DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION 253

OREGON CLEAN FUELS PROGRAM

340-253-0000

Overview

(1) **Context**. The Oregon Legislature has found that climate change poses a serious threat to the economic well-being, public health, natural resources and environment of Oregon, among other findings. 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~~, will reduce Oregon's contribution to the global levels of greenhouse gas emissions and the impacts of those emissions in Oregon.~~.

(2) **Purpose**. The purpose of the Oregon Clean Fuels Program is to reduce the average amount of lifecycle greenhouse gas emissions per unit of fuel energy used in Oregon by a minimum of 10 percent below 2010 levels over a 10-year period.

(3) ~~**Background**~~**Authority**. The 2009 Oregon Legislature adopted House Bill 2186, which was enacted as chapter 754 of Oregon Laws 2009, and 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 (2011 Edition). OAR Chapter 340 Division 253 implements section 6.

~~(4) **Deferral of carbon intensity reductions**. The Oregon Clean Fuels Program has two phases.~~

(4) ~~Phase 1. In Phase 1,~~**Flexible Implementation Approach**. This division requires regulated parties, and those parties that choose voluntarily to opt in ~~must~~ to the program, to register, keep records, ~~and~~ report the carbon intensity of the fuel they produce or import~~. Small~~ for use in Oregon, and calculate surpluses and shortfalls against the baseline carbon intensity values. These values are based on the mix of regulated and opt-in fuels that were supplied in Oregon ~~importers, however, must~~in 2010. While reporting of net carbon balance is required, regulated and opt-in parties are not required to balance surpluses and shortfalls at this time. This flexible implementation approach is designed to put in place only ~~register in Phase 1. During Phase 1 no average carbon intensity standards apply and no reductions in~~the administrative procedures necessary to implement the program. This approach is intended to minimize the initial costs to regulated parties by not requiring compliance with declining carbon intensity standards. DEQ will utilize the reports and other information to

assess, at a minimum, the following factors to make a recommendation to the EQC about the next phase of the program:

(a) The cost and administrative burden of compliance for regulated and opt-in parties;

(b) The benefits of the program to Oregon's economy and environment;

(c) The current and projected availability of lower carbon fuels,

(d) The methodologies to provide exemptions and deferrals necessary to mitigate the cost of complying with the program, in accordance with Section 6(2)(d) of chapter 754, Oregon Laws 2009;

(e) The progress and adoption rates of cleaner fuels and vehicle technologies;

~~(a)~~(f) The appropriate methods, based on the latest science, to establish baseline carbon intensity ~~are required.~~ values and declining carbon intensity standards, including methodologies to incorporate land use change and other indirect effects;

~~(b) Phase 2. In Phase 2, regulated and opt-in parties must also meet average carbon intensity standards, which may require regulated parties to reduce the carbon intensity of fuel that they produce or import. Phase 2 is deferred, however, until the Environmental Quality Commission approves its applicability through a future rulemaking.~~

~~(c) This two-phase structure is designed to defer the requirement to meet average carbon intensity standards until the Department has sufficient information to make recommendations to the EQC about whether adequate fuel supplies will exist to comply with the average carbon intensity standards, whether DEQ has adequate administrative capacity to implement Phase 2, and whether the EQC should consider changes to Phase 2 to align it with federal or other state programs that address the carbon content of transportation fuel at the time Phase 2 is implemented. This structure also allows regulated parties to gain experience with reporting requirements before they must comply with average carbon intensity requirements.~~

~~(5) **Future revisions**.~~

~~(a) During Phase 1, DEQ shall collect information and conduct an evaluation to determine whether or not to recommend that the commission terminate the deferral and initiate Phase 2. DEQ's evaluation shall include, but not be limited to:~~

~~(A)~~ The ~~availability of low carbon fuels;~~

~~(B) Progress of fuel and vehicle technology innovation;~~

~~(C) Adoption rates of cleaner fuels and alternative fuel vehicles;~~

~~(D) Available methods to account for land use change and other indirect effects;~~

~~(E) Changes to the baseline carbon intensity, the value of banked credits and other adjustments to the program necessary to account for changes in lifecycle carbon intensity calculations;~~

~~(b)~~(g) ~~Latest~~latest information on the ~~science,~~ policies~~,~~ and legal issues regarding low carbon ~~fuels~~fuel standards;

~~(c)~~(h) The status of federal ~~or~~and other state programs that address the carbon content of transportation fuel; ~~and~~

~~(A) DEQ's~~ The costs and administrative capacity of DEQ to implement ~~Phase 2.~~

(i) ~~EQC expects DEQ to periodically review and assess~~ the ~~Oregon Clean Fuels Program~~program; and ~~make recommendations to EQC for improvement~~

~~(d)~~(j) The likely impact on all of the above elements, if declining average carbon intensity standards are implemented in the future.

