 Oregon Department of Environmental Quality

 September 1, 2018

## Notice of Proposed Rulemaking

**CFP 2018 Rulemaking**

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| Introduction |

DEQ invites public input on proposed permanent rule amendments to chapter 340 of the Oregon Administrative Rules.

## Background

The 2009 Oregon Legislature authorized the Oregon Environmental Quality Commission (EQC) to adopt rules to reduce lifecycle emissions of greenhouse gases from Oregon’s transportation fuels by 10 percent over a 10-year period. The 2015 Oregon Legislature authorized the removal of the Dec. 31, 2015 sunset date of the authorizing statute and further authorized the EQC to adopt rules for managing and containing the costs of compliance with the Clean Fuels Program (CFP). The 2017 Oregon Legislature authorized additional provisions to manage and contain the costs of compliance with the CFP.

### DEQ proposal

DEQ proposes the following changes to OAR 340, division number 253 that will:

* update the models used to determine the carbon intensities of fuels and the resulting changes;
* add new categories of fuel used to generate credits and add new fuels that could generate credits; and
* make some housekeeping changes.

DEQ also proposes to amend rules under division 12 of chapter 340 of the Oregon Administrative Rules to classify certain violations and establish or clarify enforcement criteria for violations of the Oregon Clean Fuels Program.

### More information

Information about this rulemaking is on this rulemaking’s web page: <https://www.oregon.gov/deq/Regulations/rulemaking/Pages/rCFP2018.aspx>

### Public Hearings

DEQ will hold a public hearing on this rulemaking as detailed below.

Date: September 20, 2018

Time: 1:30 pm

Location: DEQ Headquarters Office, 700 NE Multnomah Street, Conference Room 601, Portland, OR 97232

## How to comment on this rulemaking proposal

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

### Comment deadline

DEQ will only consider comments on the proposed rules that DEQ receives by 4 p.m., on September 21, 2018.

#### Submit comment online

<http://www.oregon.gov/deq/Regulations/rulemaking/Pages/cCFP2018.aspx>

#### Note for public university students:

ORS 192.501(29) allows Oregon public university and OHSU students to protect their university email addresses from disclosure under Oregon’s public records law. If you are an Oregon public university or OHSU student you may omit your email address when you complete the online form to submit a comment.

#### By mail

Oregon DEQ

Attn: Cory-Ann Wind

700 NE Multnomah St., Room 600

Portland, OR 97232-4100

#### At hearing

September 20, 2018

1:30 pm

Oregon DEQ Headquarters Office

700 NE Multnomah Street

Conference Room 601

### You can also participate in the hearing through a teleconference or webinar.

Teleconference call-in number: 888-278-0296

Participant ID: 8040259

Webinar link (webinar has no audio, you must listen on the teleconference):

How to join the teleconference or webinar: [Teleconference and Webinar instructions](http://www.deq.state.or.us/regulations/docs/participantlinklog.pdf)

### Sign up for rulemaking notices

Get email or text updates about this rulemaking by signing up through this link:

[CFP 2018 Rulemaking Email List](https://public.govdelivery.com/accounts/ORDEQ/subscriber/new?topic_id=ORDEQ_509); or on the rulemaking web site: [CFP 2018 Rulemaking Web Page](https://www.oregon.gov/deq/Regulations/rulemaking/Pages/rCFP2018.aspx).

Get email or text updates about other, future DEQ rulemaking by signing up through this link: [DEQ Email Notice List](https://public.govdelivery.com/accounts/ORDEQ/subscriber/new?pop=t&topic_id=ORDEQ_548).

### What will happen next?

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

### Present proposal to the EQC

Proposed rules only become effective if the Environmental Quality Commission adopts them. DEQ plans to present the proposed rules to the commission for a decision at its meeting on November 15-16, 2018.

### Accessibility information

You may review copies of all documents referenced in this announcement at:

Oregon Department of Environmental Quality

700 NE Multnomah St., Room 600

Portland, OR, 97232-4100

To schedule a review of all websites and documents referenced in this announcement, call Cory-Ann Wind, Portland, at 503-229-5388 (800-452-4011, ext. 5622 toll-free in Oregon).

Please notify DEQ of any special physical or language accommodations or if you need information in large print, Braille or another format. To make these arrangements, contact DEQ, Portland, at 503-229-5696 or call toll-free in Oregon at 1-800-452-4011, ext. 5696; fax to 503-229-6762; or email to deqinfo@deq.state.or.us. Hearing impaired persons may call 711.

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| 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:

* update the models used to determine the carbon intensities of fuels and the resulting changes to the lookup table values, clean fuel standards, energy economy ratios, and temporary fuel pathway codes;
* add new categories of fuel used to generate credits including forklifts and truck refrigeration units and add new fuels that could generate credits including alternative jet fuel and renewable propane; and
* make some housekeeping changes.

DEQ also proposes to amend rules under division 12 of chapter 340 of the Oregon Administrative Rules to classify certain violations and establish or clarify 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.

