction type" means the nature of the fuel transaction as defined below:
- (a) "Production for use in Oregon" means the transportation fuel was designated for use only in Oregon at production and acquired a compliance obligation under Clean Fuels Program regardless of production inside or outside of Oregon;
- (b) "Purchased with obligation" means the transportation fuel was purchased with the compliance obligation passing to the purchaser;
- (c) "Purchased without obligation" means the transportation fuel was purchased with the compliance obligation retained by the seller;
- (d) "Sold with obligation" means the transportation fuel was sold with the compliance obligation passing to the purchaser;
- (e) "Sold without obligation" means the transportation fuel was sold with the compliance obligation retained by the seller;
- (f) "Export" means a transportation fuel was reported with compliance obligation under the Clean Fuels Program but was later exported outside of Oregon;
- (g) "Loss of inventory" means the fuel was produced in or imported into Oregon but was not used in Oregon due to volume loss such as through evaporation or due to different temperatures or pressurization;
- (h) "Gain of inventory" means the fuel entered the Oregon fuel pool due to a volume gain, such as through different temperatures or pressurization;
- (i) "Not used for transportation" means a transportation fuel was reported with compliance obligation under the Clean Fuels Program but was later not used for transportation purposes in Oregon or otherwise determined to be exempt under OAR 340-253-0250;
- (j) "EV charging" means providing electricity to recharge EVs including BEVs and PHEVs;
- (k) "LPGV fueling" means the dispensing of liquefied petroleum gas at a fueling station designed for fueling liquefied petroleum gas vehicles; or
- (1) "NGV fueling" means the dispensing of natural gas at a fueling station designed for fueling natural gas vehicles.

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- . Transaction type is a field in the CFP Online System used to represent how a volume of fuel should be treated in terms of compliance with the clean fuel standards.
- (78) "Transmix" means a mixture of refined products that forms at the interface between batches of dissimilar liquid products when transported through pipelines. This mixture is typically a combination of gasoline, diesel or jet fuel.
- (5479) "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.
- (80) "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.
- (81) "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;
- (B) OAR Chapter 603 Division 027; or
- (C) OAR Chapter 340 Division 340.

Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14; DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

340-253-0060

Acronyms

The following acronyms apply to this division:

- (1) "ASTM" means ASTM International (formerly American Society for Testing and Materials).
- (2) "BTU" means British thermal unit.
- (2) "BEV" means battery electric vehicle.

- (3) "CARB" means the California Air Resources Board.
- (34) "CFP" means the <u>clean Clean fuels Fuels program Program</u> established under OAR chapter 340, division 253.
- (5) "CNG" means compressed natural gas.
- (6) "CO2e" means carbon dioxide equivalents.
- (7) "DEQ" means Oregon Department of Environmental Quality.
- (8) "EER" means energy economy ratio.
- (9) "EQC" means Oregon Environmental Quality Commission.
- (10) "EV" means electric vehicle.
- (11) "FEIN" means federal employer identification number.
- (4) "CIE" means compression ignition engine.
- (5) "DEQ" means Oregon Department of Environmental Quality.
- (6) "EQC" means Oregon Environmental Quality Commission.
- (712) "FFV" means flex fuel vehicle. "FEIN" means federal employer identification number.
- (13) "FPC" means fuel pathway code.
- (814) "gCO2e/per-MJ" means grams of carbon dioxide equivalent per megajoule of energy.
- (15) "HDV" means heavy-duty vehicle.
- (16) "HDV-CIE" means a heavy-duty vehicle compression ignition engine.
- (17) "HDV-SIE" means a heavy-duty vehicle spark ignition engine.
- (918) "HEV" means hybrid electric vehicle. "SIE" means spark ignition engine.
- (19) "L-CNG" means liquefied-compressed natural gas.
- (20) "LDV" means light-duty vehicle.
- (21) "LNG" means liquefied natural gas.
- (22) "LPG" means liquefied petroleum gas.

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- (23) "LPGV" means liquefied petroleum gas vehicle.
- (24) "MDV" means medium-duty vehicle.
- (25) "mmBtu" means million British Thermal Units.
- (26) "NGV" means natural gas vehicle.
- (27) "PHEV" means partial hybrid electric vehicle.
- (28) "PTD" means product transfer document.
- (29) "RFS" means the US Environmental Protection Agency Renewable Fuel Standard.
- (30) "scf" means standard cubic feet.
- (31) "ULSD" means ultra low sulfur diesel.

Stat. Auth.: ORS 468.020, 2009 OL Ch. 754 Sec. 6 (2011 Edition) 2015 OL Ch. 4 Sec. 3. Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) 2015 OL Ch. 4 Sec. 3. Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14; DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

340-253-0100

Oregon Clean Fuels Program Applicability and Requirements

- (1) Regulated parties. All persons that produce in Oregon, or import into Oregon, any regulated fuel must comply with the rules in this division. The regulated parties for regulated fuels produced or imported in Oregon are designated under OAR 340-253-0310.
- (a) Regulated parties must comply with sections (4) through (8) below; except that:
- (b) Small importers of finished fuels are exempt from sections (56) and (7) through (8) below.
- (2) Credit generators.
- (a) The following rules designate persons eligible to generate credits for each fuel type:
- (A) OAR 340-253-0320 for compressed natural gas, liquefied natural gas, liquefied compressed natural gas, liquefied petroleum gas and renewable diesel;
- (B) OAR 340-253-0330 for electricity; and
- (C) OAR 340-253-0340 for hydrogen fuel or a hydrogen blend.

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- (b) <u>Any Ppersons</u> eligible to be <u>a credit generators</u>, <u>and that is not a regulated party</u>, <u>are is not required to participate in the program</u>. <u>Any Ppersons who chooses</u> voluntarily to participate in the program to generate credits must comply with sections (4), (5), (7) and (8) below.
- (3) Brokers.
- (a) Brokers must comply with this section and sections (4), (5), (7) and (8) below.
- (b) Brokers may hold and trade credits. A broker also may generate credits and facilitate credit generation and credit trading if a regulated party or a, credit generator or person eligible to be a credit generator authorized authorizes the a broker to act on its behalf by submitting a Broker Designation Form.
- (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 to DEQ under OAR 340-253-0500 for each fuel type before it may generate credits for fuel produced, imported, dispensed or used in Oregon. DEQ will not recognize credits allegedly generated by any person that does not have an approved, accurate and current registration.
- (c) A broker must submit a complete registration to DEQ under OAR 340-253-0500 and a broker designation form, or modify its existing registration each time it enters into a new contract with a regulated party or credit generator, before trading credits or facilitating credit generation or trading by a regulated party or credit generator. DEQ will not recognize the transfer of credits by a broker that does not have an DEQ-approved, accurate and current registration and a DEQ-approved broker designation form.
- (d) When DEQ approves the registration application of a regulated party, credit generator or broker under OAR 340-253-0500, the regulated party, credit generator or broker must establish an account in the CFP Online System and must use the CFP Online System to record and report credit and deficit generation, credit trading and compliance with the CFP rules in this division.
- (5) Records. Beginning on July 1, 2015, R regulated parties, credit generators registered under subsection (4)(b) and brokers registered under subsection (4)(c) 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. To demonstrate compliance, regulated parties must use the calculation method OAR 340-253-1030 specifies. Regulated parties may demonstrate compliance in each compliance period either by producing or importing fuel that in the aggregate meets the standard or by obtaining sufficient

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credits to offset deficits for such fuel produced or imported into Oregon. The initial compliance period is for two years, 2016 and 2017.

- (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 340-253-8020 establishes the Oregon Clean Fuel Standard for Diesel and Diesel Substitutes.
- (7) Quarterly progress report. <u>Unless exempt under subsection (1)(b), rRegulated parties, credit generators and brokers must submit quarterly progress reports under OAR 340-253-0630.</u>
- (8) Annual compliance report. Regulated parties, credit generators and brokers must submit annual compliance reports under OAR 340-253-0650. Regulated parties must submit an annual compliance report for 2016 notwithstanding that the initial two-year compliance period is for 2016 and 2017.

Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14; DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

340-253-0200

Regulated and Clean Fuels

- (1) Applicability. Producers and importers of transportation fuels listed in this rule, unless exempt under OAR 340-253-0250, are subject to division 253.
- (2) Regulated fuels. Regulated fuels means: the following transportation fuels:
- (a) Gasoline, ;
- (b) Diesel-fuel;
- (c) Denatured fuel ethanol,;
- (d) Biodiesel;
- (e) E10,
- (f) B5 and
- (ge) Any other liquid or non-liquid transportation fuel not listed in section (3) or exempted under OAR 340-253-0250.

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- (3) Clean fuels. Clean fuels means a transportation fuel with a <u>carbon intensity valuecarbon</u> intensity lower than the clean fuel standard for gasoline and their substitutes listed in Table 1 under OAR 340-253-8010 or diesel fuel and their substitutes in Table 1 listed in Table or 2 under OAR 340-253-8010 or OAR 340-253-8020, as applicable, for that calendar year, such as:
- (a) Bio-based compressed natural gasBio-CNG, ;
- (b) Bio-based liquefied compressed natural gasBio-L-CNG,;
- (c) Bio-based liquefied natural gasBio-LNG,;
- (d) Electricity, ;
- (e) Fossil compressed natural gas Fossil CNG, ;
- (f) Fossil liquefied compressed natural gas Fossil L-CNG, ;
- (g) Fossil liquefied natural gasFossil LNG, ;
- (h) Hydrogen or a hydrogen blend;
- (i) liquefied petroleum gasLPG; and
- (j) Renewable diesel.

Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

340-253-0250

Exemptions

- (1) Exempt fuels. The following fuels are exempt from the list of regulated fuels under OAR 340-253-0200(2):
- (a) Fuels used in small volumes: A transportation fuel supplied for use in Oregon if the producer or importer documents that all providers supply an aggregate volume of less than 360,000 gasoline-gallons of liquid fuel equivalents or diesel gallon equivalents per year.
- (b) Small volume fuel producer. A transportation fuel supplied for use in Oregon if the producer documents that:
- (A) The producer has an annual production volume of less than 10,000 gasoline gallons of liquid equivalents or diesel gallon equivalents per year; or

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- (B) The producer <u>uses the entire volume of fuel produced in motor vehicles used by the producer directly and</u> has an annual production volume of less than 50,000 gasoline gallons of liquid equivalents or diesel gallon equivalents and the fuel producer uses the entire volume in motor vehicles the producer uses directly; or
- (C) The producer is a research, development or demonstration facility defined under OAR 330-090-0100.
- (c) Fuels that are exported for use outside of Oregon.
- (2) Exempt fuel uses.
- (a) Transportation fuels supplied for use in any of the following motor vehicles are exempt from the definition of regulated fuels under OAR 340-253-0200:
- (A) Aircraft;
- (B) Racing activity vehicles defined in ORS 801.404;
- (C) Military tactical vehicles and tactical support equipment;
- (D) Locomotives;
- (E) <u>Watercraft</u>Ocean-going vessels defined under OAR 856-010-0003, except for vessel under fishery or recreational endorsement under title 46 United States Code, chapter 121;
- (F) Motor vehicles registered as farm vehicles as provided in ORS 805.300;
- (G) Farm tractors defined in ORS 801.265;
- (H) Implements of husbandry defined in ORS 801.310; or
- (I) Motor trucks defined in ORS 801.355 if used primarily to transport logs; and
- (J) Motor vehicles that are not designed primarily to transport persons or property, that are operated on highways only incidentally and that are used primarily for construction work.
- (b) To be exempt, the regulated party must document that the fuel was supplied to for use in a motor vehicle listed in subsection (2)(a). The documentation must:
- (A) Establish that the fuel was sold through a dedicated source to use in one of the specified motor vehicles; or
- (B) Be on a fuel transaction basis if the fuel is not sold through a dedicated source.

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Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3.

Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) <u>& 2015 OL Ch. 4 Sec. 3.</u>

Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14; DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

Designation of Regulated and Opt-in Parties

340-253-0310

Regulated Parties: Gasoline, E10, Diesel Fuel, B5, Ethanol and Biodiesel

- (1) Regulated party. The regulated party is the producer or importer of the regulated fuel.
- (2) Recipient notification requirement. If a regulated party intends to transfer ownership of fuel, it is the recipient's responsibility to notify the transferor whether the recipient is a producer, an importer of blendstocks, a large importer of finished fuels, a small importer of finished fuels or not an importer. The notification does not have to be in writing.
- (3) Recipient is an <u>importer of blendstocks or a</u> large importer <u>of finished fuels</u>. If a regulated party transfers the fuel to an <u>importer of blendstocks or a</u> large importer <u>of finished fuels</u>, the transferor and the recipient have the options and responsibilities under this section.
- (a) Unless the transferor elects to remain the regulated party under (3)(b):
- (A) The recipient is now the regulated party who:
- (i) Must comply with the registration, recordkeeping and reporting requirements under OAR 340-253-0500, 340-253-0600, 340-253-0620, 340-253-0630 and 340-253-0650 for the fuel;
- (ii) Is responsible for compliance with the clean fuel standard for the fuel under OAR 340-253-0100(6); and
- (iii) Is eligible to generate credits for the fuel, as applicable.
- (B) The transferor must provide the recipient a product transfer document by the time of transfer. The product transfer document must prominently indicate that:
- (i) Transferor company name, address and contact information;
- (ii) Recipient company name, address and contact information;
- (iii) Date of transfer;
- (iv) Fuel pathway code and carbon intensity value;
- (v) Volume/amount;

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(vi) A statement that the recipient is now the regulated party.; and

- (vii) The EPA fuel production company ID and facility ID, if available.
- (C) The transferor is no longer the regulated party for such fuel, except for maintaining the product transfer documentation under OAR 340-253-0600.
- (b) The transferor may elect to remain the regulated party for the transferred fuel. If the transferor elects to remain the regulated party:
- (A) The transferor remains the regulated party who:
- (i) Must comply with the registration, recordkeeping and reporting requirements under OAR 340-253-0500, 340-253-0600, 340-253-0620, 340-253-0630 and 340-253-0650 for the fuel;
- (ii) Is responsible for compliance with the clean fuel standard for such fuel under OAR 340-253-0100(6); and
- (iii) Is eligible to generate credits for the fuel, as applicable.
- (B) The transferor must provide the recipient a product transfer document by the time of transfer. The product transfer document must prominently indicate that:
- (i) Transferor company name, address and contact information;
- (ii) Recipient company name, address and contact information;
- (iii) Date of transfer;
- (iv) Amount; and
- (v) A statement that the transferor remains the regulated party.
- (C) The recipient is not the regulated party, except for maintaining the product transfer documentation under OAR 340 253 0600.
- (4) Recipient is a producer, a small importer <u>of finished fuels</u> or is not an importer. If a regulated party transfers the fuel to a producer, a small importer <u>of finished fuels</u> or a person who is not an importer, the transferor and the recipient have the options and responsibilities under this section.
- (a) Unless the recipient and the transferor agree the recipient is the regulated party under subsection (4)(b):
- (A) The transferor remains the regulated party who:

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- (i) Must comply with the registration, recordkeeping and reporting requirements under OAR 340-253-0500, 340-253-0600, 340-253-0620, 340-253-0630 and 340-253-0650 for the fuel;
- (ii) Is responsible for compliance with the clean fuel standard for such fuel for such fuel under OAR 340-253-0100(6); and
- (iii) Is eligible to generate credits for the fuel, as applicable.
- (B) The transferor must provide the recipient a product transfer document by the time of transfer. The product transfer document must prominently indicate that:
- (i) Transferor company name, address and contact information;
- (ii) Recipient company name, address and contact information;
- (iii) Date of transfer;
- (iv) Amount; and
- (v) A statement that the transferor remains the regulated party.
- (C) The recipient is not the regulated party, except for maintaining the product transfer documentation under OAR 340-253-0600.
- (b) The recipient may elect to be the regulated party for the transferred fuel. If the recipient elects to be the regulated party:
- (A) The recipient is the regulated party who:
- (i) Must comply with the registration, recordkeeping and reporting requirements under OAR 340-253-0500, 340-253-0600, 340-253-0620, 340-253-0630 and 340-253-0650 for the fuel;
- (ii) Is responsible for compliance with the clean fuel standard for such fuel for such fuel under OAR 340-253-0100(6); and
- (iii) Is eligible to generate credits for the fuel, as applicable.
- (B) The transferor must provide the recipient a product transfer document by the time of transfer. The product transfer document must prominently indicate that:
- (i) Transferor company name, address and contact information;
- (ii) Recipient company name, address and contact information;
- (iii) Date of transfer;

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(iv) Fuel pathway code and carbon intensity value;

- (v) Volume/amount;
- (vi) A statement that the recipient is now the regulated party; and
- (vii) The EPA fuel production company ID and facility ID, if available.
- (C) The transferor is not the regulated party, except for maintaining the product transfer documentation under OAR 340-253-0600.