~~(6)~~(5) **Construction.** This division uses the following construction~~.~~:

(a) OAR 340-253-#### followed by a bolded title is the number and title of the rule where:

(A) OAR is the acronym for *Oregon Administrative Rules*;

(B) 340 is the *chapter* number;

(C) 253 is the *division* number; and

(D) #### is the unique *rule* number.

(b) The subunits of a rule are within parenthesis in the following order:

(A) *Section*. The section is a Hindu-Arabic numeral expressed in sequence as (1), (2), (3) and so forth. Each section has a bold title;

(B) *Subsection.* The subsection is a lowercase English alphabet character expressed in sequence as (a), (b), (c) and so forth;

(C) *Paragraph*. The paragraph is an uppercase English alphabet character expressed in sequence as (A), (B), (C) and so forth; and

(D) *Subparagraph*. The subparagraph is a lowercase Roman numeral expressed in

sequence as (i), (ii), (iii) and so forth.

(c) A reference prefaced with the word *section*, *subsection*, *paragraph* or *subparagraph* is a reference to a subunit within the same rule; and

(d) A reference prefaced with OAR 340-253 is a reference to another rule under the Oregon standards.

~~(7)~~(6) **LRAPA**. Notwithstanding 340-200-0010(3), the ~~Department~~DEQ administers this division in all areas of the State of Oregon.

Stat. Auth.: ORS 468.020 and section 6, chapter 754, Oregon Laws 2009, which is printed as a note following ORS 468A.270 (2011 Edition).
Stats. Implemented: Section 6, chapter 754, Oregon Laws 2009, which is printed as a note following ORS 468A.270 (2011 Edition).
History ~~will~~must be added at the time of rule adoption.
This language ~~will~~must be added at the end of each rule at the time of rule adoption.

340-253-0040

Definitions

The definitions in OAR 340-200-0020 and this rule apply to this division. If the same term is defined in this rule and OAR 340-200-0020, 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) "**Alternative fuel**" means any transportation fuel, including but not limited to those fuels specified in OAR 340-253-0200, that is not gasoline, a gasoline blend with up to 10 percent ethanol, a diesel fuel, or a biodiesel blend defined under OAR 603-027-0410 of up to 5 percent biodiesel.~~

(2) "**Baseline carbon intensity value**" is 90.38 gCO2e per MJ for gasoline and gasoline substitutes and 90.00 gCO2e per MJ for diesel fuel and diesel substitutes. These values are based on the mix of regulated and opt-in fuels supplied for use as a transportation fuel in Oregon in 2010.

~~***OAR 603-027-1410 (11):*** *"Biodiesel" means a motor vehicle fuel consisting of mono-alkyl esters of long chain fatty acids derived from vegetable oils, animal fats, or other nonpetroleum resources, not including palm oil, designated as B100 and complying with ASTM D6751. Biodiesel produced in or imported into Oregon for use as a blend stock shall comply with B100 biodiesel requirements including ASTM International D6751 and the Certificate of Analysis.*~~

~~***Please note:*** this definition is included for convenience of the reader and will be deleted prior to the EQC's consideration of whether to adopt these rules.~~

(3) "**Biodiesel**" has the same meaning as defined ~~in~~under OAR 603-027-0410.

(4) "**Biogas**" means natural gas that meets the purity requirements ~~in~~under OAR 860-023-0025 and is produced from the breakdown of organic material in the absence of oxygen. Biogas production processes include, but are not limited to, anaerobic digestion, anaerobic decomposition and thermo-chemical decomposition:

(a) Applied to biodegradable biomass materials, such as manure, sewage, municipal solid waste, and waste from energy crops; and

(b) Used to produce landfill gas and digester gas.