The EQC adopted phase 1 rules on Dec. 7, 2012 that required Oregon transportation 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 required Oregon transportation fuel importers to reduce the average carbon intensity of fuels they provide in Oregon by 10 percent over a 10-year period.

The 2015 Oregon Legislature passed Senate Bill 324 that removed the Dec. 31, 2015 sunset date in House Bill 2186 (2009) and further amended the authorizing statute, ORS 468A.275, for the Oregon Clean Fuels Program.

The EQC adopted updated rules on Dec. 9, 2015 to implement SB 324 (2015).

The EQC adopted temporary rules on April 21, 2016 to correct a miscalculation in the clean fuel standards and certain carbon intensity values. Permanent rules for the correction were adopted on August 18, 2016.

The 2017 Oregon Legislature passed House Bill 2017 that added provisions for a Credit Clearance Market (CCM) as an additional cost containment mechanism. The EQC adopted updated rules on Nov. 2, 2017 adding the CCM mechanism, updating several provisions relating to electricity’s use as a transportation fuel and adding market monitoring provisions.

## Regulated parties

The Clean Fuels Program currently has 154 businesses that are registered to participate, representing:

* *Importers of Blendstocks -* These are businesses that import fuel components which can be blended with another fuel component or used alone. There are currently 58 businesses registered as importers of blendstocks.
* *Importers of Finished Fuels -* These are businesses which only import fuels that can be used directly in a motor vehicle, such as clear gasoline, gasoline blended with 10 percent ethanol, clear diesel and diesel blended with 5 percent biodiesel. There are currently 50 businesses registered as importers of finished fuels, 35 businesses are large (500,000 gallons per year and greater) and 15 are small (less than 500,000 gallons per year). Small importers of finished fuels are largely exempted from the program, except for the requirement to register and annually file a report through the agency’s greenhouse gas reporting program. To note, the program’s definition of a “small importer” does not align with the statutory definition of “small business” that is used to analyze the fiscal and economic impact to small businesses.
* *Oregon Producers of Transportation Fuels -* There are currently three registered Oregon producers of biofuels. One produces ethanol from corn, one produced ethanol from waste food products and one produces biodiesel from used cooking oil.
* *Credit Generators* – These are businesses that provide or produce clean fuels (natural gas, renewable natural gas, propane, electricity and hydrogen). These businesses are not required to participate with the program, but must register in order to generate credits if they choose to. Importers of blendstocks and Oregon producers may also generate credits due to the nature of fuels they provide, but an entity registered as a credit generator is doing so solely because it provides clean fuels. There are currently 43 businesses registered as credit generators.

## Request for other options

During the public comment period, DEQ requests public comment on whether to consider other options for achieving the rules’ substantive goals while reducing the rules’ negative economic impact on business.

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| Statement of need |

Climate change poses a serious threat to Oregon’s economy, environment and public health. Transportation sources account for approximately one third of all greenhouse gas emissions in Oregon. The goal of the CFP is to reduce greenhouse gas emissions from Oregon’s transportation fuels by promoting lower-carbon production methods for existing fuels and the innovation, commercialization, and deployment of new low-carbon alternative fuels. While the CFP has been operating since 2016, there are several needs that this proposed rulemaking is seeking to address as described below.

| Proposed Rule or Topic | Discussion |
| --- | --- |
| Enter rule or topic subtitle |
| What need would the proposed rule address? |  |
| How would the proposed rule address the need?  |  |
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| Rules affected, authorities, supporting documents |

**ORS 183.335(2)(b)**

#### Lead division

Air Quality Division

Air Quality Planning Section

#### Program or activity

Oregon Clean Fuels Program

#### Chapter 340 action

Amend - OAR

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| --- | --- | --- | --- | --- |
| 340-235-0000 | 340-235-0040 | 340-235-0060 | 340-235-0100 | 340-235-0200 |
| 340-235-0250 | 340-235-0310 | 340-235-0320 | 340-235-0330 | 340-253-0400 |
| 340-253-0450 | 340-235-0470 | 340-253-0500 | 340-253-0600 | 340-253-0620 |
| 340-253-0630 | 340-253-0640 | 340-253-0650 | 340-253-0670 | 340-253-1000 |
| 340-253-1005 | 340-253-1010 | 340-253-1020 | 340-253-1030 | 340-253-1040 |
| 340-253-2000 | 340-253-2100 | 340-253-2200 | 340-253-8010 | 340-253-8020 |
| 340-253-8030 | 340-253-8040 | 340-253-8050 | 340-253-8060 | 340-253-8080 |
| 340-253-8090 | 340-253-8100 |  |  |  |

### Statutory authority - ORS

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| --- | --- | --- | --- | --- |
| 468.020 | 468.265 through 277 |  |  |  |

### Statute implemented - ORS

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 468.020 | 468.265 through 277 |  |  |  |

### Legislation

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

### Documents relied on for rulemaking

|  |  |
| --- | --- |
| Document title | Document location |
| CFP 2018 Rulemaking materials, February – July 2018 | <https://www.oregon.gov/deq/Regulations/rulemaking/Pages/rCFP2018.aspx>  |

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| Fee Analysis |

This rulemaking does not involve fees.