Stat. Auth.: ORS 468.020, 2009 OL Ch. 754 Sec. 6 (2011 Edition) 2015 OL Ch. 4 Sec. 3. Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) 2015 OL Ch. 4 Sec. 3. Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14; DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

340-253-0320

Credit Generators: Compressed Natural Gas, Liquefied Natural Gas, Liquefied Compressed Natural Gas, Liquefied Petroleum Gas and Renewable Diesel

- (1) Applicability. This rule applies to providers of compressed natural gas, liquefied natural gas, liquefied compressed natural gas, liquefied petroleum gas and renewable diesel for use as a transportation fuel in Oregon.
- (2) Compressed natural gas. For CNG used as a transportation fuel, subsections (a) through (c) determine the person who is eligible to generate credits.
- (a) Fossil CNG. For fuel that is solely fossil CNG, the person that is eligible to generate credits is the owner of the compressor at the facility where the fuel is dispensed for use in a motor vehicle.
- (b) Bio-based CNG. For fuel that is solely bio-based CNG, the person that is eligible to generate credits is the producer or importer of the fuel.
- (c) Blend of fossil CNG and bio-based CNG. For fuel that is a blend of fossil CNG and bio-based CNG, the generated credits will be split between the persons eligible to generate credits under subsections (a) and (b) to give each credits based on the actual amount of fossil CNG and bio-based CNG in the blend.
- (3) Liquefied natural gas. For LNG used as a transportation fuel, subsections (a) through (c) determine the person who is eligible to generate credits.
- (a) Fossil LNG. For fuel that is solely fossil LNG, the person that is eligible to generate credits is the owner of the fueling equipment at the facility where the fuel is dispensed for use in a motor vehicle.

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- (b) Bio-based LNG. For fuel that is solely bio-based LNG, the person that is eligible to generate credits is the producer or importer of the fuel.
- (c) Blend of fossil LNG and bio-based LNG. For fuel that is a blend of fossil LNG and bio-based LNG, the generated credits will be split between the persons eligible to generate credits under subsections (a) and (b) to give each credits based on the actual amount of fossil LNG and bio-based LNG in the blend.
- (4) Liquefied compressed natural gas. For L-CNG used as a transportation fuel, subsections (a) through (c) determine the person who is eligible to generate credits.
- (a) Fossil L-CNG. For fuel that is solely fossil L-CNG, the person that is eligible to generate credits is the owner of the compressor at the facility where the fuel is dispensed for use in a motor vehicle.
- (b) Bio-based L-CNG. For fuel that is solely bio-based L-CNG, the person that is eligible to generate credits is the producer or importer of the fuel.
- (c) Blend of fossil L-CNG and bio-based L-CNG. For fuel that is a blend of fossil L-CNG and bio-based L-CNG, the generated credits will be split between the persons eligible to generate credits under subsections (a) and (b) to give each credits based on the actual amount of fossil L-CNG and bio-based L-CNG in the blend.
- (5) Liquefied petroleum gas. For propane used as a transportation fuel, the person that is eligible to generate credits is the owner of the fueling equipment at the facility where the liquefied petroleum gas is dispensed for use in a motor vehicle.
- (6) Renewable diesel. For renewable diesel used as a transportation fuel, the person that is eligible to generate credits is the producer or importer of the fuel.
- (7) Responsibilities to generate credits. Any person specified in sections (2) through (56) may generate clean fuel credits by complying with the registration, recordkeeping and reporting requirements under OAR 340-253-0500, 340-253-0600, 340-253-0620, 340-253-0630 and 340-253-0650 for the fuel.

Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14; DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

340-253-0330

Credit Generators: Electricity

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

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- (2) For residential charging. For electricity used to charge a motor vehicle in a residence, subsections (a) through (c) determine the person who is eligible to generate credits.
- (a) Electric Utility. By October 1 of the current year, an electric utility that is registered or has submitted a complete registration to DEQ under OAR 340-253-0500 may generate credits for the following calendar year.
- (b) Broker. If an electric utility does not register as the credit generator under subsection (a), then a broker may register to generate credits.
- (c) Owner of electric-charging equipment. If an electric utility or a broker does not register as the credit generator under subsection (a) or (b), then the owner of the electric-charging equipment may register to generate credits.
- (3) For non-residential charging. For electricity used to charge a motor vehicle in non-residential settings, such as at publicly available charging stations, for a fleet, or at a workplace, subsections (a) through (c) determine the person who is eligible to generate credits.
- (a) Owner or operator of electric-charging equipment. The owner or operator of the electric-charging equipment that is registered or has submitted a complete registration to DEQ under OAR 340-253-0500 by September 1 of the current year may generate credits for the following calendar year.
- (b) Electric utility. If the owner or operator of the electric-charging equipment does not register as the credit generator under subsection (a), then an electric utility may generate credits if, by October 1, the electric utility has registered or has submitted a complete registration to DEQ under OAR 340-253-0500.
- (c) Broker. If the owner or operator of the electric-charging equipment and the electric utility do not register as the credit generator under subsections (a) or (b), then a broker may generate credits if it has provided documentation to DEQ that it has an agreement with the owner or operator of the electric-charging equipment where electric vehicles are charged with transportation fuel.
- (4) Responsibilities to generate credits. Any person specified under sections (2) or (3) may generate clean fuel credits by complying with the registration, recordkeeping and reporting requirements under OAR 340-253-0500, 340-253-0600, 340-253-0620, 340-253-0630 and 340-253-0650 for the fuel.
- (5) Ceasing to generate credits. Any person that is registered to generate credits under OAR 340-253-0500 must notify DEQ in writing when it no longer intends to generate credits.

Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Hist.: DEO 8-2012, f. & cert. ef. 12-11-12; DEO 3-2015, f. 1-8-15, cert. ef. 2-1-15

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340-253-0340

Credit Generators: Hydrogen Fuel or a Hydrogen Blend

- (1) Applicability. This rule applies to providers of hydrogen fuel and a hydrogen blend for use as a transportation fuel in Oregon.
- (2) Credit generation. For a hydrogen fuel or a hydrogen blend, the person who owns the finished hydrogen fuel where the fuel is dispensed for use into a motor vehicle is eligible to generate credits.
- (3) Responsibilities to generate credits. Any person specified in section (2) may generate clean fuel credits by complying with the registration, recordkeeping and reporting requirements under OAR 340-253-0500, 340-253-0600, 340-253-0620, 340-253-0630 and 340-253-0650 for the fuel.

Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14; DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

340-253-0400

Fuel-Carbon Intensityies Values

- (1) OR-GREET. Regulated parties, credit generators and brokers must calculate all carbon intensities using OR-GREET 2.0 or a model DEQ approves.
- (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 Clean Fuels Program 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) The statewide mix of electricity used in Oregon;
- (d) Fuel economy standards and energy economy ratios;
- (e) GREET, OR-GREET, CA-GREET, GTAP, AEZ-EF or OPGEE;
- (f) Methods to calculate lifecycle greenhouse gas emissions;

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- (g) Methods to quantify indirect land use change; and
- (h) Methods to quantify other indirect effects.
- (43) Statewide carbon intensity value carbon intensities.
- (a) Regulated parties, credit generators and brokers must use the statewide average carbon intensity value carbon intensities listed in Tables 3 and 4 under OAR 340-253-8030 or and 4 under OAR 340-253-8030 or 8040, as applicable, for the following fuels:
- (A) Gasoline;
- (B) E10;
- (BC) Diesel fuel;
- (D) B5;
- (<u>CE</u>) Fossil compressed natural gas<u>CNG</u>;
- (D<u>F</u>) Fossil liquefied natural gas<u>LNG</u>;
- (EG) Liquefied petroleum gasLPG; and
- (FH) Electricity, unless an electricity provider meets the conditions under subsection (1)(b) and chooses to obtain a different carbon intensity valuecarbon intensity.
- (b) For electricity, credit generators and brokers may obtain a <u>carbon intensity value carbon</u> <u>intensity</u> different from the statewide average <u>carbon intensity value by following the procedures under section (3),</u> if the electricity provider:
- (A) Is exempt from the definition of public utility under ORS 757.005 (1)(b)(GH), and is not regulated by the Oregon Public Utility Commission; or
- (B) Generates lower carbon electricity at the same location as it is dispensed into a vehicle.
- (24) <u>Carbon intensity valueCarbon intensities</u> for established <u>fuel</u> pathways. Except as provided in sections (3) or (35), regulated parties, credit generators and brokers <u>can must</u> use <u>a the carbon intensity valuecarbon intensity that for each transportation fuel:</u>
- (a) The California Air Resources Board has certified for use in the California Low Carbon Fuel Standards program, adjusted for indirect land use change and approved by DEQ as being consistent with OR-GREET 2.0; or
- (b) Matches the description of a fuel pathway listed in Table 3 or 4 under OAR 340-253-8030 or -8040.

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that best matches the description in the fuel pathway in Table 3 or 4 under OAR 340-253-8030 or 340-253-8040, as applicable, and as approved through the registration process under 340-253-0500.

- (5) 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 broker has the option to develop a primary alternative fuel pathway. Fuel pathways shall fall into one of two tiers:
- (a) Tier 1. Conventionally-produced alternative fuels of a type that has been in full commercial production for at least three years; produced using grid electricity, natural gas and/or coal for process energy; and do not include innovative methods. 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 landfill gas.
- (b) Tier 2. All fuels not included in Tier 1 including:
- (A) Cellulosic alcohols;
- (B) Biomethane from sources other than landfill gas;
- (C) Hydrogen;
- (D) Renewable hydrocarbons other than renewable diesel produced from conventional feedstocks; and
- (E) Tier 1 fuels using innovative methods.
- (3) Individual carbon intensity values.
- (a) Directed by DEQ. A regulated party, credit generator or broker must obtain and use an individual carbon intensity value for a fuel if DEQ:
- (A) Determines the fuel's carbon intensity is not adequately represented by any of the carbon intensity values for established pathways in Table 3 or 4 under OAR 340-253-8030 or 340-253-8040, as applicable; and

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- (B) Directs the regulated party, credit generator or broker to obtain an individual carbon intensity value under OAR 340-253-0450.
- (b) Election of the party. A regulated party, credit generator or broker may obtain and use an individual carbon intensity value for a fuel if:
- (A) It applies for and obtains DEQ approval under OAR 340-253-0450; and
- (B) The fuel's carbon intensity value differs from the carbon intensity value for the most similar fuel pathway in Table 3 or 4 under OAR 340-253-8030 or 340-253-8040, as applicable, by at least 5.0 gCO2e per MJ or 10 percent, whichever is less.
- (c) New fuel or feedstock. A regulated party, credit generator or broker must obtain approval for an individual carbon intensity value under OAR 340 253 0450 for any fuel not included in Table 3 or 4 under 340 253 8030 or 340 253 8040, as applicable, and for any fuel made from a feedstock not represented in a carbon intensity value in Table 3 or Table 4 under 340 253 8030 or 340 253 8040, as applicable. A regulated party, credit generator or broker must notify DEQ by submitting a modification to the original registration within 30 days of providing a new transportation fuel for use in Oregon.
- (d) Process change notification. If a fuel's carbon intensity value changes due to a change in refining process in a way that increases the fuel's carbon intensity value by more than either 5.0 gCO2e per MJ or 10 percent, whichever is less, the regulated party, credit generator or broker must notify DEQ and obtain an individual carbon intensity value under OAR 340-253-0450 by submitting a modification to the original registration under 340-253-0500 within 30 days after the refining process changes.
- (e) OR-GREET. Regulated parties, credit generators and brokers must calculate all carbon intensity values using the approved version of OR-GREET, or a DEQ-approved comparable model for any fuel that cannot be modeled with OR-GREET. Any variations from the approved version of OR-GREET must be documented as described under OAR 340-253-0450(1) and submitted to DEQ for approval.
- (4) DEQ review of carbon intensity values. Every three years, or sooner if DEQ determines that new information becomes available that warrants an earlier review, DEQ will review the carbon intensity values in Table 3 or 4 under OAR 340 253 8030 or 340 253 8040 and:
- (a) Must consider, at a minimum:
- (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) The statewide mix of electricity used in Oregon;

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- (D) Individual carbon intensity values that have been approved under OAR 340-253-0450;
- (E) Changes to OR GREET;
- (F) New methods to calculate lifecycle greenhouse gas emissions;
- (G) Changes in quantifying indirect land use change; and
- (H) Changes in quantifying indirect effects.
- (b) Report to EQC regarding whether statewide average carbon intensity values in Table 3 or 4 under OAR 340 253 8030 or 340 253 8040 should be revised. Changes to Table 3 or 4 under 340 253 8030 or 340 253 8040 may only be revised through a rulemaking.

Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14; DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

340-253-0450

Approval Obtaining for a Individual Carbon Intensityy Values

- (1) Out-of-state producers that are not a regulated party, credit generator or broker can apply to obtain a carbon intensity by following the approval process to use a carbon intensity listed in OAR 340-253-0500(3).
- (2) Applicants seeking approval to use a carbon intensity that is approved by the California Air Resources Board must submit a link to the CARB-approved fuel pathway.
- (3) If it is not possible to identify an applicable carbon intensity under section (2) or (4), then an applicant can seek approval to use a carbon intensity that is listed in Table 3 or 4 under OAR 340-253-8030 or -8040. An applicant must propose to use the carbon intensity with the fuel pathway description that best meets the fuel pathway for the fuel.
- (4) 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 URL.
- (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) 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 using either the Tier 1 or Tier 2 calculator.
- (5) In addition to the items in section (4), applicants seeking to obtain a carbon intensity using the Tier 1 calculator must submit the following:
- (a) The Tier 1 calculator with the "T1 Calculator" tab completed;
- (b) A summary of 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 previous two years; and
- (c) RFS third party engineering report, if available.
- (6) In addition to the items in section (4), applicants seeking to obtain a carbon intensity using the Tier 2 calculator must submit the following:
- (a) A summary of 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 previous two years;
- (b) The geographical coordinates of the fuel production facility;
- (c) A copy of the Tier 2 spreadsheet;
- (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

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- (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.
- (7) Applicants seeking a provisional carbon intensity.
- (a) Applicants that are seeking to obtain a carbon intensity for a fuel production facility that has not been in full commercial operation for two years may seek a provisional carbon intensity.

 Applicants may request a provisional carbon intensity for Tier 1 and Tier 2 facilities provided they have been in full commercial production for at least one full calendar quarter. The applicant shall submit operating records covering all prior periods of full commercial operation, provided those records cover at least one full calendar quarter. DEQ will use the approval process described in sections (1) through (6) of this rule.
- (b) After DEQ approves the provisional carbon intensity, the applicants shall submit copies of receipts for all energy purchases each calendar quarter until two full calendar years of commercial production receipts are submitted. Based on timely reports, the applicant may generate provisional credits. At any time during the two year period, DEQ may revise as appropriate the operational carbon intensity based on the receipts submitted.
- (c) If, after a plant has been in full commercial production for more than two years, 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 CFP Online System and adjust the credit balance accordingly.
- (d) 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 provisional carbon intensity reduction to reflect operational data. In support of such a petition, the applicant must submit a revised application packet that fully documents the requested reduction.
- (8) Recertified CARB fuel pathways. Beginning on January 1, 2016, CARB will recalculate carbon intensities as it transitions from CA-GREET 1.8 to CA-GREET 2.0.
- (a) For applicants that rely on CARB-approved fuel pathways to be used in Oregon, no additional information will be required. DEQ will confirm that the CARB fuel pathways are consistent with OR-GREET 2.0 after they are recertified by CARB and will update the CFP Online System to reflect the updated fuel pathways. The effective dates for the recertified fuel pathways will be identical to those approved by CARB, once approved by DEQ.
- (b) Fuel pathways that are not recertified or that are not approved by DEQ will be removed from the CFP Online System on December 31, 2016.
- (1) Individual carbon intensity value approval. A regulated party, credit generator or broker may not use an individual carbon intensity value without written DEQ approval under this rule.

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Individual carbon intensity values are not available for the fuels listed under OAR 340-253-0400(1)(a).

- (a) OR-GREET modifications. To obtain an individual carbon intensity value, a regulated party, eredit generator or broker may propose a modification to inputs into OR-GREET that more accurately reflect the specific characteristics of the fuel or changes to OR-GREET itself that will result in a more accurate calculation of the carbon intensity value for a fuel. The proposal for an individual carbon intensity value must include:
- (A) Inputs used to generate the carbon intensity values under OAR 340-253-0400; and
- (B) All modified parameters used to generate the new fuel carbon intensity value.
- (b) Other modifications. To obtain an individual carbon intensity value, a regulated party, credit generator or broker may propose modifications based on any new information to calculate lifecycle greenhouse gas emissions. The proposal for an individual carbon intensity value must include:
- (A) Inputs used to generate the carbon intensity values under OAR 340-253-0400; and
- (B) All parameters used to generate the new fuel carbon intensity value.
- (2) Reliability. The regulated party, credit generator or broker must supply documentation necessary for DEQ to determine that the method used to calculate the individual carbon intensity value is reliable and comparable to OR-GREET.
- (3) Modification submittal. The regulated party, credit generator or broker must submit proposed modifications under this rule electronically and must include:
- (a) Documentation that the proposed pathway has been approved by the California Air Resources Board, if available;
- (b) A description of all modifications required by section (1);
- (c) Supporting data and calculations; and
- (d) Any other information the party would like to submit or DEQ requests to verify the method for calculating the proposed, individual carbon intensity value.
- (4) Review process. Within 15 workdays after receiving any modification proposal submitted under section (3), DEQ will determine whether the proposal is complete.
- (a) If DEQ determines the proposal is incomplete, DEQ will notify the regulated party, credit generator or broker and identify the deficiencies. If the party submits supplemental information, DEQ has 15 workdays to determine if the supplemental submittal is complete, or to notify the party and identify the continued deficiencies.