(5) "**Biogas compressed natural gas**" means compressed natural gas consisting solely of compressed biogas.

(6) "**Biogas liquefied natural gas**" means liquefied natural gas consisting solely of liquefied biogas.

(7) **"Biomass**" has the same meaning as defined ~~in~~under OAR 603-027-0410.

> ~~***OAR 603-027-0410 (13):*** *"Biomass" means organic matter that is available on a renewable or recurring basis and that is derived from:*~~
> ~~(a) *Forest or rangeland woody debris from harvesting or thinning conducted to improve forest or rangeland ecological health and reduce uncharacteristic stand replacing wildfire risk;*~~
> ~~(b) *Wood material from hardwood timber described in ORS 321.267(3);*~~
> ~~(c) *Agricultural residues;*~~
> ~~(d) *Offal and tallow from animal rendering;*~~
> ~~(e) *Food wastes collected as provided under ORS Chapter 459 or 459A;*~~
> ~~(f) *Yard or wood debris collated as provided under ORS Chapter 459 or 459A;*~~
> ~~(g) *Wastewater solids; or*~~
> ~~(h) *Crops grown solely to be used for energy, and*~~
> ~~(i) *Biomass does not mean wood that has been treated with creosote, pentachlorophenol, inorganic arsenic, or other inorganic chemical compounds.*~~
>
> ~~***Please note:*** this definition is included for convenience of the reader and will be deleted prior to the EQC's consideration of whether to adopt these rules.~~

(8) "**Biomass-~~based~~Based diesel**" has the same meaning as defined under OAR 603-027-0410.

> ~~***OAR 603-027-0410 (14):*** *"Biomass-Based Diesel" also referred to as Other Renewable Diesel and Renewable Diesel, means a conventional diesel fuel substitute produced from nonpetroleum renewable resources that meets the registration requirements for fuels and fuel additives established by the U.S. Environmental Protection Agency under the 2007 42 U.S.C. 7545, and includes fuel derived from biomass (Reference OAR 604-027-0410) and animal wastes, including poultry fats and poultry wastes, and other waste materials, or from municipal solid waste and sludges and oils derived from wastewater and the treatment of wastewater, except that the term does not include biodiesel as defined in OAR 603-027-0410, complies with ASTM International D975 Standard Specification for Diesel Fuel Oils or other applicable ASTM product specifications, can be used as a finished fuel or fuel blending component, and designed "100% Biomass-Based Diesel."*~~
>
> ~~***Please note:*** this definition is included for convenience of the reader and will be deleted prior to the EQC's consideration of whether to adopt these rules.~~

(9) "**Blendstock**" means a component used alone or blended with one or more other components to produce a finished fuel used in a motor vehicle.

(10) "**Carbon intensity**" 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).

~~(11) "**Class 1 railroad**" means a railroad with an adjusted operating revenue of $250 million or more as defined by the Surface Transportation Board.~~

~~(12)~~(11) "**Compressed natural gas**" means either biogas or fossil natural gas that meets the standards listed ~~in~~under OAR 860-023-0025 compressed to a pressure greater than ambient pressure.

> ~~***OAR 860-023-0025:*** *All gas supplied to customers shall contain no more than .25 of one grain of hydrogen sulfide in each 100 cubic feet; 20 grains of sulphur in each 100 cubic feet (30 grains of sulphur in 100 cubic feet may be permitted if the gas utility shall show cause for such an exception in advance or immediately upon the discovery of exceptional conditions that warrant it); five grains of ammonia in each 100 cubic feet. No gas shall contain impurities which may cause excessive corrosion of mains or piping or form corrosive or harmful fumes when burned in a properly designed and adjusted burner.*~~
>
> ~~***Please note:*** this definition is included for convenience of the reader and will be deleted prior to the EQC's consideration of whether to adopt these rules.~~

~~(13) "**Credits**" means the measures used for determining a regulated party's compliance with the average carbon intensity requirements under OAR 340-253-0100. Credits are expressed in units of metric tons of carbon dioxide equivalent (CO2e) and are calculated under OAR 340-253-1000 through OAR 340-253-1050.~~