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| Statement of fiscal and economic impact |

The Oregon Clean Fuels Program is a technology-neutral, market-based regulatory approach to reduce carbon pollution from transportation fuels and promote the commercialization of innovative low-carbon alternative and conventional fuels. The program does not mandate the use of any particular type of fuel or technology. Instead, it creates a performance standard to reduce the average carbon intensity of fuels sold by 10 percent over 10 years. The program allows for many strategies to be employed for meeting the clean fuel standards by giving each regulated party the flexibility to consider its particular circumstance, perspective and business needs when devising its own strategy to meet the standard.

The scope of this fiscal and economic impact statement is limited to the impact of the proposed rule changes contained in this rulemaking, it does not re-assess the existing CFP in its entirety. The proposed rule changes fall into four broad categories: a) cost containment; b) market monitoring; c) electricity provisions; and d) miscellaneous regulatory improvements along with two discrete rule changes. The proposed rule revisions are based on discussions and input from DEQ’s CFP 2017 Rulemaking Advisory Committee. Here is a brief description of the most significant elements of the proposed rules:

* *Cost Containment* – There are three proposed rule changes related to containing the potential costs associated with complying with the clean fuel standards: 1) the addition of a credit clearance market; 2) removing the monthly fuel price deferral; and 3) modifying the forecast deferral to require the Department of Administrative Service’s Office of Economic Analysis to conduct the forecast in coordination with DEQ. The credit clearance market creates a process where credits can be acquired by regulated parties that need them at the end of a compliance period if they have not generated or purchased a sufficient number of credits to meet their compliance obligations. A maximum price that credits can be purchased for through the credit clearance market will act as a cap for the regular credit market during the rest of the year, as regulated parties will be allowed to roll over unfilled deficits if they cannot purchase credits at or below that maximum price. The credit clearance market is a much more effective and transparent way to manage the costs associated with the clean fuels program than the monthly fuel price deferral, so DEQ is proposing to remove that deferral. The proposed rules also make changes to the emergency deferral in order to implement the requirements of enrolled HB 2017 A from the 2017 Legislature.
* *Market Monitoring* – There are three proposed rule changes related to improving DEQ’s ability to monitor the clean fuels credit market: 1) specifying recordkeeping and inspection requirements for credit transfers; 2) adding provisions to enable the investigation and response to cases of potentially improper credit generation, transfers, fraud, or acts of market manipulation; and 3) amending the emergency fuel supply deferral to allow its’ use to respond to other market disruptions. Collectively, these proposed changes will better allow DEQ to monitor credit market prices and trends, and react to instances where abnormal market behavior might have a negative impact on fuel consumers.
* *Electricity Provisions* – There are six proposed rule changes related to electricity used as a transportation fuel: 1) changing the way the carbon intensity values for electricity are calculated; 2) providing more information on how credits will be calculated and generated for residential charging of electric vehicles; 3) adding a backstop aggregator for residential charging of electric vehicles; 4) adding credits from electricity used for public transit vehicles; 5) adding new energy economy ratios; and 6) generating credits from residential electric vehicle charging for 2016 and 2017.

The first three proposed rule changes clarify how credits will be generated and who is able to generate them. For electricity used for charging electric vehicles at residences, a utility is currently designated to generate the credits or it can designate an aggregator to do so on its behalf. If the utility chooses neither option to generate credits, then the proposed rule change would allow DEQ to select a backstop aggregator to receive the “stranded” credits. The proposed rules establish qualifying criteria and reporting requirements for a backstop aggregator.

The next two proposed rules would expand the types of electric vehicles that can generate credits and how those credits should be calculated. The proposed rules would add electricity used for public transit such as buses, light rail, street cars or aerial tram as a qualifying transportation fuel and clarifies that the transit agency will be the default credit generator. The proposed rules also add in new energy economy ratios, which are values used to compare the relative energy efficiency of types of vehicles, for the vehicle types described above.

The last proposed rule would allow DEQ to use historical data from 2016 and 2017 to calculate the amount of credits that would have been generated from residential electric vehicle charging over that period if the eligible credit generators had been registered for the program. Then, to remain consistent with the proposed hierarchy for credit generation from residential electric vehicle charging, DEQ would make those retroactive credits available to the electric utility or a designated aggregator first, then to a backstop aggregator.

* *Miscellaneous Regulatory Improvements* – There are six proposed rule changes related to administrative requirements and calculation methodologies: 1) updating definitions; 2) requiring additional information to be submitted for co-processed fuels at existing petroleum refineries; 3) updating the process to obtain a carbon intensity value; 4) requiring compressed natural gas to be reported in therms; 5) updating several tables to reflect the latest information; and 6) adding new reports that provide transparency regarding the performance of the program and its credit market. These proposed changes are improvements to the current program based on lessons learned from implementing the program since 2016.