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- (b) If DEQ determines the proposal is complete, DEQ will:
- (A) Publish the application on the Oregon Clean Fuels Program website; and
- (B) Approve or deny an individual carbon intensity value.
- (5) DEQ approval. A regulated party, credit generator or broker may use an individual carbon intensity value upon receiving written approval from DEQ. DEQ will propose to incorporate all associated parameters and fuel-related information of a DEQ-approved individual carbon intensity value into Table 3 or 4 under OAR 340-253-8030 or 340-253-8040, as applicable, in a future rulemaking.
- (6) DEQ denial. If DEQ determines the proposal for an individual carbon intensity value is not adequately documented, DEQ will deny the modification proposal, identify the basis for the denial, and notify the party which carbon intensity value it is authorized to use for the fuel.

Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

340-253-0500

Registration

- (1) Registration information. To register, regulated parties, credit generators and brokers must submit <u>a registration application containing</u> the following <u>information</u> to DEQ <u>using DEQ approved forms</u>:
- (a) Company identification, including physical and mailing addresses, phone numbers, e-mail addresses, and contact names;
- (b) The CFP status of the registrant as a producer, <u>importer of blendstocks</u>, small importer <u>of finished fuels</u>, large importer <u>of finished fuels</u>, credit generator or broker;
- (c) For each transportation fuel that will be produced, imported, dispensed or used in Oregon:
- (A) If the fuel has a statewide carbon intensity under OAR 340-253-0400(3) or has a CARB-approved fuel pathway, no fuel-specific information is required.
- (B) If the fuel does not have a CARB-approved fuel pathway, the proposed carbon intensity, the documentation for the proposal (Tier 1 or Tier 2 calculator, OR_GREET 2.0 or default value from OAR 340-253-8030 or -8040) and the physical transport modeFor each transportation fuel that will be produced, imported, dispensed or used in Oregon. , as applicable:
- (A) The proposed carbon intensity value for each fuel. The proposed carbon intensity value must be:

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- (i) A statewide carbon intensity value for any fuel listed under OAR 340-253-0400(1);
- (ii) An individual carbon intensity value listed under Table 3 or 4 under OAR 340-253-8030 or 340-253-8040; or
- (iii) An individual carbon intensity approved by DEQ, or a proposal to obtain a new individual carbon intensity value, under OAR 340-253-0400(3).
- (B) For a biofuel, its EPA production company ID and facility ID;
- (C) The physical transport mode that represents how the fuel will enter Oregon.
- (d) Other information requested by DEQ related to registration.
- (2) Completeness determination process.
- (a) For applications using carbon intensities that are either (i) CARB-approved fuel pathways, (ii) listed in Table 3 or 4 under OAR 340-253-8030 or -8040, or (iii) calculated using the Tier 1 calculator, DEQ will determine whether the proposal is complete within 14 calendar days 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.
- (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.
- (3) Approval process to use carbon intensities.
- (a) For applications proposing to use CARB-approved fuel pathways, DEQ will confirm that CARB approved the proposed fuel pathway and that it is consistent with OR-GREET 2.0. DEQ shall approve the registration application within 14 calendar days after the completeness determination.
- (b) For applications proposing to use a carbon intensity listed in Table 3 or 4 under OAR 340-253-8030 or -8040, DEQ will confirm that the fuel's proposed fuel pathway meets the general description of the fuel pathway in the tables and is within 5 gCO2e/MJ or 10 percent of the listed carbon intensity. DEQ shall approve the registration application within 14 calendar days after the completeness determination.

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- (c) For applications proposing to use the Tier 1 calculator, DEQ will confirm that the Tier 1 calculator and the supporting documentation are accurate. DEQ shall approve the registration application within 14 calendar days after the completeness determination.
- (d) For applications proposing to use the Tier 2 calculator, DEQ will review the proposed carbon intensity as follows:
- (A) Once a proposal is deemed complete, DEQ will determine whether the requirements for approval have been met according to the following criteria:
- (i) Replication of the Tier 2 calculator outputs, using the modifications contained in the application;
- (ii) Verification of the energy consumption inputs; and
- (iii) Evaluation of the validity of the remaining inputs.
- (B) Once DEQ has approved the carbon intensity, DEQ will notify the applicant of its determination. DEQ will confirm the determination through the registration approval process.
- (C) If DEQ determines the proposal for the carbon intensity has not met the criteria in subsection (A), DEQ will notify the applicant that the proposal is denied and identify the basis for the denial.
- (2) Completeness of submittal. DEQ will review the information submitted under section (1) to determine if the submission is complete.
- (a) If DEQ determines the submission is incomplete, DEQ will notify the registrant of the information needed to complete the submission. The registrant must provide the requested information within 30 calendar days from the date on the request.
- (b) If DEQ determines the submission is complete, DEQ will notify the party in writing of the completeness determination.
- (c) If DEQ does not notify the party in writing of the completeness determination within 30 calendar days of receipt of the registration application, the application is deemed complete.
- (3) Approval of carbon intensity values. DEQ will review proposed carbon intensity values to determine if they are accurate.
- (a) DEQ will review proposed carbon intensity values as follows:
- (A) For a proposed carbon intensity value listed under Table 3 or 4 under OAR 340-253-8030 or 340-253-8040, as applicable, DEQ will review whether the fuel type accurately matches the fuel pathway description of the proposed carbon intensity value listed.

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- (B) For a proposed individual carbon intensity value, DEQ will review the proposal as provided under OAR 340-253-0450.
- (b) If DEQ determines that the proposed carbon intensity values accurately reflect the carbon intensity of the fuel types, DEQ will approve the proposed values. Approval of carbon intensity values is confirmed in the registration approval under section (4).
- (c) If DEQ determines that a different carbon intensity value more accurately reflects the information submitted, DEQ will notify the regulated party, credit generator or broker of its determination including DEQ's proposed carbon intensity value and the reason(s) for selecting it within 45 days of DEQ's completeness determination.
- (A) The registrant must accept or appeal DEQ's determination in writing within 15 days of receiving DEQ's carbon intensity value determination.
- (B) If the registrant accepts DEQ's determination, then confirmation will be through the registration approval under section (4) of this rule.
- (C) If the registrant appeals DEQ's determination, then it must submit additional supporting information to DEQ within 30 days of its appeal notification. DEQ will review the additional information as provided in this section for review of initial submissions of carbon intensity values. If DEQ already reviewed one appeal of its carbon intensity determination under this section, DEQ may inform the regulated party, credit generator or broker that DEQ's decision is final and it will not undertake further review.
- (4) Registration approval. Once DEQ approves the carbon intensity values, DEQ will notify the registrant in writing of its registration approval. The notification will include confirmation of the carbon intensity value for each fuel to be used in calculating credits and deficits under OAR 340-253-1000.
- (4) Registering as a user in the CFP Online System. After DEQ provides written approval of the registration application, the regulated party, credit generator or broker must establish an account in the CFP Online System.
- (55) Modifications to the registration.
- (a) The registrant must submit an amended registration to DEQ within 30 days of any change occurring to information described in section (1).
- (b) DEQ may require a registrant to submit an amended registration based on new information DEQ receives.
- (c) If a registrant amends its registration under this section, the registrant must also update the registrant's account in the CFP Online System to accurately reflect the amended information, as appropriate.

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- (6) Opting out. To opt-out of the CFP, a credit generator or broker must notify DEQ in writing. A credit generator or broker that opts out cannot generate, trade, or facilitate the generation or trading of credits unless the credit generator or broker re-registers under OAR 340-253-0100(3) or (4). Regulated parties may not opt out of the CFP.
- (7) Registering as a user in the CFP Online System. After DEQ provides initial written approval of the registration application of a regulated party, credit generator or broker, the regulated party, credit generator or broker must establish an account in the CFP Online System and must use the CFP Online System to record and report credit and deficit generation, credit trading and compliance with the rules in this division.
- (6) Cancellation of the registration.
- (a) If a regulated party no longer meets the applicability of the program under OAR 340-253-0100(1), then it must notify DEQ of such change.
- (b) If a credit generator or broker wishes to voluntarily opt-out of the Clean Fuels Program, the credit generator or broker must provide a 90-day notice of intent to opt out of the Clean Fuels Program and a proposed effective date for the completion of the opt-out process.
- (c) The regulated party, credit generator or broker must submit any outstanding quarterly progress reports and an annual compliance report. Any credits that remain shall be forfeited and the account in the CFP Online System shall be closed.
- (d) Once DEQ determines that the above actions are complete, DEQ will notify the registrant in writing of the cancellation of its registration.

Stat. Auth.: ORS 468.020,
2009 OL Ch. 754 Sec. 6 (2011 Edition)
2015 OL Ch. 4 Sec. 3. Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition)
2015 OL Ch. 4 Sec. 3. Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14; DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

340-253-0600

Records

- (1) Records <u>Retention</u>. Regulated parties, credit generators and brokers must retain the following records for at least 5 years:
- (a) Product transfer documents as described in section (2);
- (b) Credit transfer documents Records related to obtaining a carbon intensity described in OAR 340-253-0450;
- (c) Copies of all data and reports submitted to DEQ;

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- (d) Records related to each fuel transaction; and
- (e) Records used for compliance or credit calculations.
- (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 ID and facility ID as registered with the RFS program.
- (23) Review. All data, records, and calculations used by a regulated party, a credit generator or a broker to comply with the Oregon Clean Fuels Program are subject to verification by DEQ. Regulated parties, credit generators and brokers must provide records retained under section (1) within 60 calendar days after the date DEQ requests a review of the records, unless DEQ specifies otherwise.

Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14; DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

340-253-0620

CFP Online System Reporting

- (1) Online reporting.
- (a) Except as provided in subsection (b), Rregulated parties, credit generators and brokers must use the CFP Online System to submit all required reports, including quarterly progress reports under OAR 340-253-0630 and annual compliance reports under OAR 340-253-0650.

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- (b) Small importers of finished fuels may submit annual compliance reports using the EZ-Fuels Online Reporting Tool for Fuel Distributors in lieu of using the CFP Online System.
- (2) Credit transactions. Regulated parties, credit generators and brokers must use the CFP Online System to transact credits.
- (23) Establishing an account. <u>After DEQ approves Following DEQ's approval of a the regulated party's, credit generator's or broker's registration application under OAR 340 253 0500, the regulated party, credit generator or broker such person must establish an account in the CFP Online System and. Such person must include the following information to register as a user in the CFP Online System:</u>
- (a) User's Business -name, address, state and county, date and place of incorporation, and federal employer identification number (FEIN);
- (b) <u>User's The name of the person who will be the primary contact name</u>, and that person's business and mobile phone numbers, email address, <u>CFP Online System</u> username and password;
- (c) Name and title of a person who will act as the an-Administrator for the account;
- (d) Name and title of <u>one or more persons who will be</u> Contributors <u>on the account</u>, optional;
- (e) Name and title of <u>one or more persons who will be</u> Reviewers <u>on the account</u>, optional; and
- (f) Any other information DEQ may require in the CFP Online System.
- (34) Account management roles.
- (a) Administrator:
- (A) Authorized to sign for the useraccount;
- (B) Responsible for submitting quarterly progress and annual compliance reports;
- (C) Makes changes to the company profile; and
- (D) May designate other users persons within the company who can review and upload data, but not submit reports.
- (b) Contributor:
- (A) Authorized to submit quarterly progress and annual compliance reports, if given signature authority; but
- (B) Cannot make changes to the company account profile.

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(c) Reviewer:

- (A) Provided read-only access; but
- (B) Cannot submit quarterly progress and annual compliance reports.
- (45) Signature. The Administrator or a Contributor authorized to sign reports Reports must sign include an electronic signature that each report to certifyies that the submitted information is true, accurate and complete.
- (5) Correcting a previously submitted report. A regulated party, credit generator or broker may request to have a previously submitted quarterly progress or annual compliance report reopened for corrective edits and re-submittal. The requestor must submit an "Unlock Report Request Form" using the CFP Online System. The requestor is required to provide justification for the report corrections and indicate the specific corrections to be made to the report. Each submitted request is subject to DEQ approval. DEQ approval of a corrected a report does not preclude DEQ enforcement based on misreporting.
- (6) Information exempt from disclosure. Pursuant to the provisions of ORS 192.410 to 192.505, all information submitted to the Department 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, ORS 192.410 through 192.505 or other applicable Oregon law.

Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Hist.: DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

340-253-0630

Quarterly Progress Reports

- (1) Quarterly progress reports. Except for persons exempt from this requirement under OAR 340-253-0100, Each quarter, regulated parties, credit generators and brokers must submit a quarterly progress report using the CFP Online System by no later than:
- (a) May 31 June 30 for January through March of each year;
- (b) August 31 September 30 for April through June of each year;
- (c) November 30 December 31 for July through September of each year; and
- (d) February 28 March 31 for October through December of each previous year.
- (2) General reporting requirements for quarterly progress reports.

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- (a) Regulated parties, credit generators and brokers must submit qQuarterly progress reports that must contain the information specified in Table 5 under OAR 340-253-8050 for each transportation fuel subject to the CFPClean Fuels Program.
- (b) Reporters must upload the data for the quarterly reports in the CFP Online System within the first 45 days after the end of the quarter.
- (c) During the second 45 days, reporters must work with each other to resolve any fuel transaction discrepancies between different reporters' reported transactions.
- (3) Any reporter that generated credits by importing or producing natural gas (including CNG, LNG and L-CNG) must report:
- (a) For CNG and L-CNG, the amount of fuel (in scf) dispensed per compliance period for all LDV and MDV, HDV-CIE and HDV-SIE. To convert pounds OF CNG to SCF use the formula below:

$$100 lbs CNG x \frac{SCF}{20.4 arams} x \frac{453.59 grams}{lb} = 22.23 SCF$$

- (b) For LNG, the amount of fuel dispensed (in gal) 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 Table 3 or 4 under OAR 340-253-8030 or -8040.
- (3<u>d</u>) Specific reporting parameters <u>F</u> for biomethane (including bio-based CNG, bio-based LNG and bio-based L-CNG) used as a transportation fuel., The credit generator must report:
- (a) The information specified for CNG and LNG in Table 5 under OAR 340-253-8050;
- (b) Tthe carbon intensity valuecarbon intensity of the bio-based CNG, bio-based LNG or bio-based L-CNG as approved under OAR 340-253-0500(4)0500 and; and
- (c) Tthe EPA production company ID and facility ID.
- (4)_Specific reporting parameters for electricity used as a transportation fuel. Any reporter that generated credits by providing For electricity used as a transportation fuel, a credit generator must report the following:
- (a) The information specified for electricity in Table 5 under OAR 340-253-8050;

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- (b) The earbon intensity valuecarbon intensity of the electricity as listed in Table 3 or 4 under OAR 340-253-8030 or -8040 or as approved under OAR 340-253-0500; as approved under OAR 340-253-0500(4); and
- (c) For residential charging stations, the total electricity dispensed (in kilowatt hourskWh) to all vehicles at each residence, 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 household or residence; or
- (B) For households and residences where direct metering is not available has not been installed and with prior DEQ approval, the credit generator or broker may report the total electricity dispensed as a transportation fuel using an alternative method that the credit generator or broker demonstrates is substantially similar to the use of direct metering, as approved by DEQ.
- (d) For each public access <u>charging facility</u>, fleet <u>charging facility</u> and workplace private access charging facility, the amount of electricity dispensed (in <u>kilowatt hourskWh</u>).

Stat. Auth.: ORS 468.020,
2009 OL Ch. 754 Sec. 6 (2011 Edition)
2015 OL Ch. 4 Sec. 3. Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition)
2015 OL Ch. 4 Sec. 3. Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14; DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

340-253-0650

Annual Compliance Reports

- (1) (1) Annual compliance reports. Using the CFP Online System,
- (a) Except as providing in subsection (b), regulated parties, credit generators and brokers must use the CFP Online System to submit an annual compliance report to DEQ not later than April 30 for the compliance period running ending on from January 1 through December 31 of the previous year.
- (b) Small importers of finished fuels may submit annual compliance reports using the EZ-Fuels Online Reporting Tool for Fuel Distributors under OAR 340 Division 215, in lieu of using the CFP Online System, not later than March 31 for the compliance period ending on December 31 of the previous year.
- (2) General reporting requirements for annual compliance reports. Regulated parties, credit generators and brokers must submit annual compliance reports that meet, at minimum, the general and specific requirements for quarterly progress reports and include the following information:

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- (a) The total credits and deficits generated by the regulated party, credit generator or broker in the current compliance period, calculated in the CFP Online System as per equations in OAR 340-253-1020;
- (b) Any credits carried over from the previous compliance period;
- (c) Any deficits carried over by a regulated party from the previous compliance period;
- (d) The total credits acquired from <u>other regulated parties</u>, <u>credit generators and brokers</u>other regulated parties, <u>credit generators and brokers</u>;
- (e) The total credits <u>sold or otherwise</u> transferredto other regulated parties, credit generators and brokers; and
- (f) The total credits retired <u>within the CFP Online System</u> by a regulated party to meet the regulated party's compliance obligation.
- (3) All pending credit transfers initiated during a compliance period must be completed prior to submittal of the annual compliance report.
- (4) Correcting a previously submitted report. A regulated party, credit generator or broker may ask DEQ to re-open a previously submitted quarterly progress or annual compliance report for corrective edits and re-submittal. The requestor must submit an "Unlock Report Request Form" using the CFP Online System. The requestor is required to provide justification for the report corrections and must indicate the specific corrections to be made to the report. Each submitted request is subject to DEQ approval. DEQ approval of a corrected report does not preclude DEQ enforcement based on misreporting.

Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14; DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

340-253-1000

Credit and Deficit Basics

- (1) Carbon intensity value Carbon intensities.
- (a) Except as provided in subsections (b) or (c), when calculating earbon intensity value carbon intensities, regulated parties, credit generators and brokers must:
- (A) Use a DEQ carbon intensity value carbon intensity approved by DEQ under OAR 340-253-0500(3)(4); and

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- (B) Express the earbon intensity value carbon intensity to the same number of significant figures as shown in Table 3 or 4 under OAR 340-253-8030 or -8040 Table 3 or 4 under OAR 340-253-8030 or 340-253-8040, as applicable.
- (b) If a regulated party, credit generator or broker has submitted a complete registration under OAR 340-253-0500 and DEQ has not approved the proposed carbon intensity value or has not determined that a different carbon intensity value more accurately reflects the fuel type, the regulated party, credit generator or broker must use the carbon intensity value proposed in its registration.
- (b) If a regulated party, credit generator or broker has an approved provisional carbon intensity approved under OAR 340-253-0450(8), the regulated party, credit generator or broker must use the provisional carbon intensity DEQ approved.
- (2) Fuel quantities. Regulated parties, credit generators and brokers must express fuel quantities in the unit of fuel to the nearest whole unit applicable for each fuel such as gallons, standard cubic feet, kilowatt hours or pounds.
- (3) Conversion of energyCompliance period. To convert other energy units to megajoules, the regulated party, credit generator or broker must multiply the unit by the corresponding energy density factor based on the lower heating values of fuels in OR GREET using BTU to megajoules conversion of 1,055 J per BTU. Table 6 under OAR 340-253-8060 includes energy density conversions for Oregon. The annual compliance period is January 1 through December 31 of each year, except that the initial compliance period is January 1, 2016, through December 31, 2017.
- (4) Metric tons of CO2 equivalent. Regulated parties, credit generators and brokers must express credits and deficits to the nearest whole metric ton of carbon dioxide equivalent.
- (5) Deficit and cCredit generation.
- (a) Credit generation. A clean fuel credit is generated when fuel is produced, imported, dispensed or used in Oregon, as applicable, and the earbon intensity value carbon intensity of the fuel approved under OAR 340-253-0500(4)0500(3) is less than the clean fuel standard for gasoline and gasoline substitutes in Table 1 under OAR 340-253-8010 or for diesel fuel and their diesel substitutes in Table 1 or 2 under 340-253-8010 or 340-253-8020, as applicable.
- (b) Deficit generation. A clean fuel deficit is generated when fuel is produced, imported, dispensed or used in Oregon, as applicable, and the carbon intensity of the fuel approved under OAR 340-253-0500(3) 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 340-253-8020.
- (c) Banking deficits and credits. Upon submission and acceptance of a timely quarterly progress report, the total number of deficits and credits generated will be placed in the CFP Online System account of the regulated party, credit generator or broker.

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- (d) Once banked, regulated parties, credit generators and brokers may retain credits indefinitely, retire them to meet a compliance obligation or transfer them to another regulated party, credit generator or broker.
- (e) No credits may be generated or claimed for any transactions or activities occurring in a quarter for which the quarterly reporting deadline has passed.
- (6) Deficit generation. A clean fuel deficit is generated when fuel is produced, imported, dispensed or used in Oregon, as applicable, and the carbon intensity value of the fuel approved under OAR 340-253-0500(4) is more than the clean fuel standard for gasoline or diesel fuel and their substitutes in Table 1 or 2 under 340-253-8010 or 340-253-8020, as applicable.

Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

340-253-1010

Fuels to Include in Credit and Deficit Calculation

- (1) Fuels included. Regulated parties, credit generators and brokers must calculate eCredits or and deficits must be calculated for all regulated fuels and clean fuels except that:
- (a) Credits may be generated only for biodiesel blends (B6 through B20) that can comply with an oxidation stability induction period of not less than 20 hours as determined by the test method described in the European standard EN 15751;
- (b) Credits may be generated only for B100 that can comply 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; and
- (c) Biodiesel blends and biodiesel that do not comply with subsections (a) or (b) can still be imported into Oregon but cannot generate credits for the Clean Fuels Program.
- (2) Fuels exempted. Except as provided in section (3), regulated parties, credit generators and brokers may not calculate credits and deficits may not be calculated for fuels:
- (a) Exported outside Oregon; or
- (b) Exempt under OAR 340-253-0250.
- (3) Voluntary inclusion. A regulated party, credit generator or broker may choose to include in its credits and deficits calculations fuel that is exempt under OAR 340-253-0250(1) orand fuel that is sold to an exempt user under 340-253-0250(2) provided that the credit and deficit calculation includes all fuel listed on the same delivery invoice is included.

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Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3.

Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) <u>& 2015 OL Ch. 4 Sec. 3.</u> Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

340-253-1020

Calculating Credits and Deficits

Regulated parties, credit generators and brokers must calculate credits or deficits for each fuel included under 340-253-1010 by:

- (1) Using credit and deficit basics as <u>directed in OAR 340-253-1000 specifies</u>;
- (2) Calculating energy in megajoules by multiplying the amount of fuel by the energy density of the fuel in Table 6 under OAR 340-253-8060;
- (3) Calculating the adjusted energy in megajoules by multiplying the energy in megajoules from section (2) by the energy economy ratio of the fuel <u>using-listed in Table 7</u> or 8 under OAR 340-253-8070 or 340-253-8080, as applicable;
- (4) Calculating the carbon intensity difference by subtracting the fuel's earbon intensity value carbon intensity as approved under OAR 340-253-0500(4)0500(3) from the clean fuel standard for gasoline or gasoline substitutes listed in Table 1 under OAR 340-253-8010 or diesel fuel and their diesel substitutes listed in Table 2 under substitutes in Table 1 or 2 under 340-253-8010 or OAR 340-253-8020, as applicable;
- (5) 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);
- (6) Calculating the metric tons of carbon dioxide equivalent by dividing the grams of carbon dioxide equivalent in section (5) by 1,000,000; and
- (7) Determining under OAR 340-253-1000(5) and (6) whether credits or deficits are generated.

Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

340-253-1030

Net Balance Calculation Deficits Demonstrating Compliance

(1) Small deficits. At the end of a compliance period, a regulated party that has a net deficit balance may carry forward a small deficit to the next compliance period without penalty if the regulated party does not have any credits to offset its deficits. A small deficit exists if the amount

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(3) Calculation of credit balance.

of credits the regulated party needs to meet the standard is 10 percent or less than the total amount of deficits the regulated party generated for the compliance period.

- (2) Large deficits. At the end of a compliance period, a regulated party that has a net deficit balance may not carry forward a large deficit to the next compliance period. A large deficit exists if the amount of credits the regulated party needs to meet the standard is greater than 10 percent of the total amount of deficits the regulated party generated for the compliance period. A regulated party violates this rule if that party has a large deficit at the end of a compliance period.
- (3) Deficit reconciliation. If a regulated party carries a small deficit forward from the previous compliance period, the regulated party must eliminate the small deficit by the end of the current compliance period. This provision does not preclude the regulated party from carrying forward a small deficit in the subsequent compliance period based on the total amount of deficits the regulated party generated in the subsequent compliance period.
- (1) Compliance demonstration. Each regulated party must meet its compliance obligation for the compliance period by demonstrating via its annual compliance report that it possessed and has retired a number of credits from its credit account that is equal to its compliance obligation calculated under section (2).
- (2) Calculation of compliance obligation. A regulated party's compliance obligation is the sum of deficits generated in the compliance period plus deficits carried over from the prior compliance period, represented in the following equation:

 $ComplianceObligation = Deficits^{Generated} + Deficits^{CarriedOver}$

- (a) Definitions. For the purpose of this section:

 (A) Deficits Generated ______ are the total deficits generated by the regulated party for the current compliance period;

 (B) Deficits CarriedOver _____ are the total deficits carried over by the regulated party from the previous compliance period;
- (C) Credits Generated are the total credits generated by the regulated party in the current compliance period;
- (D) *Credits* Acquired are the total credits acquired by the regulated party in the current compliance period from other regulated parties, credit generators and brokers, including carryback credits;
- (E) Credits CarriedOver are the total credits carried over by the regulated party from the previous compliance period;

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- (F) Credits^{Retired} are the total credits retired by the regulated party within the CFP Online System for the current compliance period;
- (G) Credits^{Sold} are the total credits sold by, or otherwise transferred from, the regulated party in the current compliance period to other regulated parties, credit generators and brokers; and
- (H) *Credits* OnHold are the total credits placed on hold due to enforcement or an administrative action. While on hold, these credits cannot be used for meeting the regulated party's compliance obligation.
- (b) A regulated party's credit balance is calculated using the following equation:

$$CreditBalance = (Credits^{Gen} + Credits^{Acquired} + Credits^{CarriedOver})$$

$$- (Credits^{Retired} + Credits^{Sold} + Credits^{OnHold})$$

- (4) Small deficits. At the end of a compliance period, a regulated party that has a net deficit balance may carry forward a small deficit to the next compliance period without penalty if the regulated party does not have any credits to offset its deficits. A small deficit exists if the amount of credits the regulated party needs to meet its compliance obligation is 10 percent or less than the total amount of deficits the regulated party generated for the compliance period.
- (5) Extended credit acquisition period. A regulated party may acquire carryback credits between January 1st and March 31st to be used for meeting its compliance obligation for the prior compliance period. A regulated party must initiate all carryback credit transfers in the CFP Online System by March 31st and complete them by April 15th to be valid for meeting the compliance obligation for the prior compliance period.
- (6) Extended compliance period for large importers of finished fuels. If a large importer of finished fuels cannot meet its compliance obligation for a compliance period, it can choose to carry over its deficit balance to the following compliance period. Deficits accrued in 2016 and 2017 may be carried over to 2018 when compliance with the aggregate deficit balance must be met.

Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

340-253-1050

Credit Basics

(1) General.

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- (a) Clean fuel cCredits are a regulatory instrument and do not constitute personal property, instruments, securities or any other form of property.
- (b) Regulated parties, credit generators and brokers may:
- (A) Retain clean fuel credits without expiration for use within the CFPClean Fuels Program in compliance with this division, subject to this rule and OAR 340-253-1030; and
- (B) Acquire or transfer clean fuel credits from or to other regulated parties, credit generators and brokers that are <u>registered approved program users</u> under OAR 340-253-0500(4) and have account access to the CFP Online System.
- (c) Regulated parties, credit generators and brokers may not:
- (A) Use alleged credits that have not been generated in compliance with this division the rules in this division; or
- (B) Borrow or use anticipated credits from future projected or planned carbon intensity reductions.
- (2) Mandatory retirement of credits.
- (a) At the end of a compliance period, a regulated party that possesses credits must retire a sufficient number of credits so that:
- (a) Enough credits are retired to completely meet satisfy the regulated party's compliance obligation for that compliance period, or
- (b) —If the total number of the regulated party's credits is less than the total number of the regulated party's deficits, the regulated party must retire all of its credits.

A regulated party may not carry over credits to the next compliance period if the regulated party has any remaining deficits.

- (b) At the end of a compliance period, if the total number of credits is less than the total number of deficits, the regulated party is subject to OAR 340 253-1030.
- (3) Credit Retirement Hierarchy. The CFP Online System will use the following default hierarchy to retire credits for the purposes of meeting a compliance obligation:
- (a) The System will retire credits acquired or generated in a previous compliance period prior to credits generated or acquired in the current compliance period;
- (b) The System will retire credits with an earlier completed transfer "recording date" before credits with a later completed transfer "recording date;"

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- (c) The System will retire credits generated in an earlier quarter before credits generated in a later quarter.
- (<u>34</u>) Credit transfers between parties.
- (a) "Credit seller," as used in this rule, means a regulated party, credit generator or broker who wishes to sell or transfer credits.
- (b) "Credit buyer," as used in this rule, means a regulated party, credit generator or broker who wishes to acquire credits.
- (c) A credit seller and a credit buyer may enter into an agreement to transfer credits.
- (d) A credit seller may only transfer credits up to the number of total credits in the credit seller's CFP Online System account on the date of transfer.
- (45) Credit seller requirementstransfer form.
- (a) When a credit transfer agreement has been reached, within 10 businesses days, the credit seller must initiate an online parties intend to enter in to a credit transfer agreement, the credit seller must use the "Credit Transfer Form" provided in the CFP Online System and must include the following:
- (Aa) Date of the proposed credit transfer agreement on which the credit buyer and credit seller reached agreement;
- (Bb) Names and FEINs of the credit seller and credit buyer;
- (Cc) <u>First and last nNames</u> and contact information of the persons who performed the transaction on behalf of the credit seller's and credit buyer's behalf;
- (Dd) The number of credits proposed to be transferred; and
- (<u>Ee</u>) The price or equivalent value of the consideration (in US dollars) to be paid per metric ton of credit proposed for transfer, excluding any fees.
- (b) After receiving the credit transfer form from the credit seller, the credit buyer must confirm the accuracy of the information contained in the credit transfer form using the CFP Online System.
- (6) Credit buyer requirements. Within 10 days of receiving the "Credit Transfer Form" from the credit seller, the credit buyer must confirm the accuracy of the information therein by signing and dating the form using the CFP Online System.
- (7) If the credit buyer and credit seller have not fulfilled the requirements of sections (5) and (6) within 20 days of reaching an agreement, the transaction will be voided. -If a transaction has

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been voided, the credit buyer and credit seller may reinitiate the process to confirm the transaction, but the date of transfer that will be approved will in no event be earlier than ten days before the date that the credit seller initiates the online Credit Transfer Form.

- (58) Broker. A credit seller or a credit buyer may elect to use a broker to facilitate the transfer of credits but may only use a broker who complies with this rule. A broker may only facilitate the transfer of creditsact as a credit seller or credit buyer if that broker:
- (a) Has an approved and active registration under OAR 340-253-0500(4)0500;
- (b) Has an account on in the CFP Online System; and
- (c) Complies with OAR 340-253-0100(4).(c) Has an approved Broker Designation Form from a regulated party or credit generator for whom the broker is acting in any given transaction.
- (69) Illegitimate credits.
- (a) A credit generator violates these rules if it submits information into the CFP Online System indicating that one or more credits have been generated when such an assertion is inconsistent with the requirements of OAR 340-253-1000 through 340-253-1020. If DEQ determines that one or more clean fuel credits a credit generator claims to have generated was not generated in compliance with these rules are illegitimate credits, then the credit generator:
- (A) Must provide an approved clean fuel credit to replace each credit that was not properly generated, if available; and
- (B) Is also subject to enforcement for the violation.
- (b) A regulated party, credit generator or broker that has acquired one or more illegitimate credits is subject to enforcement unless DEQ determines:
- (A) The credits were acquired from a registered regulated party, credit generator or broker—with a CFP Online System account; and
- (B) The <u>earbon intensity value</u> carbon intensity of the fuel for which the credits were generated matches the <u>earbon intensity value</u> carbon intensity <u>listed in the CFP Online System approved by DEQ for that fuel pathway</u> for that producer.
- (710) Public disclosure.
- (a) List of DEQ-approved registered parties. DEQ will maintain a current list of regulated parties, credit generators and brokers whose that have had their registrations DEQ has approved by DEQ under OAR 340-253-0500(4)0500 and will make that list publicly available electronically on its website-on-line. The list will include, at a minimum, the name of the regulated party, credit generator or broker and whether the regulated party is an importer of

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<u>blendstocks</u>, <u>a</u> large importer<u>of finished fuels</u>, a small importer<u>of finished fuels</u>, or a producer, <u>a credit generator or a broker</u>.

- (b) Clean Fuels Program Quarterly status report data summary. DEQ will publish a at least quarterly:
- (A) An aggregate data summary quarterly report that summarizes the aggregate CFP of credit and deficit generation for the:
- (A) M(i) Most recent quarter:
- (B) Past(ii) Previous quarters of the current compliance period; and
- (C) (iii) Past Previous annual compliance periods: and
- (B) Information on the contribution of credit generation by different fuel types.
- (c) Clean Fuels Program Ceredit trading activity report. DEQ will publish at least monthly:
- (A) DEQ will publish a credit trading activity report monthly report that summarizes the aggregate CFP credit transfer information for the:
- (A) (i) Most recent month;
- (B) (ii) Previous three months,
- (iii) previous three quarters, Past months of the current compliance period; and
- (iv) Previous
- (C) Past annual compliance periods:; and
- (B) Information on the credits transferred during the most recent month including the total number of credits transferred, the number of transfers and the number of parties making transfers. If more than three transfers have occurred during the month, the report will also include the monthly average credit price for transfers.
- (d) DEQ <u>will base its</u> reports will be based on information submitted into the CFP Online System.
- (e) DEQ reports will represent information aggregated for all fuel transacted within the state; not by individual parties.

Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3.