~~(14) "**Credit transfer document**" means an invoice, bill of lading, purchase contract, or any other proof of credit ownership transfer.~~

~~(15) "**Deficits**" means the measures used for determining a regulated party's compliance with the average carbon intensity requirements under OAR 340-253-0100. Deficits are expressed in units of metric tons of carbon dioxide equivalent (CO2e) and are calculated under OAR 340-253-1000 through OAR 340-253-1050.~~

> ~~***OAR 603-027-0410 (23):*** *"Diesel Fuel" means a refined middle distillate suitable for use as a fuel in a compression-ignition (diesel) internal combustion engine.*~~
>
> ~~***Please note:*** this definition is included for convenience of the reader and will be deleted prior to the EQC's consideration of whether to adopt these rules.~~

~~(16)~~(12) **"Diesel fuel**" has the same meaning as defined ~~in~~under OAR 603-027-0410.

~~(17)~~(13) "**Diesel substitute**" means any fuel, other than diesel fuel, that may be used in ~~a diesel engine~~light-duty or heavy-duty vehicles, and off-road vehicles that ~~is designed for diesel~~typically use~~, including~~ diesel as a fuel. Diesel substitutes include but are not limited to ~~electricity used in a heavy duty vehicle and~~ liquefied natural gas used in a heavy duty motor vehicle and biodiesel used in a heavy duty motor vehicle.

~~(18)~~(14) "**Electricity bundled services supplier**" means any person or entity that provides charging infrastructure and provides access to ~~vehicle~~vehicles charging under contract with a charging service recipient or charging equipment owner.

~~(19)~~(15) "**Electric utility**" has the same meaning as defined in ORS 757.600.

> ~~***ORS 757.600 (13):*** "Electric utility" means an electric company or consumer-owned utility that is engaged in the business of distributing electricity to retail electricity consumers in this state.~~
>
> ~~***Please note:*** this definition is included for convenience of the reader and will be deleted prior to the EQC's consideration of whether to adopt these rules.~~

~~(20)~~(16) "**Ethanol**," or "**Denatured fuel ethanol**" has the same meaning as defined ~~in~~under OAR 603-027-0410.

> ~~***OAR 603-027-0410 (27):*** *"Ethanol" also known as "Denatured Fuel Ethanol," means nominally anhydrous ethyl alcohol meeting ASTM D 4806 standards. It is intended to be blended with gasoline for use as a fuel in a spark-ignition internal combustion engine. The denatured fuel ethanol is first made unfit for drinking by the addition of Alcohol and Tobacco Tax and Trade Bureau (TTB) approved substances before blending with gasoline.*~~
>
> ~~***Please note:*** this definition is included for convenience of the reader and will be deleted prior to the EQC's consideration of whether to adopt these rules.~~

~~(21)~~(17) "**Feedstock**" means the material a fuel is made from.

~~(22)~~(18) "**Finished fuel**" means a transportation fuel used directly in a motor vehicle without additional chemical or physical processing.

~~(23)~~(19) "**Finished hydrogen fuel**" means a finished fuel that consists of:

(a) Hydrogen; or

(b) A blend of hydrogen and another fuel.

(20) "**Fossil compressed natural gas**" means compressed natural gas derived solely from petroleum or fossil sources such as oil fields and coal beds.

(21) "**Fossil liquefied natural gas**" means liquefied natural gas derived solely from petroleum or fossil sources such as oil fields and coal beds.

~~(22) "**Fuel route**" means the applicable combination of truck routes, rail lines, pipelines, electricity transmission lines and any other method through which the regulated or opt-in party reasonably expects to route fuel under contract from the fuel generator or producer. A fuel route starts at its point of production, continues through all intermediaries and ends at the fuel importer or Oregon producer, in Oregon.~~

~~(23)~~(22) "**Fuel type**" means any unique fuel feedstock and production process combination.

~~(24)~~(23) "**Gasoline**" has the same meaning as defined ~~in~~under OAR 603-027-0410.