There are two additional, discrete proposed rule changes:

* Changing renewable hydrocarbon diesel (RHD) from a clean fuel to a regulated fuel. This proposed change would require that all imported RHD be registered in the clean fuels program and generate credits or deficits based on its individual feedstock carbon intensity values. The current rule only requires registration to generate credits, but some varieties of RHD have carbon intensities that exceed the clean fuel standard, and that therefore result in deficits that will trigger a compliance obligation.
* Restricting the transfer of deficits for fuel transactions “below the rack” if the buyer is an importer of finished fuels. The current rules allow for deficits to be transferred from a seller to a buyer at the rack if the buyer is registered as an importer of blendstocks or a large importer of finished fuels. This proposed change will restrict that from happening if the buyer is a large importer of finished fuels; the seller of the fuel will retain the deficits in that situation. As the fuel is already blended, the purchaser cannot affect the carbon-intensity of the blend, limiting their options for compliance.

## Statement of Cost of Compliance

Direct Costs to Registered Parties

All registered parties have direct costs with complying with the Clean Fuels Program. There are administrative costs related to keeping records, submitting reports, responding to investigations and transferring credits. There is also the cost to comply with the clean fuel standards, which requires regulated parties to generate or acquire and retire enough credits to offset the number deficits it generated. Credits can be acquired with low-carbon fuels as they are transacted or separately on the open market. In both cases the implied or discrete prices paid for credits are negotiated between the two counterparties. Regulated parties, such as importers of blendstocks and finished fuels, may also be producers of low-carbon fuels, or have long-term agreements with low-carbon fuel producers that are not indexed to the current price of credits. Thus, the actual cost to comply with the clean fuels standards will vary from party to party, depending on the scope of the administrative costs, how regulated parties source their fuels and other aspects of their business operations.

For this discussion, importers of blendstocks and finished fuels, Oregon producers, and some credit generators are large businesses under the statutory definition—businesses with more than 50 employees. Some credit generators are considered small businesses under that definition, with 50 or fewer employees.

* For all of the proposed rule changes, registered parties will have to make adjustments to their administrative procedures to comply with the program. The fiscal impact of these changes is minimal.
* For *Electricity Provisions*, there are three classes of parties that might be impacted.
	+ For transit agencies, there will be credits generated from electric buses, light rail, streets cars and aerial trams. DEQ’s consultant for this rulemaking, ICF, projected between 20,000 – 40,000 credits might be generated from those vehicles between 2018 and 2025. Assuming the current market rate of $50 per credit, this equates to approximately $1,000,000 - $2,000,000 in revenue that can be used to reinvest in those systems or for other purposes.
	+ For electric utilities or their designated aggregators, they will be eligible under the proposed rules to acquire the 2016 and 2017 credits for residential electric vehicle charging if they also choose to generate the credits for 2018. ICF projected that the total number of credits that should have been generated in 2016 and 2017 is about 190,000 for both residential and non-residential charging combined. According to industry studies, approximately 85% of charging of electric vehicles occur at residences which means approximately 160,000 credits could be generated by electric utilities or their designated aggregators for those two years. Assuming the current market rate of $50 per credit, this equates to approximately $8,100,000 in potential market value. Electric utilities are regulated by the Public Utility Commission or their own governing bodies which will provide guidance on how the revenue from the sale of these credits will be spent. The impact to the utility itself or its designated aggregators will be moderate.

* + For a backstop aggregator, DEQ cannot anticipate which electric utilities will not register to participate in the program for 2018 or future years, which then impacts the number of credits a backstop aggregator could receive. If all the utilities participate in the program, then no credits will go to a backstop aggregator; if none of the utilities participate in the program, then all of the residential credits will go to a backstop aggregator. ICF projected that the total number of credits that can be generated from residential and non-residential electric vehicle charging from 2016 through 2025 is between 2.8 – 3.3 million. Using the same 85% assumption above, approximately 2.4 – 2.8 million credits could be given to a backstop aggregators. At this time, DEQ is providing a conservative estimate that 80% of the credits will stay with the utilities or their designated aggregators and 20% will be given to a backstop aggregator, or approximately 475,000 – 568,000 credits. Assuming the current market rate of $50 per credit, this equates to approximately $23,000,000 - $28,000,000 in potential market value. The proposed rules will require a backstop aggregator to invest the majority of the revenue from the sale of those credits in projects that promote transportation electrification and allow for administrative costs to be funded from credit sales, so the impact to a backstop aggregator itself will be moderate.
* For *Renewable Hydrocarbon Diesel*, the importers of blendstocks will likely be impacted. Lower carbon RHD will generate credits but the higher carbon RHD, such as those produced from palm oil, would not. The proposed rules will require higher carbon RHD be reported and generate deficits. That change will likely increase the cost to comply but to what extent will vary from party to party depending on how much higher carbon RHD they chose to supply to Oregon fuel consumers.
* For *Transfer of Deficits,* the importers of blendstock and importers of finished fuels will likely be impacted. Most sellers of fuels above the rack are importers of blendstocks and they will likely have more deficits to manage because they will be restricted from transferring them to the importers of finished fuels. Subsequently, the cost to importers of blendstocks might increase while the cost to large importers of finished fuels might decrease, depending on the extent to which the practice for fuel sellers above the rack was to pass the obligation for clear or blended fuels onto fuel buyers below the rack. Presumably the costs of passing or retaining this obligation are captured within the economic terms of the transactions, decreasing the relative economic impact of this change.