Hist.: DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

Attachment A2 Dec. 9-10, 2015, EQC meeting Page 52 of 67 **Deferrals**

340-253-2000

Emergency Deferral Due to Clean Fuel Supply

- (1) Determining whether to issue an emergency deferral. DEQ will issue an order declaring an emergency deferral from the clean fuel standard, if DEQ determines:
- (a) There is a shortage of fuel that is needed for regulated parties to comply with the clean fuel standard, due to:
- (A) A natural disaster; or
- (B) An unanticipated disruption in production or transportation of clean fuels used for compliance, except disruptions for routine maintenance of a fuel production facility or fuel transmission system; and
- (b) The magnitude of the shortage is greater than the equivalent of five percent of the total credits generated by all regulated parties and providers of clean fuels under OAR 340-253-1020 in the previous compliance period. To determine the magnitude of the shortage, DEQ will consider the following:
- (A) The volume and carbon intensity of the fuel determined to be not available under subsection (1)(a);
- (B) The estimated duration of the shortage;
- (C) Whether one of the following options could mitigate compliance with the clean fuel standard:
- (i) The same fuel from other sources is available;
- (ii) Substitutes for the affected fuel and the carbon intensities values of those substitutes are available; or
- (iii) Banked clean fuel credits are available; and
- (D) Any other information DEQ may need to determine the magnitude of the shortage.
- (2) Content of an emergency deferral. If DEQ determines under section (1) that it must issue a deferral, then DEQ will determine:
- (a) The start date and end date of the emergency deferral period, which may not exceed one year (but which may be renewed if DEQ makes a subsequent determination under section (1);

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- (b) The fuel deferred from complying with the clean fuel standard; and
- (c) Which of the following methods DEQ selects to defer compliance with the clean fuel standard during the temporary deferral period:
- (A) Allowing deficits to be carried over into future compliance periods, notwithstanding OAR 340-253-1030(24) through and 340-253-1030(3) (6); or
- (B) Suspending deficit accrual during the emergency deferral period.
- (d) Credits will accrue during the emergency deferral period.
- (3) Issuing an emergency deferral. An emergency deferral order DEQ issues under this rule must notify the affected parties and must contain at least the following information:
- (a) DEQ's determination under section (1);
- (b) The deferral period as established under section (2);
- (c) The fuel deferred as established under section (2); and
- (d) The method selected by DEQ to comply as established under section (2).

Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Hist.: DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

340-253-2100

Forecasted Deferral Due to Clean Fuel Supply

- (1) DEQ forecast. DEQ will use available data under section (2) to develop a fuel supply forecast for the next calendar year that includes:
- (a) The potential volumes of gasoline substitutes and diesel fuel substitutes available in Oregon;
- (b) The estimated total aggregate credits available;
- (c) The estimated credits needed to meet the clean fuel standard; and
- (d) A comparison of the estimates under subsections (1)(a) and (b) with (1)(c) to indicate the availability of fuel needed for compliance.
- (2) Available data. DEQ will consider available data to develop the forecast including:
- (a) Past Oregon fuel consumption volumes and trends;

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- (b) Oregon and nationwide trends in alternative fuel use;
- (c) Information on numbers of alternative-fueled vehicles in Oregon;
- (d) Banked clean fuel credits;
- (e) Projected total transportation fuel consumption volumes in Oregon, including gasoline and diesel fuel;
- (f) Planned projects in or near Oregon such as electric vehicle charging or natural gas fueling stations;
- (g) The status of existing and planned clean fuel production facilities nationwide;
- (h) Applicable updates to the carbon intensity valuecarbon intensities of fuels;
- (i) Nationwide volumes for fuels required under the federal renewable fuel standard; and
- (j) Any other information DEQ may need to develop the forecast.
- (3) Determining whether to issue a forecasted deferral. If DEQ forecasts a shortfall in clean fuel credits under subsection (1)(d), and the shortfall is greater than the equivalent of five percent of the credits needed under (1)(c) to comply with the clean fuel standard, then DEQ will determine whether a forecasted deferral is needed by considering the following:
- (a) Timing of fuel availability;
- (b) Timing, duration and magnitude of the estimated clean fuel shortfall;
- (c) Information in addition to material considered under section (2), on potential and current gasoline substitutes and diesel fuel substitutes, including:
- (A) Production nationwide;
- (B) Use in Oregon; and
- (C) Clean fuel infrastructure development in Oregon; and
- (d) Any other information DEQ may need in the analysis.
- (4) Content of a forecasted deferral. If DEQ determines under section (3) that it must issue a forecasted deferral, DEQ will determine:
- (a) The start date and end date of the forecasted deferral period, which may not exceed one year except that DEQ may renew that period if DEQ makes a subsequent determination under section (3);

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- (b) The fuel deferred from complying with the clean fuel standard; and
- (c) Which of the following methods DEQ will use to defer compliance with the clean fuel standard during the forecasted deferral period:
- (A) Defer the requirement to comply with the clean fuel standard for up to one year, and allow credits to accrue during the deferral period; or
- (B) Propose that EQC revise the CFP Clean Fuels Program through a rulemaking to:
- (i) Amend the clean fuel standard;
- (ii) Amend the clean fuel standard to extend beyond 2025, the year when Oregon must meet the lowest average carbon intensity valuecarbon intensities to allow for less stringent annual reductions while still reaching the same average carbon intensity valuecarbon intensity at the end of the period; or
- (iii) Otherwise amend the CFP Clean Fuels Program to address the forecasted fuel supply shortage, such as by adopting a multi-year deferral.
- (5) Issuing a forecasted deferral. DEQ will issue a forecasted deferral order to the affected parties with the following information:
- (a) DEQ's determination under section (3);
- (b) The deferral period as established under section (4);
- (c) The fuel deferred as established under section (4); and
- (d) The method selected by DEQ to comply as established under section (4).

Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Hist.: DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

340-253-2200

Monthly Fuel Price Deferral

- (1) Definitions. As used in this rule:
- (a) "Diesel Blends" means diesel fuel and diesel fuel blended with biodiesel.
- (b) "Gasoline Blends" means gasoline and gasoline blended with ethanol.

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- (c) "Price evaluation threshold" means that the 12-month rolling weighted average price of gasoline blends or diesel blends in Oregon is more than five percent higher than the 12-month rolling weighted average price in the:
- (A) Statutory PADD 5 for gasoline; or
- (B) Statutory PADD 5 or, if unavailable, Actual PADD 5, for diesel fuel.
- (2) Average price. Each month, DEQ will calculate the 12-month rolling average price for gasoline blends and diesel blends using data available from the U.S. Energy Information Administration or a comparable source, as follows:
- (a) Oregon's 12-month rolling average price. Each month, DEQ will calculate the Oregon 12-month rolling average price for gasoline blends and diesel blends.
- (b) Gasoline 12-month rolling weighted-average price for PADD 5. Each month, DEQ will calculate the PADD 5 12-month rolling volume-weighted average price for gasoline blends using the statutory PADD 5 data.
- (c) Diesel 12-month rolling weighted-average price for PADD 5. Each month, DEQ will calculate the PADD 5 12-month rolling volume-weighted average price for diesel blends using the actual PADD 5 or, if available, the statutory PADD 5 data.
- (3) Determining need for cost mitigation. If the price of gasoline blends or diesel blends in Oregon exceeds the price evaluation threshold:
- (a) DEQ will provide fuel data and analysis to EQC that includes the applicable information under sections (4) and (5);
- (b) EQC will determine the need to mitigate the costs of complying with the clean fuel standard after considering the DEQ fuel data and analysis. EQC will direct DEQ to implement one or more cost mitigation strategies if EQC determines that:
- (A) The price of Oregon gasoline blends or diesel blends exceeds the price evaluation threshold due to the costs of complying with the clean fuel standard; and
- (B) Implementing one of the strategies under section (6) is necessary to mitigate the costs of compliance with the clean fuel standard.
- (4) Determining whether the clean fuel standard caused the price evaluation threshold exceedance. EQC will determine whether the price of Oregon gasoline blends or diesel blends exceeds the price evaluation threshold due to the costs of complying with the clean fuel standard. DEQ will analyze and provide the following information to EQC:
- (a) Whether fuel volume and price data is faulty or incomplete;

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- (b) Price of gasoline substitutes and diesel substitutes;
- (c) Changes in demand for gasoline blends and diesel blends such as changes caused by:
- (A) An increase in population; or
- (B) An increase in fuel usage.
- (d) A decrease in retail outlets for gasoline blends and diesel blends in Oregon;
- (e) Natural or manmade disasters affecting Oregon but not the statutory PADD 5 as a whole;
- (f) Regulatory change that affects Oregon but not the statutory PADD 5 as a whole;
- (g) Change in the usage of reformulated gasoline or other special fuel in any state in the statutory PADD 5; and
- (h) Any other information DEQ or EQC may need to determine whether the clean fuel standard caused the price of Oregon gasoline blends or diesel blends to exceed the price evaluation threshold.
- (5) Factors in determining whether a price mitigation strategy is necessary. EQC will consider the following factors to determine whether it is necessary to mitigate the costs of compliance with the clean fuel standard, or whether the price of gasoline blends or diesel blends will fall below the price evaluation threshold within six months without implementing a cost mitigation strategy:
- (a) Fuel price trends;
- (b) Price of gasoline substitutes and diesel substitutes;
- (c) Availability and use of gasoline substitutes and diesel substitutes in Oregon;
- (d) Compliance schedule for the fuel;
- (e) Future supply of gasoline substitutes and diesel substitutes; and
- (f) Any other information DEQ or EQC may need to determine whether implementing standard cost mitigation strategy is necessary.
- (6) Cost mitigation strategies. If EQC determines under subsection (3)(b) that mitigating the cost of compliance is necessary, it will order, and DEQ will implement, one of the following cost mitigation strategies with EQC-approved start and end dates:
- (a) Suspending deficit accrual during a cost mitigation period and allowing credits to accrue during that period;

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- (b) Allowing credits to accrue and allowing deficits to be carried over into future compliance periods, notwithstanding OAR 340-253-1030(24) and 340-253-1030through (36), during a cost mitigation period. EQC may allow deficits to be carried over for one, two, or three future compliance periods before the deficits must be reconciled;
- (c) Suspending deficit accrual for a percentage of the fuel during the cost mitigation period and allowing credits to accrue during the period;
- (d) Eliminating the requirement to comply with the clean fuel standard for up to one year; or
- (e) Adopting any other price mitigation strategy that EQC determines to be necessary to effectively mitigate the cost of compliance.
- (7) EQC reconsideration. EQC may reconsider and revise its determinations under sections (4) and (5) if the information it considered under those sections has changed. Based on that reconsideration, EQC may reconsider and revise or withdraw any cost mitigation strategies ordered under section (6).
- (8) DEQ implementation. In implementing a cost mitigation strategy as EQC directs, DEQ will notify the affected parties with the following information:
- (a) EQC's determinations under sections (4) through (6);
- (b) The start date and end date for the cost mitigation strategy period;
- (c) The fuel(s) affected by the price mitigation strategy; and
- (d) The cost mitigation strategy that EQC adopted under section (6).

Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3.

Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3.

Hist. DEC 2.2015 f. 1.8.15 cont. of 2.1.15

Hist.: DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

340-253-3010 [Renumbered to **340-253-8030**]

340-253-3020 [Renumbered to **340-253-8040**]

340-253-3030 [Renumbered to **340-253-8060**]

340-253-3040 [Renumbered to **340-253-8070**]

340-253-3050 [Renumbered to **340-253-8080**]

340-253-8010

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

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Table 1 – 340-253-8010

Oregon Clean Fuel Standard for Gasoline and Gasoline Substitutes

Calendar Year	Oregon Clean Fuel Standard (gCO2e per MJ)	Percent Reduction
2015	None (Gasoline Baseline	e is 89.31 <u>97.80</u>)
2016 <u>*</u>	89.08 <u>97.56</u>	0.25 percent
2017	88.86 <u>97.31</u>	0.50 percent
2018	88.41 <u>96.82</u>	1.00 percent
2019	87.97 <u>96.33</u>	1.50 percent
2020	87.08 <u>95.36</u>	2.50 percent
2021	86.18 <u>94.38</u>	3.50 percent
2022	84.84 <u>92.91</u>	5.00 percent
2023	83.50 <u>91.44</u>	6.50 percent
2024	82.16 <u>89.98</u>	8.00 percent
2025 and beyond	80.36 <u>88.02</u>	10.00 percent

^{*}Initial compliance period is a two-year period for 2016 and 2017. The 2016 standard is to be used only to calculate deficits and credits in 2016 under OAR 340-253-1020.

[ED. NOTE: Tables referenced are not included in rule text. Click here for PDF copy of table(s).]

Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3.

Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3.

Hist.: DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

2025 and beyond

340-253-8020

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

State of Oregon Department of Environmental Quality Table 2 – 340-253-8020 Oregon Clean Fuel Standard for Diesel Fuel and Diesel Substitutes Calendar Year **Percent Reduction** Oregon Clean Fuel Standard (gCO2e per MJ) 2015 None (Diesel Baseline is 87.09 98.39 98.48) 86.87 98.23 2016* 0.25 percent 2017 86.65 97.99 0.50 percent 86.22 <u>97.5</u>0 2018 1.00 percent 2019 85.78 97.00 1.50 percent 2020 84.91 96.02 2.50 percent 2021 84.04 <u>95.03</u> 3.50 percent 2022 82.73 93.56 5.00 percent 2023 81.43 92.08 6.50 percent 2024 8.00 percent 80.12 <u>90.60</u> 10.00 percent

*Initial compliance period is a two-year period for 2016 and 2017. The 2016 standard is to be used only to calculate deficits and credits in 2016 under OAR 340-253-1020.

[ED. NOTE: Tables referenced are not included in rule text. Click here for PDF copy of table(s).]

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Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3.

Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) <u>& 2015 OL Ch. 4 Sec. 3.</u>

Hist.: DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

340-253-8030

Table 3 — Oregon Carbon Intensity Lookup Table for Gasoline and Gasoline Substitutes

NOTE: DEQ recognizes that indirect effects, including indirect land use change, are real. However the methodologies to quantify these effects are still in development. DEQ intends to monitor the science of indirect effect and will adjust carbon intensity values through future rulemaking as methodologies improve.

NOTE: Renumbered from 340-253-3010.

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Table 3 - 340-253-8030

			Carbon Intensity Values (gCO2e/MJ)		
Fuel	Pathway Identifier	Pathway Description	Direct Emissions	Land Use or Other Indirect Effect	Total
	ORGAS001	Clear gasoline, based on a weighted average of gasoline supplied to Oregon	89.40	-	89.40
Gasoline	ORGAS002	Blended gasoline, 10% ethanol, based on based on assuming 90% clear gasoline and 10% GREET default corn ethanol	89.31	-	89.31
	ETHC001	Midwest average; ; 80% Dry Mill; 20% Wet Mill; Dry DGS; NG	69.40	_	69.4040
Ethanol from Corn	ETHC002	California average; 80% Midwest Average; 20% California; Dry Mill; Wet DGS; NG	65.66	-	65.66
	ETHC003	California; Dry Mill; Wet DGS; NG	50.70	-	50.70
	ETHC004	Midwest; Dry Mill; Dry DGS, NG	68.40	_	68.40
	ETHC005	Midwest; Wet Mill, 60% NG, 40% coal	75.10	-	75.10
	ETHC006	Midwest; Wet Mill, 100% NG	64.52	_	64.52
	ETHC007	Midwest; Wet Mill, 100% coal	90.99	_	90.99

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ETHC008	Midwest; Dry Mill; Wet, DGS; NG	60.10	-	60.10
ETHC009	California; Dry Mill; Dry DGS, NG	58.90	-	58.90
ETHC010	Midwest; Dry Mill; Dry DGS; 80% NG; 20% Biomass	63.60	_	63.60
ETHC011	Midwest; Dry Mill; Wet DGS; 80% NG; 20% Biomass	56.80	-	56.80
ETHC012	California; Dry Mill; Dry DGS; 80% NG; 20% Biomass	54.20	-	54.20
ETHC013	California; Dry Mill; Wet DGS; 80% NG; 20% Biomass	47.44	-	47.44
ETHC014	2B Application*: Midwest; Dry Mill; Plant energy use not to exceed a value the applicant classifies as confidential; No grid electricity use; Coal use not to exceed 71% of fuel use (by energy); Coal carbon content not to exceed 48%	60.99	-	60.99
ETHC015	2B Application*: Midwest; Dry Mill; Plant energy use not to exceed a value the applicant classifies as confidential; No grid electricity use; Biomass must be at least 5% of the fuel use (by energy); Coal use not to exceed 66% of fuel use (by energy); Coal earbon content not to exceed 48%	59.08	1	59.08
ETHC016	2B Application*: Midwest; Dry Mill; Plant energy use not to exceed a value the applicant classifies as confidential; No grid electricity use; Biomass must be at least 10% of the fuel use (by energy); Coal use not to exceed 60% of fuel use (by energy); Coal carbon content not to exceed 48%	57.16	_	57.16
ETHC017	2B Application*: Midwest; Dry Mill; Plant energy use not to exceed a value the applicant	55.24	_	55.24