> ~~***OAR 603-027-0410 (30):*** *"Gasoline" means any fuel sold for use in spark ignition engines whether leaded or unleaded.*~~
>
> ~~***Please note:*** this definition is included for convenience of the reader and will be deleted prior to the EQC's consideration of whether to adopt these rules.~~

~~(25)~~(24) "**Gasoline substitute**" means any fuel, other than gasoline, that may be used in ~~an engine~~light-duty vehicles that ~~is designed for~~ typically use gasoline ~~use, including~~as a fuel. Gasoline substitutes include but are not limited to electricity used in a light-~~-~~duty motor vehicle and natural gas used in a light-~~-~~duty motor vehicle.

~~(26)~~(25) "**Heavy duty ~~vehicle~~**~~" means any motor vehicle rated at more than 8,500 pounds gross vehicle weight rating or that has an actual vehicle curb weight as delivered to the ultimate purchaser of 6,000 pounds or over~~**motor vehicle**" has the same meaning as defined under OAR 340-256-0010.

~~(27)~~(26) "**Import**" means to bring a product from outside Oregon into Oregon.

~~(28)~~(27) "**Importer**" means the person who owns a product imported from outside Oregon into Oregon:

(a) ~~-~~With respect to any imported liquid product, it means the person who owns the fuel in the stationary storage tank into which the product was first transferred after it was imported into Oregon; or

(b) With respect to any biogas, it means the person who owns the imported product upon receipt at a pipeline in Oregon through which the biogas is delivered in Oregon.

~~(29)~~(28) "**Large Oregon importer**" means any person who imports more than 250,000 gallons of fuel in a given calendar year into Oregon.

~~(30)~~(29) "**Light--duty ~~vehicle~~**" ~~means any~~ **motor vehicle** ~~rated at 8,500 pounds gross vehicle weight rating or less and~~ " has ~~an actual vehicle curb weight~~the same meaning as ~~delivered to the ultimate purchaser of~~defined under ~~6,000 pounds~~OAR 340-256-0010.

(30) "**Lifecycle greenhouse gas emissions**" means the:

(a) Aggregate 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) Full fuel lifecycle including all stages of fuel production, from feedstock generation or extraction, production, distribution, and combustion of the finished fuel by the consumer; and

(c) Mass values for all greenhouse gases as adjusted to account for their relative global warming potential.

(31) "**Liquefied natural gas**" means biogas or fossil natural gas converted to liquid form.

(32) "**Liquefied petroleum gas**" or "**propane**" has the same meaning as defined ~~in~~under OAR 603-027-0395.

> ~~***OAR 603-027-0395 (1):*** *~~"Liquefied Petroleum Gas," "LP Gas," or "LPG" means a petroleum product composed predominantly of any of the hydrocarbons propane, propylene, butane (normal or iso), butylene, or mixtures thereof, maintained in the liquid state.~~*
>
> ~~***Please note:*** this definition is included for convenience of the reader and will be deleted prior to the EQC's consideration of whether to adopt these rules.~~

(33) "**Motor vehicles**" has the same meaning as defined ~~in~~under OAR 603-027-0410.

> ~~***OAR 603-027-0410 (40):*** *~~"Motor Vehicles" means all vehicles, vessels, watercraft, engines, machines, or mechanical contrivances that are propelled by internal combustion engines or motors.~~*
>
> ~~***Please note:*** this definition is included for convenience of the reader and will be deleted prior to the EQC's consideration of whether to adopt these rules.~~

(34) "**Natural gas**" means a mixture of gaseous hydrocarbons and other compounds from either fossil or biogas sources, with at least 80 percent methane by volume, and typically sold or distributed by utilities such as any utility company regulated by the Oregon Public Utility Commission.

(35) "**Opt-in party**" means a person who is not a regulated party and who elects to register with DEQ under OAR 340-253-0100(4). ~~Opt-in parties must comply with the requirements of OAR 340-253-0100, including average carbon intensity requirements, which allow opt-in parties to generate credits during Phase 2.~~

(36) ~~-~~"**Oregon producer**" means:

(a) With respect to any liquid blendstock or finished fuel, the person who makes the liquid blendstock or finished fuel at the Oregon production facility; or

(b) With respect to any biogas produced in Oregon, the person who refines the gas to pipeline quality.