Direct Costs to the Oregon Department of Environmental Quality

Many of the items included in this proposed rulemaking streamline current processes and make it more efficient for DEQ to implement. For example:

* Updating the registration process for regulated parties, credit generators, aggregators and fuel producers
* Updating the process to obtain a carbon intensity value
* The creation of temporary fuel pathway codes
* Improving the quarterly reporting process

Several other proposals may generate new work for the agency, but at a scale that DEQ can absorb within its currently-budgeted positions. For example:

* Amending how to calculate the carbon intensity of electricity
* Allowing credits to be generated from electricity used for transit
* Amending the recordkeeping requirements for credit transfers
* Requiring all renewable hydrocarbon diesel to register with the program
* Restricting the transfer of deficits below the rack if the buyer is a finished fuel importer

There are a few major proposals that collectively will significantly increase the amount of work for the agency to implement. While some of these proposals were considered and recommended by the rulemaking advisory committee, making them consistent with HB 2017 provides an additional layer of work for DEQ. For example:

* + Implementing the preferred cost containment mechanism, the Credit Clearance Market, including: calling for credits, calculating the pro rata shares, carrying over deficits, and modifying the CFP Online System.
	+ Increased monitoring and oversight of the credit market, including: auditing of credit transactions, investigating questionable credit trading activity, taking actions against bad actors, and taking formal enforcement or legal action against fraudulent or manipulative credit market activity.
	+ Implementing the emergency deferral mechanisms for credit market disruptions and abnormal market activity, including: active monitoring of credit prices, auditing supporting documentation for individual credit transactions, analyzing credit price fluctuations, investigating the cause of credit price abnormalities, and issuing an emergency action to remedy a credit market disruption.
	+ Implementing the modified forecast deferral to coordinate with the Department of Administrative Services Office of Economic Analysis.
	+ Selecting and managing the backstop aggregator, including: recruiting and selecting a backstop aggregator, entering into a written agreement, calculating the number of credits to be transferred, collaborating to implement the proposed plan, and reviewing reports and financial audits.
	+ Providing the additional transparency regarding the performance of the program and its credit market, including monthly, quarterly and annual reports and a formal program review.

The agency estimates that it will need up to an additional 1.0 FTE to fully implement the all proposed rule changes, which is approximately $250,000 for a biennium. DEQ will evaluate options for resourcing the additional work as it finalizes its 2017-2019 budget.

Indirect Costs to Fuel Consumers

The cost of complying with the CFP on a per-gallon basis can be estimated using three pieces of information: 1) the carbon intensity of the fuel, 2) the standard for the year and 3) the price of credits. Here is the equation for that calculation:

$$Cost \left(\frac{\$}{gal}\right)=\left[\left(fuel CI\right)-(Std)\frac{gCO2e}{MJ}\right]\*(ED)\frac{MJ}{gal}\*\left(\frac{1 ton}{1,000,000 grams}\right)\*(CP)\frac{\$}{ton}$$

Where CI: carbon intensity of the fuel in gCO2e per MJ

Std: gasoline or diesel standard in a given year in gCO2e per MJ

 ED: energy density of the fuel in MJ per gallon

 CP: credit price in dollars per ton

If the carbon intensity of a fuel is higher than the standard, the result can be considered as the cost of complying with the program. Here is an example calculation for the 10 percent ethanol blended with gasoline (E10) in 2016:

$$Cost \left(\frac{\$}{gal}\right)=\left[\left(98.54\right)-(98.37)\frac{gCO2e}{MJ}\right]\*(112.63)\frac{MJ}{gal}\*\left(\frac{1 ton}{1,000,000 grams}\right)\*\frac{\$50}{ton}$$

$Cost$ = $0.000957/gal = 0.10 cent per gallon

If the carbon intensity of a fuel is lower than the standard, the result can be considered as a cost savings of complying with the program. Here is an example calculation for the 20 percent used cooking oil biodiesel blended with diesel (B20) in 2016:

$$Cost saving \left(\frac{\$}{gal}\right)=\left[\left(84.95\right)-(99.39)\frac{gCO2e}{MJ}\right]\*(127.50)\frac{MJ}{gal}\*\left(\frac{1 ton}{1,000,000 grams}\right)\*\frac{\$50}{ton}$$

$Cost saving$ = $0.092055/gal = 9.21 cents per gallon

Both costs and cost savings should be considered for this discussion although it is difficult to quantify with any certainty about what the impact on the price of fuels will be.