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oregon c					Dollitutes
		classifies as confidential; No grid			
		electricity use; Biomass must be			
		at least 15% of the fuel use (by			
		energy); Coal use not to exceed			
		54% of fuel use (by energy); Coal			
		carbon content not to exceed 48%			
		2B Application*: Midwest; Dry			
		Mill; Plant energy use not to			
		exceed a value the applicant			
		classifies as confidential; No grid	70.00		
	ETHC018	electricity use; Coal use not to	59.80	-	59.80
		exceed 71% of fuel use (by			
		energy); Coal carbon content not			
		to exceed 48%			
		2B Application*: Midwest; Dry			
		Mill; Plant energy use not to			
		exceed a value the applicant			
		classifies as confidential; No grid			
	ETHC019	electricity use; Biomass must be	57.86	_	57.86
	21110017	at least 5% of the fuel use (by	27.00		27.00
		energy); Coal use not to exceed			
		65% of fuel use (by energy); Coal			
		carbon content not to exceed 48%			
		2B Application*: Midwest; Dry			
		Mill; Plant energy use not to			
		exceed a value the applicant			
		classifies as confidential; No grid			
	ETHC020	electricity use; Biomass must be	55.91	_	55.91
		at least 10% of the fuel use (by			
		energy); Coal use not to exceed			
		59% of fuel use (by energy); Coal			
		carbon content not to exceed 48%.			
		2B Application*: Midwest; Dry			
		Mill; Plant energy use not to			
		exceed a value the applicant			
		classifies as confidential; No grid			
	ETHC021	electricity use; Biomass must be	53.96	_	53.96
	21110021	at least 15% of the fuel use (by	22.70		22.70
		energy); Coal use not to exceed			
		53% of fuel use (by energy); Coal			
		carbon content not to exceed 48%			
	ETHC022	2A Application*: Midwest; Dry	57.16	_	57.16
	=1110022	====-Ppiioanon : inio::obt, Bij	27.13		00

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		Mill; 15% Dry DGS, 85%			
		Partially Dry DGS; NG; Plant			
		energy use not to exceed a value			
		the applicant classifies as			
		confidential			
		2A Application*: Midwest; Dry			
		Mill; Partially Dry DGS; NG;			
	ETHC023	Plant energy use not to exceed a	54.29	_	54.29
		value the applicant classifies as			
		confidential			
		2A Application*: Midwest; Dry			
		Mill; 75% Dry DGS, 25% Wet			
	ETHC024	DGS; NG; Plant energy use not to	61.60	_	61.60
		exceed a value the applicant			
		classifies as confidential			
		2A Application*: Dry Mill; Dry			
	ETHC025	DGS; Raw starch hydrolysis;			
		Amount and type of fuel use, and	62.44	-	62.44
		amount of grid electricity use not			02.44
		to exceed a value the applicant			
		classifies as confidential			
		2A Application*: Dry Mill; Dry			
		DGS; Raw starch hydrolysis/			
		combined heat and power;			
	ETHC026	Amount and type of fuel use, and	58.49	_	58.49
		amount of grid electricity use not			
		to exceed a value the applicant			
		classifies as confidential			
		2A Application*: Dry Mill; Dry			
		DGS; Raw starch			
		hydrolysis/biomass & landfill gas			
	ETHC027	fuels; Amount and type of fuel	58.50	-	58.50
		use, and amount of grid electricity			
		use not to exceed a value the			
		applicant classifies as confidential			
		2A Application*: Dry Mill; Dry			
		DGS; Raw starch hydrolysis/corn			
		fractionation; Amount and type of			
	ETHC028	fuel use, and amount of grid	61.66	-	61.66
		electricity use not to exceed a			
		value the applicant classifies as			
		confidential			

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ETHC029	2A Application*: Dry Mill; Dry DGS; Conventional cook/combined heat and power; Amount and type of fuel use, and amount of grid electricity use not to exceed a value the applicant classifies as confidential	60.52	1	60.52
ETHC030	2A Application*: Dry Mill; Dry DGS; Raw starch hydrolysis/biogas process fuel; Amount and type of fuel use, and amount of grid electricity use not to exceed a value the applicant elassifies as confidential	44.70	1	44.70
ETHC031	2A Application*: Dry Mill; Wet DGS; Raw starch hydrolysis; Amount and type of fuel use, and amount of grid electricity use not to exceed a value the applicant classifies as confidential	53.69	-	53.69
ETHC032	2A Application*: Dry Mill; Wet DGS; Raw starch hydrolysis/ combined heat and power; Amount and type of fuel use, and amount of grid electricity use not to exceed a value the applicant classifies as confidential	50.01	1	50.01
ETHC033	2A Application*: Dry Mill; Wet DGS; Raw starch hydrolysis/corn fractionation; Amount and type of fuel use, and amount of grid electricity use not to exceed a value the applicant classifies as confidential	50.26	_	50.26
ETHC034	2A Application*: Dry Mill; Wet DGS; Conventional cook/combined heat and power; Amount and type of fuel use, and amount of grid electricity use not to exceed a value the applicant classifies as confidential	50.47	_	50.47
ETHC035	2A Application*: Dry Mill; Wet	43.21	_	43.21

Oregon Department of Environmental Quality Table 3 – 340-253-8030 Oregon Carbon Intensity Lookup Table for Gasoline and Gasoline Substitutes				
DGS; Raw starch hydrolysis/biogas process fuel; Amount and type of fuel use, and amount of grid electricity use not to exceed a value the applicant classifies as confidential				

Table 3 - 340-253-8030

		D 111			
	ETHS001	Brazilian sugarcane using average production processes	27.4040	-	27.4040
	ETHS002	Brazilian sugarcane with average production process, mechanized harvesting and electricity coproduct credit	12.40	-	12.40
	ETHS003	Brazilian sugarcane with average production process and electricity co-product credit	20.40	-	20.40
Ethanol from	ETHS004	2B Application*: Brazilian sugarcane processed in the CBI with average production process; Thermal process power supplied with NG	32.94	-	32.94
Sugarcane	ETHS005	2B Application*: Brazilian sugarcane processed in the CBI with average production process, mechanized harvesting and electricity co-product credit; Thermal process power supplied with NG	17.94	-	17.94
	ETHS006	2B Application*: Brazilian sugarcane processed in the CBI with average production process and electricity co-product credit; Thermal process power supplied with NG	25.94	1	25.94
	2CNG002	North American NG delivered via pipeline; compressed in OR	68.0000	_	68.0000
	3CNG003	Landfill gas (biomethane) cleaned up to pipeline quality NG; compressed in OR	11.26	-	11.26
	CNG004	Dairy Digester Biogas to CNG	13.45	_	13.45
Compressed Natural Gas	CNG005	Biomethane produced from the high solids (greater than 15 percent total solids) anaerobic digestion of food and green wastes; compressed in OR	-15.29	-	-15.29
	CNG006	North American landfill gas to pipeline quality biomethane; delivered via pipeline;	33.02	_	33.02

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		compressed in OD			
		compressed in OR			
	LNG001	North American NG delivered via pipeline; liquefied in OR using liquefaction with 80% efficiency	83.13	-	83.13
	2LNG002	North American NG delivered via pipeline; liquefied in OR using liquefaction with 90% efficiency	72.38	-	72.38
	LNG003	Overseas sourced LNG delivered as LNG to OR; re-gasified then re-liquefied in OR using liquefaction with 80% efficiency	93.37	-	93.37
Ligardia	LNG004	Overseas sourced LNG delivered as LNG to OR; re-gasified then re-liquefied in OR using liquefaction with 90% efficiency	82.62	-	82.62
Liquefied Natural Gas	LNG005	Overseas sourced LNG delivered as LNG to OR; no re-gasification or re-liquefaction in OR	77.50	1	77.50
	LNG006	Landfill Gas (biomethane) to LNG liquefied in OR using liquefaction with 80% efficiency	26.31	-	26.31
	7LNG007	Landfill Gas (biomethane) to LNG liquefied in OR using liquefaction with 90% efficiency	15.56	-	15.56
	LNG008	Dairy Digester Biogas to LNG liquefied in OR using liquefaction with 80% efficiency	28.53	-	28.53
	LNG009	Dairy Digester Biogas to LNG liquefied in OR using liquefaction with 90% efficiency	17.78	-	17.78
Liquefied Petroleum Gas	LPG001	Liquefied petroleum gas, crude and natural gas mix	83.05	-	83.05
Electricity	ELC001	Oregon average electricity mix	108.29	_	108.29
Hydrogen	HYGN001	Compressed H2 from central reforming of NG (includes liquefaction and re-gasification steps)	142.20	-	142.20
	HYGN002	Liquid H2 from central reforming of NG	133.00	-	133.00

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Oregon Carbon Intensity Lookup Table for Gasoline and Gasoline Substitutes

HYGN003	Compressed H2 from central reforming of NG (no liquefaction and re-gasification steps)	98.80	_	98.80
HYGN004	Compressed H2 from on-site reforming of NG	98.30	-	98.30
HYGN005	Compressed H2 from on site reforming with renewable feedstocks	76.10	_	76.10

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<u>Table 3 – 340-253-8030</u>

			Carbon In	Intensity Values (gCO2e/MJ)		
<u>Fuel</u>	<u>Pathway</u> <u>Identifier</u>	Pathway Description	Direct Lifecycle Emissions	Land Use or Other Indirect Effect	<u>Total</u> <u>Emissions</u>	
<u>Gasoline</u>	ORGAS001	Clear gasoline - based on a weighted average of gasoline supplied to Oregon	100.77	п	100.77	
	ORGAS002	Blended gasoline (E10) - 90% clear gasoline & 10% corn ethanol based on Midwest average	<u>97.68</u>	Ξ	<u>97.68</u>	
Ethanol from Corn	ORETHC001	Midwest average - MW corn; Dry Mill; NG; MW production	<u>62.29</u>	<u>7.60</u>	<u>69.89</u>	
	ORETHC002	Oregon average - MW corn; Dry Mill; NG; Oregon production	<u>57.08</u>	<u>7.60</u>	<u>64.68</u>	

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Oregon Carbon Intensity Lookup Table for Gasoline and Gasoline Substitutes

Ethanol from Sugarcane	ORETHS001	Brazilian sugarcane base case	<u>39.24</u>	<u>11.80</u>	<u>51.04</u>
Ethanol from Sorghum	ORETHG001	Sorghum; average	<u>66.96</u>	<u>19.40</u>	<u>86.36</u>
Ethanol from Molasses	ORETHM001	Molasses; average	<u>41.03</u>	<u>11.80</u>	<u>52.83</u>
Compressed	ORCNG001	North American NG delivered via pipeline; compressed in OR	<u>79.93</u>	Ξ	<u>79.93</u>
Natural Gas	ORCNG002	Landfill gas (biomethane) cleaned up to pipeline quality NG; compressed in OR	<u>50.26</u>	п	<u>50.26</u>
<u>Liquefied</u>	ORLNG001	North American NG delivered via pipeline; liquefied in OR using liquefaction with 80% efficiency	<u>94.46</u>	п	<u>94.46</u>
Natural Gas	ORLNG002	Landfill Gas (biomethane) to LNG liquefied in OR using liquefaction with 80% efficiency	<u>65.81</u>	П	<u>65.81</u>
Liquefied Petroleum Gas	ORLPG001	Liquefied petroleum gas	83.05	Ξ.	<u>83.05</u>
<u>Electricity</u>	ORELC001	Oregon average electricity mix	<u>31.85</u>	<u>=</u>	<u>31.85</u>

[ED. NOTE: Tables referenced are not included in rule text. Click here for PDF copy of table(s).]

Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14; Renumbered from 340-253-3010 by DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

340-253-8040

Table 4 — Oregon Carbon Intensity Lookup Table for Diesel and Diesel Substitutes

NOTE: DEQ recognizes that indirect effects, including indirect land use change, are real. However the methodologies to quantify these effects are still in development. DEQ intends to monitor the science of indirect effect and will adjust carbon intensity values through future rulemaking as methodologies improve.

NOTE: Renumbered from 340-253-3020

Oregon Department of Environmental Quality

Table 4 – 340-253-8040

Oregon Carbon Intensity Lookup Table for Diesel and Diesel Substitutes

				Carbon Intensity Values (gCO2e/MJ)			
Ŧ	'uel	Pathway Identifier	Pathway Description	Direct Emissions	Land Use or Other Indirect Effect	Total	
		ORULSD001	Clear diesel, based on a weighted average of diesel fuel supplied to Oregon	89.00	1	89.00	
Đ	iesel	ORULSD002	Blended diesel, 5% biodiesel, based on assuming 95% clear diesel and 5% GREET default soybean biodiesel	87.09	-	87.09	
			Conversion of Midwest soybeans to biodiesel (fatty acid methyl esters FAME)	21.2525	-	21.2525	
			Conversion of waste oils (Used Cooking Oil) to biodiesel (fatty acid methyl esters FAME) where "cooking" is required	15.84	-	15.84	
Bic	diesel		Conversion of waste oils (Used Cooking Oil) to biodiesel (fatty acid methyl esters FAME) where "cooking" is not required	11.76	-	11.76	
		BIOD004	Conversion of waste oils (Used Cooking Oil) to biodiesel (fatty acid methyl esters FAME) where "cooking" is required. Fuel produced in the Midwest	18.72	-	18.72	
		BIOD005	Conversion of waste oils (Used Cooking Oil) to biodiesel (fatty acid methyl esters—FAME) where "cooking" is not required. Fuel produced in the Midwest	13.83	-	13.83	

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	Table 4 – 340-253-8040							
	Oregon Carbon Intensity Lookup Table for Diesel and Diesel Substitutes							
		BIOD007	Conversion of corn oil, extracted from distillers grains prior to the drying process, to biodiesel	4.0000	-	4.0000		
			Conversion of Midwest soybeans to renewable diesel	20.16	-	20.1616		
Renew Die:			Conversion of tallow to renewable diesel using higher energy use for rendering	39.33	-	39.33		
			Conversion of tallow to renewable diesel using lower energy use for rendering	19.65	-	19.65		
		CNG002	North American NG delivered via pipeline; compressed in OR	68.00	-	68.00		
			E	CNG003	Landfill gas (biomethane) cleaned up to pipeline quality NG; compressed in OR	11.26	-	11.26
		CNG004	Dairy Digester Biogas to CNG	13.45	-	13.45		
Compr Natura		CNG005	Biomethane produced from the high solids (greater than 15 percent total solids) anaerobic digestion of food and green wastes; compressed in OR	-15.29	-	-15.29		
			CNG006	North American landfill gas to pipeline quality biomethane; delivered via pipeline; compressed in OR	33.02	-	33.02	
	uefied ral Gas	LNG001	North American NG delivered via pipeline; liquefied in OR using liquefaction with 80% efficiency	83.13	-	83.13		
Natural		LNG002	North American NG delivered via pipeline; liquefied in OR using liquefaction with 90% efficiency	72.38	-	72.38		

l ago	Oregon Department of Environmental Quality						
	Table 4 – 340-253-8040						
Oregon Carbon Intensity Lookup Table for Diesel and Diesel Substitutes							
O TO S	LNG003	Overseas sourced LNG delivered as LNG to OR; regasified then re-liquefied in OR using liquefaction with 80% efficiency	9 3.37	-	93.37		
	LNG004	Overseas sourced LNG delivered as LNG to OR; regasified then re-liquefied in OR using liquefaction with 90% efficiency	82.62	_	82.62		
	LNG005	Overseas sourced LNG delivered as LNG to OR; no re-gasification or re- liquefaction in OR	77.50	-	77.50		
	LNG006	Landfill Gas (bio-methane) to LNG liquefied in OR using liquefaction with 80% efficiency	26.31	-	26.31		
	LNG007	Landfill Gas (bio methane) to LNG liquefied in OR using liquefaction with 90% efficiency	15.56	-	15.56		
	LNG008	Dairy Digester Biogas to LNG liquefied in OR using liquefaction with 80% efficiency	28.53	-	28.53		
	LNG009	Dairy Digester Biogas to LNG liquefied in OR using liquefaction with 90% efficiency	17.78	-	17.78		
Liquefied Petroleum Gas	LPG001	Liquefied petroleum gas, erude and natural gas mix	83.05	-	83.05		
Electricity	ELC001	Oregon average electricity mix	108.29	-	108.29		
Hydrogen	HYGN001	Compressed H2 from central reforming of NG (includes liquefaction and regasification steps)	142.20	-	142.20		

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Oregon Department of Environmental Quality							
					•		
	HYGN002	133.00	-	133.00			
	HYGN003	Compressed H2 from central reforming of NG (no liquefaction and regasification steps)	98.80	-	98.80		
	HYGN004	Compressed H2 from on-site reforming of NG	98.30	-	98.30		
	HYGN005	Compressed H2 from on-site reforming with renewable feedstocks	76.10	-	76.10		

Oregon Department of Environmental Quality

<u> Table 4 – 340-253-8040</u>

Oregon Carbon Intensity Lookup Table for Diesel and Diesel Substitutes

			Carbon Intensity Values (gCO2e/MJ)		
<u>Fuel</u>	Pathway Identifier	Pathway Description	Direct Lifecycle Emissions	Land Use or Other Indirect Effect	Total Emissions
<u>Diesel</u>	ORULSD001	Clear diesel, based on a weighted average of diesel fuel supplied to Oregon	<u>101.65</u>	Ξ	<u>101.65</u>
	ORULSD002	Blended diesel (B5) - 95% clear diesel & 5% soybean biodiesel	<u>98.48</u>	Ξ	<u>98.48</u>
	ORBIOD001	Conversion of Midwest soybeans to biodiesel	<u>29.15</u>	<u>29.10</u>	<u>58.25</u>
<u>Biodiesel</u>	ORBIOD002	Conversion of Used Cooking Oil to biodiesel where "cooking" is required; NW UCO; Oregon production	<u>18.12</u>	Ξ	<u>18.12</u>

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Conversion of tallow to biodiesel; ORBIOD003 37.93 37.93 MW tallow; MW production Conversion of canola oil to ORBIOD004 43.34 14.50 57.84 biodiesel ORBIOD005 Conversion of corn oil to biodiesel 36.89 36.89 Ξ Conversion of soybeans to ORRNWD001 23.15 29.10 52.25 renewable diesel Conversion of Used Cooking Oil to ORRNWD002 19.25 19.25 Ξ renewable diesel Conversion of tallow to renewable Renewable ORRNWD003 29.96 29.96 Diesel diesel Conversion of canola oil to ORRNWD004 35.48 14.50 49.98 renewable diesel Conversion of corn oil to renewable ORRNWD005 33.64 33.64 diesel North American NG delivered via ORCNG001 79.93 79.93 pipeline; compressed in OR Compressed Landfill gas (biomethane) cleaned Natural Gas ORCNG002 up to pipeline quality NG; 50.26 50.26 compressed in OR North American NG delivered via ORLNG001 pipeline; liquefied in OR using 94.46 94.46 liquefaction with 80% efficiency Liquefied Natural Gas Landfill Gas (bio-methane) to LNG ORLNG002 liquefied in OR using liquefaction 65.81 65.81 with 80% efficiency Liquefied petroleum gas, crude and Liquefied ORLPG001 83.05 83.05 Ξ Petroleum Gas natural gas mix

[ED. NOTE: Tables referenced are not included in rule text. Click here for PDF copy of table(s).]