(37) "**Oregon production facility**" means a facility located in Oregon that:

(a) Produces any liquid blendstock or finished fuel other than liquefied natural gas; or

(b) Converts, compresses, liquefies, refines, treats or otherwise processes natural gas into compressed natural gas or liquefied natural gas that is ready for use as a transportation fuel in a motor vehicle without further physical or chemical processing.

(38) "**OR-GREET**" means the Greenhouse gases, Regulated Emissions, and Energy in Transportation (GREET) Argonne National Laboratory model modified and maintained for Oregon. Copies of OR-GREET are available from DEQ upon request.

(39) "**Private access fueling facility**" means an Oregon fueling facility that restricts access ~~(such as to businesses, government agencies, farms and nonprofit agency accounts) and uses electronic cards to authorize dispensing fuel, or is located in a secure area not accessible to the public.~~ by use of a card or key-activated fuel dispensing device to dispensing fuel to nonretail customers.

(40) "**Product transfer document**" means an invoice, bill of lading, purchase contract, or any other proof of fuel ownership transfer.

(41) "**Public access fueling facility**" means an Oregon fueling facility that is not a private access fueling facility.

(42) "**Regulated party**" means a person identified as a regulated party under OAR 340-253-0310 through 340-253-0340. Regulated parties must comply with the requirements ~~of~~under OAR 340-253-0100.

(43) "**Shortfall(s)**" means a state in which the carbon intensity of a fuel is higher than the baseline carbon intensity value for gasoline and gasoline substitutes or diesel fuel and diesel substitutes. Shortfalls are expressed in units of metric tons of carbon dioxide equivalent (CO_2e) and are calculated under OAR 340-253-1020.

(44) "**Small Oregon importer**" means any person who imports 250,000 gallons or less of fuel in a given calendar year into Oregon.

(45) "**Statutory PADD 5**" means a portion of Petroleum Administration for Defense District 5, which includes Oregon, Washington, Arizona and Nevada.

(46) "**Surplus(es)**" means a state in which the carbon intensity of a fuel is lower than the baseline carbon intensity value for gasoline or diesel fuel and their substitutes. Surpluses are expressed in units of metric tons of carbon dioxide equivalent (CO_2e) and are calculated under OAR 340-253-1020.

(47) "**Transportation fuel**" means any fuel used or intended for use in motor vehicles as defined ~~in~~under OAR 603-027-0410.

~~***OAR 603-027-0410 (40):*** *"Motor Vehicles" means all vehicles, vessels, watercraft, engines, machines, or mechanical contrivances that are propelled by internal combustion engines or motors.*~~

~~***Please note:*** this definition is included for convenience of the reader and will be deleted prior to the EQC's consideration of whether to adopt these rules.~~

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.

(3) "DEQ" means Oregon Department of Environmental Quality.

(4) "EQC" means Oregon Environmental Quality Commission.

(5) "gCO_2e ~~per MJ~~" means grams of carbon dioxide equivalent ~~per~~.

(6) "gge" means gasoline gallon equivalents.

~~(5)~~(7) "MJ" means megajoule.

~~(6) "GREET" means the Greenhouse gases, Regulated Emissions, and Energy use in Transportation model.~~

340-253-0100

Oregon Clean Fuels Program

(1) **Applicability.**

(a) ~~Any~~All regulated ~~party~~parties under section (3) that ~~produces in Oregon, imports, sells, supplies~~import or ~~offers~~produce, sell, supply or offer for sale in Oregon~~,~~ any regulated ~~or opt-in~~ fuel ~~(~~, as defined ~~by~~under OAR 340-253-0200~~) is~~, are subject to this rule.

(b) Any person may become an opt-in party by registering with DEQ ~~pursuant to~~under section (4) of this rule. ~~Any~~All opt-in ~~party~~parties under section (3) that ~~produces in Oregon, imports,~~import or ~~sells, supplies,~~produce, sell, supply or ~~offers~~offer for sale in Oregon~~,~~ any ~~regulated or~~ opt-in fuel ~~(~~, as defined ~~by~~under OAR 340-253-0200~~) is~~, are subject to this rule~~, including the average carbon intensity requirements that allow an opt-in party to generate credits during Phase 2~~.