Fuel suppliers such as importers of blendstocks may generate credits as a result of their own business operations at an internal price that is less than the prevailing market price for credits. Fuel suppliers and credit generators may also enter into long-term price agreements for credits which would insulate them from swings in the market price. The calculations above are idealized, and for this discussion, fuel consumers encompass the general public; large and small businesses; and federal, state or local governments as they all purchase fuel for vehicles.

* For all of the proposed rule changes, fuel suppliers will have to make adjustments to their administrative procedures to comply with the program. The fiscal impact of these changes is minimal, as these changes just adjust the administrative procedures that parties must already comply with, but do not significantly increase or decrease the economic burdens of complying with such procedures.
* For *Cost Containment –* DEQ has spent the last 7 months with the CFP 2017 advisory committee reviewing and discussing the possible addition of one or more mechanisms, or the modification of existing mechanisms, in order to improve the implementation of SB 324 (2015):

*“The commission shall adopt by rule provisions for managing and containing the costs of compliance with the standards, including but not limited to provisions to facilitate compliance with the standards by ensuring that persons may obtain credits for fuels used as substitutes for gasoline or diesel and by creating opportunities for persons to trade credits.”*

DEQ believes that the following excerpt, taken from a discussion paper written by the agency and presented to the CFP 2017 rulemaking advisory committee on November 2, 2016, well explains the rationale for developing a credit clearance market within the context of the program:

Environmental markets are created by governments to allow the private sector to efficiently achieve an environmental goal by averaging out the costs of compliance with a program through the creation of tradeable credits. This allows market forces to work out the most efficient path to getting to the environmental goal of increasing cleaner energy consumption or decreasing pollution.

Oregon’s Clean Fuels Program (CFP) allows regulated parties and credit generators to sell credits created under the program. Now that credits have been generated and transfers are allowed, the environmental market created by the program will help show the cost of reducing carbon intensity under the program and help ensure the lowest-cost reductions are found across the different fuels in the program.

DEQ administers the CFP credit market in terms of accounting for credit and deficit generation by regulated parties and credit generators, requiring accurate fuel volume and carbon intensity reporting, setting the rules for participation in the credit market, and providing the tracking system for credit transfers. The agency oversees and monitors the credit market both to ensure that it serves the goal of lowering overall compliance costs with the program and that it is as well-functioning and provides as level a playing field for different entities in the market as is possible.

In addition to a well-functioning credit market, stakeholders have also indicated a desire for a new CFP mechanism to further contain the cost of complying with the program. For DEQ, the key question is how to balance the needs of fuel consumers with the impact to clean fuel providers and the environmental goals of the program.

Based on discussions with stakeholders, DEQ is proposing the addition of a credit clearance market. The adoption of a credit clearance market is also now required by enrolled HB 2017 A from the 2017 Legislature. The credit clearance market will effectively act to create a cap on credit prices by providing an alternative mechanism for regulated parties to remain in compliance with the rules if credit prices rise above the maximum price set for the Credit Clearance Market. This approach will strengthen the program by increasing market certainty around the maximum compliance cost for the program, reducing the possibility of credit price spikes, and maintaining the incentive to invest in low carbon fuel production and distribution. Deficits where compliance is deferred by regulated parties after going through the credit clearance market will be assessed a 5% interest rate on the number of carried over deficits, and must be covered within five years.

DEQ believes that this approach, in concert with the annual fuel supply forecast, will ensure that compliance can be achieved by regulated parties under all possible credit supply outcomes.

The clearance market works by allowing regulated parties to roll over any uncovered deficits at the end of the a compliance period so long as they purchase their pro-rata share of any credits made available for sale through the clearance market. Sellers in the clearance market will agree to sell their credits at a maximum price of $200 in 2018 and adjusted for inflation between 2019 and 2025.

The following table show the potential maximum cost under the proposed maximum credit prices in dollars per gallon using 2018 dollars for the imported E10 and B5 fuel pathway codes. Those fuel pathway codes represent the likely highest carbon-intensity blends of those two fuels.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
| Imported E10 | $0.023  | $0.035  | $0.058  | $0.082  | $0.117  | $0.152  | $0.187  | $0.233  |
| Imported B5 | $0.027  | $0.040  | $0.067  | $0.094  | $0.134  | $0.173  | $0.214  | $0.267  |

To estimate the impact of the proposed rules, DEQ must evaluate the impact on fuel prices impacts of the current rules with the proposed rules. The estimated fuel price impact from the proposed rule is shown above and the estimated fuel price impacts of the current rule is shown below, as taken from the supporting documents for the Clean Fuels Program Phase 2 rulemaking (adopted January 2015) in the section titled “Potential Impact on Fuel Prices”.