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Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3.

Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3.

Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; DEQ 15-2013(Temp), f. 12-20-13, cert. ef. 1-1-14 thru 6-30-14; DEQ 8-2014, f. & cert. ef. 6-26-14; Renumbered from 340-253-3020 by DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

340-253-8050

Table 5 — Summary Checklist of Quarterly Progress and Annual Compliance Reporting Requirements

[ED. NOTE: Tables referenced are not included in rule text. Click here for PDF copy of table(s).]

Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3.

Hist.: DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

340-253-8060

Table 6 — Oregon Energy Densities of Fuels

NOTE: Renumbered from 340-253-3030.

[ED. NOTE: Tables referenced are not included in rule text. Click here for PDF copy of table(s).]

Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; Renumbered from 340-253-3030 by DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

340-253-8070

Table 7 — Oregon Energy Economy Ratio Values for Fuels Used as Gasoline Substitutes

NOTE: Renumbered from 340-253-3040.

[ED. NOTE: Tables referenced are not included in rule text. Click here for PDF copy of table(s).]

Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; Renumbered from 340-253-3040 by DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

Attachment A2
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Table 8 — Oregon Energy Economy Ratio Values for Fuels Used as Diesel Substitutes

NOTE: Renumbered from 340-253-3050.

[ED. NOTE: Tables referenced are not included in rule text. Click here for PDF copy of table(s).]

Stat. Auth.: ORS 468.020, & 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Stats. Implemented: 2009 OL Ch. 754 Sec. 6 (2011 Edition) & 2015 OL Ch. 4 Sec. 3. Hist.: DEQ 8-2012, f. & cert. ef. 12-11-12; Renumbered from 340-253-3050 by DEQ 3-2015, f. 1-8-15, cert. ef. 2-1-15

Clean Fuels Program Update Rulemaking List of Commenters

Commenter ID	Commenter	Organization	Comment	Comment IDs
1	Robert Russell	Oregon Trucking Association	See written comment submitted.	1,2,3
2	Shannon Baker-Branstetter	Consumers Union	See written comment submitted.	4,5
3	Marie-Helene Labrie	Enerkem	See written comment submitted.	4,5,6,7
4	Geoff Cooper	Renewable Fuels Association	See written comment submitted.	7,8,9,10
5	Jessica Hoffmann	RPMG	See written comment submitted.	8,10,11,12,13,14,15
7	Steven Harrington	Oregon Dept. of Agriculture	See written comment submitted.	16,17
8	Stephanie Searle	International Center for Clean Transportation	See written comment submitted.	4,18,19,20
9	lan Thomson	Western Canada Biodiesel Association	See written comment submitted.	4,21,22
10	Daniel Sinks	Phillips 66	See written comment submitted.	2,23,24,25,26
11	Mike Freese	Associated Oregon Industries	See written comment submitted.	2
12	Simon Mui	Natural Resources Defense Council	See written comment submitted.	4,12,19,20,27,38,39, 30,31,32,33
13	Chris Blyly	Growth Energy	See written comment submitted.	34,35,36,37

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Commenter ID	Commenter	Organization	Comment	Comment IDs
14	Stephanie Batchelor	Biotechnology Industry Organization	See written comment submitted.	13,38,39,40,41
15	Charlie Peters	Clean Air Performance Professionals	Voluntary GMO fuel may reduce CO2, ozone & NOx in 2016. Monopoly patent mandate may lower BP-DuPont stock value and profit while a move to voluntary may improve employee and customer relationship with improved profit. Win-Win outcome. MTBE is in our water and a pain to oil profit. Is it time to check California water for fuel ethanol? Time for food & AB32 climate change performance? Time for an AG conversation for consideration of a California fuel ethanol waiver? UN supports voluntary GMO fuel, a waiver.	87
16	Chris Hagerbaumer	Oregon Environmental Council	Mote, P., A. K. Snover, S. Capalbo, S. D. Eigenbrode, P. Glick, J. Littell, R. Raymondi, and S. Reeder, 2014: Ch. 21: Northwest. Climate Change Impacts in the United States: The Third National Climate Assessment, J. M. Melillo, Terese (T.C.) Richmond, and G. W. Yohe, Eds., U.S. Global Change Research Program, 487-513. doi:10.7930/J04Q7RWX. http://nca2014.globalchange.gov/report/regions/northwest	88
17	Gavin Carpenter	SeQuential Biodiesel	See written comment submitted.	4,42
18	Graham Noyes	Low Carbon Fuels Coalition	See written comment submitted.	4,43
19	Jennifer Dresler	Oregon Farm Bureau	See written comment submitted.	2
20	Kristen Sheeran	Climate Solutions	See written comment submitted.	4,5,18,44,45

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Commenter ID	Commenter	Organization	Comment	Comment IDs
21	Graham Noyes	Emerald Biofuels	The attached comment is submitted on behalf of our client, Emerald. It is being submitted by Kathleen Kapla of Keyes, Fox & Wiedman LLP. The comment supports the explicit inclusion in the Clean Fuels Program of low carbon intensity marine distillate oils.	4,46
22	Jan Koninckx	DuPont	See written comment submitted.	12
23	Nik Blosser		See written comment submitted.	7
24	Thomas Wheatley	Renew Oregon	See written comment submitted.	4
25	Jessica Spiegel	Western States Petroleum Association	See written comment submitted.	2,12,23,24,33,63,64, 65,66,67,68,69,70,71, 72,73, 74,75,76,77,78,79,80, 81,82,83,84,85,86
26	Tom Koehler	Pacific Ethanol	See written comment submitted.	7
27	Jeremy Martin	Union of Concerned Scientists	See written comment submitted.	4,18,19,20
28	Ryan Kenny	Clean Energy	See written comment submitted.	4,5,47,48,49
29	Rebecca Deehr	Environmental Entrepreneurs	See written comment submitted.	4,5,18,45,50,51

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Commenter ID	Commenter	Organization	Comment	Comment IDs
30	Harrison Pettit	Pacific Ag	Dear Administrator, PACIFIC AG (www.pacificag.com) is North America's leading ag biomass harvest and supply company. Pacific Ag sustainably harvests ag residues for a diverse set of industries but helping lead the way as the key biomass supplier to two of three cellulosic biofuels plants now fully constructed and producing very low carbon fuels. We are highly supportive of the Clean Fuels Program but adamantly disagree with the draft rule's treatment of ILUC, which we view as placing an unfair burden on agriculture given the indirect effects on other fuels. Including the CARB ILUC is neither scientifically justified nor good, balanced policy. We recommend that no ILUC value be assigned until a greater scientific consensus and a more balanced approach to indirect effects is developed or Oregon should use the Argonne GREET model ILUC values, if some value must be applied today. As you are aware a recent study by Dr. Bruce Babcock using empirical real world evidence shows the econometric assumption driven model of CARB to be grossly overstating land use emissions and activity. Recent work by Argonne incorporated into the GREET model is much more consistent with the actual empirical data collected by Babcock. We further recommend that Oregon apply regulatory methodology consistently across all fuels at the same time. The current proposal adds a special indirect effect penalty to agricultural derived fuels while ignoring the indirect effects of other fuels such as crude oil, electricity and natural gas. As you are aware British Columbia decided against	7,8

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Commenter ID	Commenter	Organization	Comment	Comment IDs
			including indirect effects into regulation because of lack of scientific consensus and an unwillingness to apply the controversial values on a selective basis. Attached, you will find several papers, some collaborated on by Dr. Bruce Dale that further address some of the flaws with the CARB ILUC values and approach.	
31	Shelby Neal	National Biodiesel Board	See written comment submitted.	19,52,53,54

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Commenter ID	Commenter	Organization	Comment	Comment IDs
32	Carrie Nyssen	American Lung Association in Oregon	American Lung Association in Oregon strongly supports the proposed rules for the Oregon Clean Fuels Program. These rules will move forward our mission of saving lives by improving lung health and preventing lung disease. Too many Oregonians are exposed to unhealthy air pollution, in part because of our dependence on fossil fuels. Accelerating the use of clean fuels is a vital public health strategy to reduce exposure to bad air. Taking action to reduce our greenhouse emissions is a health win for our children, the elderly and other vulnerable populations who live with the ongoing challenges of asthma, chronic obstructive pulmonary disease and other chronic illnesses made worse by dirty air. Inaction is not acceptable. Continuing to release greenhouse gases into our atmosphere contributes to warmer temperatures and facilitates the formation of ozone which is harmful for all Oregonians to breathe. Warmer temperatures also means a longer pollen season that affects quality of life for those with asthma and allergies. Air pollution from cars, trucks, buses and freight transportation leads to illness and premature death, especially for those living near busy roadways. The Clean Fuels Program is a vital strategy to address serious public health impacts from air pollution. It will result in the development and deployment of cleaner alternative fuels, reducing Oregon's unhealthy dependence on polluting petroleum fuels. American Lung Association's expertise does not lie in the technical details of the program, but we want to signal our strong support yet again, and urge that the program	4

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Commenter ID	Commenter	Organization	Comment	Comment IDs
			move forward in a way that results in real reductions in emissions as well as real improvements in our air. Cleaner fuel choices means less pollution, less soot and less smog and that's good for the health of all Oregonians.	
33	Colin Murphy	Next Gen Climate	See written comment submitted.	4,55,56
34	Gary Neal	Port of Morrow	See written comment submitted.	57
35	Dayne Delahoussaye	Neste US, Inc.	See written comment submitted.	5,58,59,60,61,62
36	Kristen Sheeran	Climate Solutions	(Oral) DEQ carefully crafted the rules. Climate Solutions support the program and proposed rules. Support future discussion of cost containment. Supports refinements for direct emissions calculations and encourages judicious updates in the future. The program is designed to incent the cleanest fuels. The baseline is flexible and certain. Support baseline that uses the US avg. CI for corn ethanol. still require 10% reduction over 10 year period. Support streamlining and additional flexibility to comply for large importers of finished	See written comments above

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Commenter	Commenter	Organization	Comment	Comment IDs
			fuels to ensure the program's success. See also written comments submitted.	
37	Chris Hagerbaumer	Oregon Environmental Council	(Oral) Oregon must be a leader to climate change. The program holds regulated parties accountable. In California, credits have been generated, minimal price impact, new pathways identified, alternatives are less carbon intensive. Support updating models to align with California. Sends a clear and coordinated signal to industry. Recommend prudent updates to models. Support proposal of CARB's ILUC values. HB 2186 directed inclusion of ILUC. Alignment with California avoid a patchwork regulatory system. Supports use of US average vs. OR average corn ethanol CI. Supports more time to comply for importers of finished fuel. See also written comments submitted.	See written comments above
38	Frank Holmes	Western States Petroleum Association	(Oral) The program is still infeasible and costly to consumers. Proposed changes make it worse with inclusion of ILUC and changes in modeling. Ability for industry to comply through blending of low carbon fuels gets difficult early in the program. Chart shows pathways that can generate credits. Costs continue to be a factor. The rule does not include cost containment required by SB 324 and impacts how industry complies. Proposed rules should consider cost containment prior to adoption, including provisions negotiated in bicameral fashion - on-ramp for liquid biofuels must be cost effective	See written comments above

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Commenter ID	Commenter	Organization	Comment	Comment IDs
			and feasible. California re-adoption causing CIs to change. Industry does not have a clear vision of compliance because of the changing numbers. Economic analysis has not been done in a complete fashion. Legal issues included in written comments. This is a poor policy for the state to consider; EQC should not be asked to consider adoption before inclusion of cost containment and economic analysis. See also written comments submitted.	
39	Miles Heller	Tesoro	(Oral) Provides regulated party perspective. Too short of time between the hearing in December but having to comply in January. Difficult to figure out how to comply with preliminary information. Difficult and uncertain. The program is not easy or flexible. Compliance difficult starting in first year. Part due to baseline E10 and B5 plus changes to model and inclusion of ILUC. Fuels used in California to generate credits initially will not be available to provide early credits in Oregon. In California, since biodiesel was not part of the baseline, there was great flexibility in diesel side to make up for shortcomings on the gasoline side. Baseline for diesel should be B2 which was 2010 requirement. Program requires credit build up in early years. Great uncertainty administratively. Usually contract a month or more ahead for fuels. Delay adoption beyond the December hearing for more systems to be in place and more analysis of the impact of the program to be done. See also written comments submitted.	Incorporated into WSPA written comments

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Commenter ID	Commenter	Organization	Comment	Comment IDs
40	Jamie Painter		(Oral) Global warming presents significant problems for Oregon in the future. Moving forward with policy helps. The proposed rules strengthen the program. It spurs investments in clean fuels. Oregon is a leader in clean transportation. Work over the last 7 years has made clear that ILUC is real and must be included. The California value represents the best science today. Encourage to partner with California to increase understanding of issue in a collaborative process. See also written comments submitted.	See written comments above

Clean Fuels Program Update Rulemaking Responses to Comments

Comment Category	Comment ID	Description of Comment	Response
	4	Supports proposed rules.	
	5	Supports synchronizing/harmonizing/aligning with California's program.	
General	6	Encourage Oregon to consider complementary policies to encourage in-state production of advanced biofuels from waste.	Thank you for your comment
Gen	38	The Clean Fuels Program should incentivize the use of biofuels through sound science in determining Cls, flexibility built into the mechanism to comply and a streamlined pathway approval system.	Thank you for your comment.
	55	Additional exemptions or compliance delays will jeopardize the stability of the program.	

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Comment Category	Comment ID	Description of Comment	Response
	58	A properly implemented Clean Fuels Program will stabilize the economic drivers and be an adequate market signal driving low carbon fuels to Oregon.	
	87	Voluntary GMO fuel may reduce CO2, ozone & NOx in 2016. Monopoly patent mandate may lower BP-DuPont stock value and profit while a move to voluntary may improve employee and customer relationship with improved profit. Win-Win outcome. MTBE is in our water and a pain to oil profit. Is it time to check California water for fuel ethanol? Time for food & AB32 climate change performance? Time for an AG conversation for consideration of a California fuel ethanol waiver? UN supports voluntary GMO fuel, a waiver.	
	88	Ch. 21: Northwest. Climate Change Impacts in the United States: The Third National Climate Assessment	
Cost Containment	1	Fuel price deferral will not protect consumers from increased fuel costs in a timely manner.	The current program rules include "provisions for managing and containing the costs of compliance with the standards," as required by SB 324 (2015). DEQ also intends to study, develop and adopt one or more additional cost containment mechanisms prior
	2	The proposed rules are incomplete because the SB 324-mandated cost containment language is not included and should be prior to implementation.	to the end of the first carbon reduction compliance period on December 31, 2017. Because the first compliance period will not end until that time, DEQ anticipates that regulated parties will have ample

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Category	Comment ID	Description of Comment	Response
	63	DEQ has failed to comply with its statutory obligations by excluding cost containment measures from this rulemaking.	opportunity to take use any such additional cost containment provisions to meet their compliance obligations.
Compliance Scenarios	15	Compliance scenarios are not comprehensive forecasts. Conduct a forecast prior to implementing program.	DEQ analysis shows that after incorporating the proposed changes in this rulemaking, the program is feasible over its 10-year lifetime. As the program is implemented, DEQ will update its analysis with
Recommend update to compliance scenarios to reflect most current Cls, latest trends in the clean fuels market, technology, etc.	current information as part of its forecasted fuel supply deferral process, the CI updates and program		
am	10	Inclusion of ILUC and setting a stringent baseline will preclude meaningful levels of credit banking in early years.	The baseline established represents the most recent information available for the beginning of the Clean Fuels Program. The blending rate is 10% ethanol in gasoline (E10) and 5% biodiesel in diesel (B5). The fuel import volumes and crude sources are from
Feasibility of Program	11	The proposed compliance curve will shock the marketplace. Does not give credit to what has been accomplished.	2012. The corn ethanol CI is based on reported 2013 data, adjusted to OR-GREET 2.0 and Oregon ILUC values. All other CIs are based on OR-GREET 2.0, OPGEE 1.1 and Oregon ILUC values. In response to
	23	Proposed rule amendments make the requirement to reduce CI by 10% over 10 years is infeasible. B5 baseline and updated biofuels CIs make compliance more difficult.	comments regarding the feasibility of the program in 2016, DEQ is proposing to extend the initial compliance period to two years, so that regulated parties will not have to demonstrate program compliance for 2016 and 2017 until early in 2018. For

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Comment Category	Comment ID	Description of Comment	Response
	44	Adjust 2015 baseline to represent US average corn ethanol instead of Oregon average corn ethanol.	2016, deficits and credits will be generated relative to the 2016 standards. Then compliance will be required for all fuel transactions over the 2016-2017 calendar year period with a 0.50% reduction required. The rest of the 10-year phase-in period will
	50	Availability of biofuels is sufficient for program goals to be achieved.	continue as proposed, with a full 10% reduction required in 2025. This change will allow additional time for: 1) DEQ to adopt one or more additional cost containment mechanisms; 2) regulated parties to comply with the program; and 3) credit generators
	67	Compliance pathways that require higher than E10 or B5 blending will require upgrading infrastructure and will present misfuelling and product liability challenges.	to sell or bank credits knowing that the program will continue through 2025. These changes further support DEQ's analysis that the Clean Fuels Program is feasible over its 10-year lifetime.
	68	The proposed baseline makes compliance more difficult.	
ities	29	Supports proposal to provide large finished fuel importers with two additional years for compliance.	
Flexibil	45	Supports additional flexibilities for regulated parties to comply (extended compliance periods).	
Additional Program Flexibilities	48	Do not support providing additional time for importers of finished fuels to comply; prevents the formation of any market for the first two years of the program.	The additional program flexibilities will make it easier for regulated parties to comply, especially smaller businesses, while retaining all of the GHG reductions intended by the program.
dditio	52	Additional time for importers of finished fuels to comply is generous.	
<i>d</i>	73	Support addition of carryback credits.	