~~(2) **Phases.**~~

(2) ~~Phase 1~~**Requirements.** Beginning January 1, 2013~~, regulated~~:

(a) Regulated and opt-in parties ~~(~~, except for small Oregon importers~~) and opt-in parties,~~ must register under section (4~~),~~) of this rule, keep records under section (5~~),~~) of this rule, and submit reports under sections (~~7~~6) and (~~8). During Phase 1, small~~7) of this rule; and

~~(a)~~ Small Oregon importers must register ~~only~~ under section (4~~). During Phase 1, average carbon intensity requirements~~) of this rule and are exempt from keeping records under section (~~6) do not apply, no reductions in carbon intensity are required, and no credits may be generated.~~

~~(b) Phase 2. Beginning on a future date to be specified by the Environmental Quality Commission by rule:~~

~~(A) Regulated and opt-in parties must comply with the average carbon intensity standards pursuant to section (6) of this rule in addition to registering, keeping records,~~5) of this rule and submitting reports under sections (~~4), (5), (~~7~~6) and (~~8); and~~

~~(B) DEQ must implement OAR 340-253-2000 through 2200.~~

~~(c)~~(b) ~~Phase 2 deferral. Phase 2 is deferred until the Environmental Quality Commission triggers its applicability through a future rulemaking~~7) of this rule.

(3) **Regulated party or opt-in party.** The following rules designate ~~the~~ regulated ~~or~~and opt-in ~~party~~parties, by type of fuel:

(a) OAR 340-253-0310 for gasoline, diesel fuel, biodiesel, biomass-based diesel, ethanol, and any other liquid fuel except liquefied natural gas~~;~~ and liquefied petroleum gas;

(b) OAR 340-253-0320 for natural gas including compressed natural gas, liquefied natural gas, ~~and~~ biogas and liquefied petroleum gas;

(c) OAR 340-253-0330 for electricity; and

(d) OAR 340-253-0340 for hydrogen fuel or a hydrogen blend.

(4) **Registration.**

(a) ~~By July~~After January 1, 2013~~ a~~, but no later than June 30, 2013, each regulated party must submit a complete application ~~pursuant to~~under OAR 340-253-0500 to register with DEQ for each fuel type ~~that it has produced in Oregon, imported, sold, supplied or offered to sell~~the party imports or produces, sells, supplies or offers for sale in Oregon on or before ~~that date~~July 1, 2013, and that it plans to continue to import or produce ~~in Oregon, import~~, sell, supply or offer ~~to sell~~for sale in Oregon after July 1, 2013.

(b) Beginning on July 1, 2013, ~~a~~each regulated party must submit a complete application under OAR 340-253-0500 to register with DEQ for each fuel type, on or before the date upon which it begins to import or produce ~~in Oregon, import~~, sell, supply or offer ~~to sell~~for sale in Oregon ~~the~~such fuel ~~type~~.

(c) To become an opt-in party~~,~~ a person must submit a complete ~~registration to DEQ. Credits may not be generated or sold until the person submits a complete registration, as determined by~~application under OAR 340-253-0500 to register with DEQ.

(5) **Records**.

(a) Beginning on July 1, 2013, ~~the~~each regulated ~~or opt-in~~ party must develop and retain all records required under OAR 340-253-0600.

~~(b) During Phase~~Beginning on the latter of either July 1, ~~a Small Oregon importer is exempt from (5)(a).~~

~~(6) **Average carbon intensity requirement.** During Phase 2, a regulated~~2013, or the date that an opt-in party ~~under section (3) must:~~

~~(a) Meet the Required Average Carbon Intensity Value in Table 1 or Table 2~~submits a complete application, as ~~applicable, for all regulated and opt-in transportation fuels that the regulated or opt-in party produced in Oregon, imported, sold or supplied in Oregon in each calendar year;~~

~~(b) Demonstrate compliance~~determined by DEQ, under subsection (~~a) by using credit~~

~~and deficit calculations~~4)(c) of this rule, each opt-in party must develop and retain all records required under OAR 340-253-~~1000 through OAR 340-253-1050;~~

~~(c) Use Table 1 for gasoline and gasoline substitutes sold or supplied in Oregon; and~~

~~(d)~~(b) ~~Use Table 2 for diesel fuel and diesel substitutes sold or supplied in Oregon~~0600.