To estimate the potential fiscal and economic impact of the proposed rule on the price of fuel, DEQ reviewed studies, including the documents in the table below. This table includes a range of potential fuel price impacts that DEQ considered. Details about assumptions used to estimate the fuel price impacts are in each study. The estimated price impacts below reflect potential price increases at the end of the ten-year phase-in period.

|  |  |
| --- | --- |
| Document | Potential Fuel Price Impacts |
| California’s Low Carbon Fuel Standard: Compliance Outlook & Economic ImpactsICF International, 2014 | $0.06 to $0.19 per gallon |
| Understanding the impact of AB 32Boston Consulting Group, 2012 | $0.33 - $1.06 per gallon |
| Low Carbon Fuel Standard ClarificationsLeidos, 2014 | $0.04 to $0.06 per gallon |

DEQ used a fuel price range of $.04 to $0.19 to characterize the potential impact of the program on future fuel prices by the end of the ten-year period after consulting with experts in the fuels market including other agencies and academic institutions. DEQ also considered the Expert Evaluation of the Report “Understanding the Impacts of AB32” from the UC Davis Policy Institute for Energy, Economy and the Environment, 2013. DEQ concluded the assumptions used to develop fuel prices in the ICF International and Leidos studies are more likely to occur for Oregon than the assumptions that the Boston Consulting Group used.

When DEQ compares its current estimate of the potential maximum impact to fuel prices to the range used by DEQ in 2015, there is not a significant difference; but it is considerably lower than the range presented by BCG and considerably higher than the range presented by Leidos. Since DEQ has previously asserted that the $.04 to $0.19 range is more likely to occur in Oregon, DEQ can further assert that the addition of the credit clearance market will not have a significant impact on fuel prices and provides additional certainty about the upper limit of such impacts.

* *For the Electricity Provisions –* The electricity provisions being amended in this rulemaking will likely help lower the costs of the program to fuel consumers by increasing the supply of credits in the market and thus lowering the overall cost of credits in the program.

Impacts to small businesses – businesses with 50 or fewer employees

|  |  |
| --- | --- |
| a. Estimated number of small businesses and types of businesses and industries with small businesses subject to proposed rule. | There are currently 21 small businesses registered with the program, primarily small fuel distributors and small credit generators (electric vehicle chargers and fleets).  |
| 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 not significantly change the administrative costs for small businesses to comply.  |
| 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 29-member advisory committee that included small businesses and membership organizations that represent small businesses to discuss the proposed rule changes. |

## Documents relied on for fiscal and economic impact

|  |  |
| --- | --- |
| Document title | Document location |
| Registration and reporting information from the registered parties | Program files located at:DEQ headquarters700 NE Multnomah, Suite 600Portland, OR 97232  |
| Clean Fuels Program Phase 2 Rulemaking | <http://www.oregon.gov/deq/Rulemaking%20Docs/cfp2pnp.pdf>  |
| CFP2017 Rulemaking Advisory Committee meeting materials, including ICF reports | <http://www.oregon.gov/deq/Regulations/rulemaking/Pages/cfp2017.aspx>  |

## Advisory committee

DEQ appointed the CFP 2017 Rulemaking Advisory Committee to provide input on the proposed rules and for input on the 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 and its findings are stated in the meeting summary and in submitted written comments. The committee determined the proposed rules would not have a significant impact on businesses in general, nor an adverse impact on small businesses in Oregon.

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

**2016-7**

From November 2016 through June 2017, DEQ worked with a 29-member advisory committee that included small businesses. The committee discussed cost containment updates to the program and other miscellaneous improvements proposed in this rulemaking. Membership and meeting summaries are at: [2017 Advisory Committee](http://www.oregon.gov/deq/Regulations/rulemaking/Pages/cfp2017.aspx).

**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](http://www.oregon.gov/deq/RulesandRegulations/Pages/Advisory/acleanfuelsupdate.aspx).

**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](http://www.oregon.gov/deq/RulesandRegulations/Pages/Advisory/A2CFPPh2.aspx).

**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](http://www.deq.state.or.us/aq/cleanFuel/meetings.htm).

**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](http://www.deq.state.or.us/aq/committees/advcomLowCarbonFuel.htm).

## 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.

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| Federal relationship |

### Relationship to federal requirements

ORS 183.332, 468A.327 and OAR 340-011-0029 require DEQ to attempt to adopt rules that correspond with existing equivalent federal laws and rules unless there are reasons not to do so.

The proposed rules are “in addition to federal requirements” since there are no federal regulations that require the reduction in the average lifecycle content of greenhouse gases in transportation fuels. The proposed rules protect the environment and residents of Oregon by reducing greenhouse gas emissions.

**What alternatives did DEQ consider if any?**

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

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

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

**Goal Title**

 5 Open Spaces, Scenic and Historic Areas, and Natural Resources

 6 Air, Water and Land Resources Quality

 9 Ocean Resources

11 Public Facilities and Services

 16 Estuarial Resources

Statewide goals also specifically reference the following DEQ programs:

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

### Determination

DEQ determined that these proposed rules do not affectland use under OAR 340-018-0030 or DEQ’s State Agency Coordination Program.