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Comment Category	Comment ID	Description of Comment	Response
	86	Support reinstatement of 10% deficit carryover provision.	
oo	13	Include provisions for voluntary producer registration.	Since biofuel producer registration is voluntary, there is no need to incorporate any requirements into the rules. Producers who wish to obtain a CI for use in Oregon will have to follow the process described in OAR 340-253-0450 and OAR 340-253-0500(3). The CFP Online System is designed to accept registration applications and DEQ will develop guidance to assist producers in their application for CIs.
Program Expansion	14	Include provisions for out-of-state producer opt-in.	If an out-of-state producer wants to opt in to the program, it should become the importer as defined as the owner of the fuel as it crosses the state line.
Progr	30	DEQ should expand credits to medium-, heavy-duty and off-road applications for electricity.	
	40	Consider including all types of energy utilized to power vehicles as regulated parties, not just biofuel and traditional fuel importers and producers.	Thank you for your comment. DEQ is interested in expanding the program in the future and looks
	43	Expand the program to allow for credit generation from aviation fuels.	forward to working with you on these potential fuels and applications.
	46	Expand the program to allow for credit generation from marine fuels.	
Rulemaking Process	24	Not enough time between rule adoption and compliance to plan properly.	DEQ has been working with stakeholders for several months ahead of the December adoption date in an open and transparent rulemaking process. Since the first carbon reduction compliance period will not end

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Comment Category	Comment ID	Description of Comment	Response
	26	Recommends that DEQ withdraw proposed rule changes until all the questions about the program are answered.	until December 31, 2017, regulated parties will have lots of time to prepare for compliance.
	34	DEQ will not be able to show how the proposed rule changes satisfied any purported need. DEQ did not undertake its own research. DEQ hasn't shown that ILUC will be effective. DEQ didn't sufficiently review the Argonne methodology. The changes proposed will be ineffectual.	These are not errors in complying with the rulemaking requirements, but rather a disagreement over policy decisions made by DEQ. The Notice of Proposed Rulemaking contains statements of need for all proposed rule changes. There is no requirement that DEQ conduct its own original research. DEQ has thoroughly reviewed competing information for all aspects of the proposed rule.
	36	DEQ has not adequately addressed the negative fiscal impacts of the proposed rule changes.	A draft statement of fiscal and economic impact was reviewed by an advisory committee and included in the notice of proposed rulemaking. The statement of
	64	DEQ failed to meet its obligation to prepare a fiscal and economic impact statement.	fiscal and economic impact also addresses ORS 183.333(3) and 183.540 for consideration of impacts to small businesses. It is important to remember that
	66	DEQ failed to comply with the requirements in ORS 183.333(3) and 183.540.	the requirement for this statement of fiscal and economic impact pertains only to the changes proposed in this rulemaking, not the entire program.

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Comment Category	Comment ID	Description of Comment	Response
	65	DEQ failed to follow the procedures in ORS 468A.270.	ORS 468A.270 is regarding the EQC's authority to adopt motor vehicle pollution control systems and requirements and has nothing to do with the Clean Fuels Program. We believe that this comment was intended to refer to the provisions of Sections 6 to 9, chapter 754, Oregon Laws 2009 ("2009 Clean Fuels Law"), which have been inserted into the codified Oregon Revised Statutes immediately after ORS 468A.270. If that is the intent of this comment, DEQ incorporated the evaluation criteria from the 2009 Clean Fuels Law, as amended by SB 324 (2015), in its work with stakeholders to design the program and in the development of the formal rulemaking documents.
	35	DEQ is effectively trying to delegate its statutory duties to CARB. DEQ cannot have CARB perform its statutory duties.	Neither DEQ nor the EQC has delegated authority to CARB. By its action, the EQC is exercising its own rulemaking authority as it considers what requirements to apply.
Authority	37	DEQ should amend the Clean Fuels Program rules only in ways that are consistent with the Clean Air Act, the Reformulated Gasoline Rule and the Renewable Fuel Standard.	The policy to adopt federal rules does not apply when "there is no corresponding federal rule." ORS 183.332(6). There is no federal low carbon fuel
Au	41	Ensure harmonization with Renewable Fuel Standard since it also regulates lifecycle content of greenhouse gases in transportation fuels.	standard and, as the US District Court for the District of Oregon ruled in <i>AFPM vs. O'Keeffe</i> , the Clean Fuels Program is not inconsistent with either the Reformulated Gasoline Rule or the Renewable Fuel Standard.

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Comment Category	Comment ID	Description of Comment	Response
	69	Provide the specific dates for the two periodic program reviews.	DEQ is not committing to exact dates for the planned program reviews in order to retain flexibility to schedule the reviews at times that will maximize their usefulness (incorporate changes in carbon intensities, policies or legislation), coordinate with other entities, and efficiently manage program resources.
cess	70	CI updates should be every five years - or remain in place for the entire 10 year period - instead of every 3 years.	DEQ has selected a 3 year CI updates review period in order to balance between providing certainty to the market and ensuring that the program is using the most current reliable science. Any review period longer than 3 years will not reflect the latest science.
Program Process	71	Issues considered for review should not be explicit in the regulation.	DEQ wants to provide transparency to stakeholders that specific significant issues will be addressed during a program review while remaining open to addressing any emerging issue.
	76	DEQ should provide a list of approved, registered brokers on its website.	DEQ will provide a list of regulated parties, credit generators and brokers on its webpage and will
	80	DEQ should publish when a credit generator or broker opts out of the program.	update it at least once per quarter.
	83	DEQ should provide a workshop and public input prior to a determination under the Forecasted Fuel Supply Deferral.	DEQ anticipates that the one or more new cost containment mechanisms will replace the forecasted fuel supply deferral process prior to the first required forecast in 2016 for 2017. If that is not the case, however, DEQ will consider providing such a workshop and for public input at that time.

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Comment Category	Comment ID	Description of Comment	Response
Definitions	16	Suggest changes to definitions of "biodiesel", "biodiesel blend", "clear gasoline", "clear diesel", "diesel fuel", "compressed natural gas", "diesel substitute", "E10", "fuel ethanol", "fossil", "gasoline", "gasoline substitute", "importer", "liquefied petroleum gas", "renewable diesel", "transmix", "unit of fuel". Remove definitions of "diesel fuel blend", "invoice", "liquefied compressed natural gas", "renewable fuel". Add definition of "crude oil".	DEQ will incorporate changes to definitions in OAR 340-253-0040. The definitions for "Biodiesel" and "Biodiesel blends" need to cite specific versions of the ASTM documents because changing ASTM standards cannot supersede the EQC's rulemaking authority.
	53	Request changes to definitions of biodiesel and biodiesel blend.	
	62	Propose new definition for "renewable hydrocarbon diesel".	
	72	Standardize definitions throughout the regulation and align with state/federal regulations as appropriate.	
Carbon Intensities	21	GREET overestimates CI for canola oil.	DEQ will consider this information in the next CI review.
	25	How will Oregon incorporate the changes to CIs as a result of California's recertification process?	Oregon will update its CFP Online System as California recertifies its fuel pathways, after confirming that CARB's updates are consistent with OR-GREET 2.0. Upon approval by DEQ, effective dates established by CARB for the recertified fuel pathways will be recognized in Oregon.
	27	DEQ should perform periodic reviews of CIs based on changes to conditions or considerations that would trigger variables to be reviewed.	OAR 340-253-0400(2) establishes the considerations for the review of CIs.

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Comment Category	Comment ID	Description of Comment	Response
	28	Adoption of Tier 1 and Tier 2 calculators provide maximum flexibility to applicants to obtain a CI.	Thank you for your comment.
	47	How can the carbon intensities for propane and electricity not be changed from the previous calculations?	Since propane is not part of the California program, the propane CI is taken from an industry study. The electricity CI is provided to DEQ from the Oregon Department of Energy based on information from utilities complying with the renewable portfolio standard and represents the actual statewide electricity mix.
	49	Consider methane leakage values from utility studies that are more accurate than CARB's.	DEQ is willing to consider information, if available, that is specific to Oregon pipelines as it develops the statewide CI for fossil CNG and fossil LNG.
Electricity	31	DEQ should encourage utilities to use CFP credits to further expand electrification.	DEQ cannot dictate to utilities how they should invest the revenue from selling CFP credits. However, since DEQ supports expanding investments in electric vehicle charging infrastructure as a policy matter, DEQ will work with the Oregon Public Utilities Commission to provide the clarity that is needed to promote that outcome.
	32	Utilities should be first-in-line for residential credits. Charging service provider or site host should be first-in-line for non-residential credits.	This is consistent with the current rules. The hierarchy for entities to generate credits from residential charging is: 1) utility; 2) a third party aggregator; then 3) the owner of the charger. The
	51	Request clarification as to who generates credits for public electric vehicle charging stations.	hierarchy for entities to generate credits from non- residential charging is: 1) the owner of the charger; 2) utility; then 3) a third party aggregator.

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Comment Category	Comment ID	Description of Comment	Response
	85	Do not allow for non-direct-metered credit generation from electricity.	DEQ will work directly with entities wishing to generate credits from the use of electricity as a transportation fuel and agree on an accepted methodology that ensures program integrity.
Indirect Land Use Change	7	Oregon should adopt Argonne ILUC factors instead of CARB's.	The evidence shows that indirect land use change must be included in a proper accounting of lifecycle greenhouse gas emissions and for this reason, DEQ recommends that ILUC values should be adopted at this time. Adopting ILUC values at this point in the program will provide needed certainty to the market. Analysis conducted by CARB represents the best science available today for estimating the indirect land use changes for biofuels made from soybean, canola, palm oil, sugarcane and sorghum. However, for biofuels made from corn, Argonne National Laboratory has also analyzed the impacts of indirect land use change. Evidence submitted suggests that Argonne used more refined information regarding land use changes for corn grown in the United States. Commenters argue that since all of the corn ethanol consumed in the United States is produced domestically, it reasons that the Argonne ILUC value is more accurate for use at this time. Since Argonne has not developed any ILUC values for any other feedstocks, DEQ recommends the adoption of the Argonne ILUC value for biofuels made from corn and the CARB ILUC values for biofuels made from
	9	Proposed ILUC values have nothing to do with the expected carbon impacts of the program in Oregon.	
	18	Supports proposed inclusion of ILUC factors to ensure real climate benefits.	
	19	Supports adoption of CARB ILUC factors as the most up-to-date analysis. Model of public engagement and transparency. Provides consistent approach across multiple feedstocks. Harmonizes with California's regulation.	

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Comment Category	Comment ID	Description of Comment	Response
	39	Leave ILUC out until they reflect and include a more scientific peer review process and recommendations listed in comments to CARB.	soybeans, canola, palm oil, sugarcane and sorghum. DEQ is committed to continuously monitor the evolution of the science to quantify the impact of land use change caused by biofuels policies and over the next few years, will collaborate with the California Air Resources Board, Argonne National
	57	Adoption of the CARB ILUC will unfairly penalize the Oregon renewable fuels industry.	Laboratory and other experts as they continue to refine the information and methodologies to quantify the impact of indirect land use change of all biofuels.
	61	Consider additional information regarding ILUC from palm oil.	DEQ will consider this information in the next CI review.
Other Indirect Effects	8	Oregon should not include ILUC without indirect effect penalty factors for any other fuel types.	In addition to indirect land use changes for biofuels caused by lower carbon fuels policies, there are indirect lifecycle carbon emissions effects that should be allocated to petroleum fuels. For example, an
	20	Support adoption of ILUC now without inclusion of indirect effects from fossil fuels.	indirect fuel use change or the change in carbon intensity of the marginal fuel supply are both concepts that could potentially be significant if quantified. However, at this time, there is insufficient information to quantify these impacts. DEQ will continue to monitor the science regarding indirect lifecycle carbon emissions effects of all fuels and will recommend to incorporate its findings, as appropriate, in the three-year review of CIs and program reviews.
	22	Recommends that DEQ adopt a specific timeline and process to assess impact of indirect effects for traditional fuels.	
Techni	3	Proposed rules do not include framework to regulate brokers.	OAR 340-253-0100 includes requirements for brokers to participate in the program. Item G 00015

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Comment Category	Comment ID	Description of Comment	Response
	12	Amend language for provisional credits to California's new adopted language.	DEQ will incorporate California's adopted language for provisional credits.
	17	Suggest specifying volumes for gallons of gasoline and diesel instead of gge and dge.	DEQ will incorporate the actual liquid volumes in OAR 340-253-0250. The non-liquid volumes are not necessary because those fuels are not required to participate in the program and thus, no minimal threshold needs to be established.
	54	Provisions for heightened requirements for oxidation stability is unnecessary and counterproductive.	SB 324 directs DEQ to incorporate these provisions into the rules.
	59	Adopt third party verification for pathway applications.	Thank you for your comment. DEQ believes that these provisions can further strengthen the program and will look at adding them in the future.
	60	Regulations should specifically allow for mass balancing of mixed feedstock renewable fuels.	DEQ will consider information it receives from program participants in support of mass balancing mixed feedstocks and will develop a consistent methodology for such requests.
	74	Support expanded definition of PTD.	Thank you for your comment.
	75	Regulated parties should not have to register for every fuel imported into Oregon.	DEQ will incorporate this comment into OAR 340-253-0500. Regulated parties should only have to register for fuels that need to obtain a CI for use in Oregon.
	77	Remove requirement for recipient of the fuel to notify the seller of its regulated party status; or allow it to be non-written.	DEQ will incorporate this comment into OAR 340-253-0310(2). Regulated parties can use the list posted on the webpage or receive non-written notification from the recipient.

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Comment	Comment		
Category	ID	Description of Comment	Response
	78	Remove requirement for recipient who does not become the regulated party to maintain the PTD; the seller should maintain the PTD.	DEQ will incorporate this comment into OAR 340-253-0310. The non-importer or small importer should not have to maintain the PTD since they do not have the compliance obligation.
	79	Provide a time limit to obtain a CI.	The process for obtaining a CI is through the registration process so the timelines contained in OAR 340-253-0500 apply.
	82	Credit generation should be allowed after the end of the quarter in the event of an amended report.	Since there is no compliance obligation for a calendar quarter, there is no need to extend the credit generation period. At the end of the calendar year, there are already provisions to allow for extra time to generate credits for compliance.
	84	Allow for regulated parties to apply for credit based on co-processing renewables at their out-of-state refineries.	Thank you for your comment. DEQ believes that these provisions can further strengthen the program. We look forward to discussions about how this might work in Oregon since all of the refineries are located out-of-state.
Enforcement	42	Penalties for willful non-compliance must be substantial and severe enough to prevent companies from disregarding the program and paying a fine.	Thank you for your comment. The proposed changes will provide the necessary enforcement provisions to support the Clean Fuels Program.
	56	DEQ must maintain a strong enforcement capacity, with penalties for non-compliant parties.	support the clean ruers rrogram.
	81	Consider providing compliance protection as the result of the reconciliation process if the business partner refuses to respond. Consider providing enforcement relief for corrections to quarterly reports.	Business partners who are regulated parties, credit generators or brokers are required to reconcile. Other business partners are not required to reconcile since they don't retain any compliance obligation.