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|  Stakeholder and public involvement  |

### Advisory committee

DEQ convened the CFP 2017 Rulemaking advisory committee. The committee included importers of various transportation fuels; large and small businesses that may be regulated parties; the general public; and conservation organizations with members that may be impacted by the program and met 7 times. The committee’s web page is located at: <http://www.oregon.gov/deq/Regulations/rulemaking/Pages/cfp2017.aspx>.

The committee members were:

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| CFP2017 Rulemaking Advisory Committee |
| **Name** | **Representing** |
| Craig Campbell | AAA |
| Mike Friese | Associated Oregon Industries |
| Jeff Rouse | Carson Oil |
| Anne Smart | ChargePoint |
| Micah Berry | Chevron USA Inc |
| Bob Jenks | Citizens Utility Board |
| Brandon Price | Clean Energy Fuels |
| Meredith Connolly | Climate Solutions |
| Annie Stuart | Coleman Oil Company |
| Jeff Allen | Drive Oregon |
| Graham Noyes | Low Carbon Fuels Coalition |
| Jana Gastellum | Oregon Environmental Council |
| Danelle Romain | Oregon Fuels Association & Oregon Public Utility Districts Association |
| Beth Vargas Duncan | Oregon Refuse & Recycling Association |
| Bob Russell | Oregon Trucking Association |
| Tom Koehler | Pacific Ethanol |
| Mary Wiencke | PacifiCorp |
| Brendan McCarthy | Portland General Electric |
| Lindsay Fitzgerald | Renewable Energy Group |
| Jessica Hoffmann | RPMG |
| Ian Hill | SeQuential Biofuels |
| Connor Nix | Shell Oil Products US |
| Miles Tesoro | Tesoro  |
| Peter Weisberg | The Climate Trust |
| Lester Spitler | TriMet |
| Jeremy Martin | Union of Concerned Scientists |
| Joshua Skov | University of Oregon |
| Kim Kaminski | Waste Management |
| Jessica Spiegel | Western States Petroleum Association |

### Meeting notifications

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

### Committee discussions

## In addition to the recommendations described under the Statement of Fiscal and Economic Impact section above, the committee was asked to discuss and provide input on the following topics:

* A methodology to implement the Forecasted Fuel Supply Deferral mechanism
* Updates to the illustrative compliance scenarios from the 2014 study
* Development of new illustrative compliance scenarios for the program

## The need for additional cost containment measures in the program and the design of those measures if they are needed

* Other topics, as identified by DEQ staff

### EQC prior involvement

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

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|  Public notice and hearings ORS 183.335(1); 468.020(2) [Public Hearings](http://deqsps/programs/rulemaking/SitePages/Hearings.aspx) |

### Public notice

DEQ provided notice of the proposed rulemaking and rulemaking hearing on September 1, 2018 by:

* On September 1, 2018, filing notice with the Oregon Secretary of State for publication in the September 1, 2018 Oregon Bulletin;
* Posting the Notice, Invitation to Comment and Draft Rules on the web page for this rulemaking, located at: RULEMAKING WEB PAGE LINK;
* Emailing NUMBER OF PARTIES interested parties on the following DEQ lists through GovDelivery:
* Rulemaking
* Oregon Clean Fuels
* Emailing the following key legislators required under [ORS 183.335](http://www.leg.state.or.us/ors/183.html):
* Senator Michael Dembrow, Chair, Senate Environment and Natural Resources Committee
* Representative Ken Helm, Chair, House Energy and Environment Committee
* Senator Lee Beyer
* Senator Cliff Bentz
* Posting on the DEQ event calendar: [DEQ Calendar](http://www.oregon.gov/deq/Get-Involved/Pages/Calendar.aspx)

### Public hearings

DEQ plans to hold one public hearing. The details are described in the Introduction section of this document. Anyone can attend a hearing in person, or by webinar or teleconference.

DEQ will consider all written comments received at the hearings listed below before completing the draft rules. DEQ will summarize all comments and respond to comments in the Environmental Quality Commission staff report.

Any person can submit comments on the proposed rules as described in the Introduction section of this document.

## Close of public comment period

The comment period will close 4 p.m. on September 21, 2018.

## Accessibility Information

You may review copies of all documents referenced in this announcement at:

Oregon Department of Environmental Quality

700 NE Multnomah St., Ste. 600

Portland, OR, 97232

To schedule a review of all websites and documents referenced in this announcement, call Cory-Ann Wind at 503-229-5388(800-452-4011, ext. 5622 toll-free in Oregon).

Please notify DEQ of any special physical or language accommodations or if you need information in large print, Braille or another format. To make these arrangements, contact DEQ, Portland, at 503-229-5696 or call toll-free in Oregon at 1-800-452-4011, ext. 5696; fax to 503-229-6762; or email to deqinfo@deq.state.or.us. Hearing impaired persons may call 711

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| Draft Rules - With Edits Highlighted |

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| Draft Rules – With Edits Incorporated |

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| Supporting documents |