~~(7)~~ **Quarterly ~~progress~~ report**. Beginning on January 1, 2014, each regulated ~~or~~and opt-in party must submit quarterly ~~progress~~ reports ~~pursuant to~~under OAR 340-253-0630.

~~(8)~~(6) ~~**Quarterly progress report due date**. Each regulated or opt-in party must calculate its credits and deficits accrued during each quarter. A quarterly progress report must be submitted to DEQ~~ Reports must be submitted to DEQ for:

(a) January through March of each year, by May 31~~ of each year~~;

(b) April through June of each year, by August 31~~ of each year~~;

(c) July through September of each year, by November 30~~ of each year~~; and

(d) October through December of each year, by February 28 of ~~each~~the following year.

~~(a) During Phase 1,~~

~~(A) the Small Oregon importer is exempt from (7)(a);~~

~~(B) the purpose of the quarterly progress report is to enable regulated and opt-in parties to gain experience with reporting requirements before they must comply with average carbon intensity requirements;~~

~~(C) the regulated or opt-in party completes credit and deficit calculations under the average carbon intensity requirements, but compliance with the average carbon intensity requirements themselves is not required; and~~

~~(D) the regulated or opt-in party must use the gasoline or diesel fuel baseline in place of the relevant carbon intensity requirement when calculating credit and deficit generation under OAR 340-253-1000(5) and (6).~~

~~(b) During Phase 2, the purpose of the quarterly progress report is to estimate credits and deficits accrued during that quarter and calculate progress towards annual compliance.~~

~~(8)~~ **Annual ~~compliance~~ report.** ~~For the period of July 1 through December 31, 2013, and for every calendar year thereafter, the~~Each regulated ~~or~~party and opt-in party must submit an annual ~~compliance~~ report ~~pursuant to~~each year under OAR 340-253-0650.

~~(a) **Annual compliance report for Phase 1.**~~ The ~~purpose of annual compliance reports~~

~~submitted during Phase 1 is to enable regulated and opt-in parties to gain experience with reporting requirements before they must comply with average carbon intensity requirements, and to assist DEQ in estimating the supply and carbon intensity values of available transportation fuels.~~

~~(b) **Annual compliance report for Phase 2.** The purpose of annual compliance reports submitted during Phase 2 is to demonstrate compliance with average carbon intensity requirements.~~

~~(9)~~(7) ~~**Annual compliance report due date.** The regulated or opt-in party must submit its annual compliance report~~ report must be submitted to DEQ by April 30 of each year to report for the prior calendar year~~. For example, the report must be submitted by April 30, 2014 to report for calendar year~~ ; except for 2013, when the reporting period is from July 1 through December 31.

340-253-0200

Regulated and Opt-in Fuels

(1) **Applicability**. ~~Unless exempt under OAR 340-253-0250, the~~The transportation fuels listed in this rule are subject to Division 253, unless exempt under OAR 340-253-0250.

(2) **Regulated fuels.** Regulated fuels means the following transportation fuels or blendstocks ~~used to produce the following transportation fuels~~:

(a) Gasoline;

(b) Diesel fuel;

(c) Fossil liquefied natural gas that is imported, but not transferred by a natural gas pipeline in Oregon~~, such as fossil liquefied natural gas imported by ship from other countries and delivered by truck to a liquefied natural gas fueling station~~;

(d) A fuel blend containing ethanol;

(e) A fuel blend containing biomass-based diesel or biodiesel;

(f) Ethanol or denatured ~~fuel~~ ethanol, also referred to as E100;

(g) Neat biomass-based diesel and biodiesel, also referred to as B100; and

(h) Any other liquid or non-liquid fuel not listed in section (3) or exempted ~~in~~under OAR 340-253-~~250~~0250.

(3) **Opt-in fuels.** Opt-in fuels means the following transportation fuels:

(a) Electricity;

(b) Hydrogen fuel;

(c) Hydrogen blends;

(d) Fossil compressed natural gas;

(e) Fossil liquefied natural gas derived from fuel delivered through a natural gas pipeline;

(f) Biogas compressed natural gas; ~~and~~

(g) Biogas liquefied natural gas; and

~~(g)~~(h) Liquefied petroleum gas.

340-253-0250

Exempt Fuels and Fuel Uses ~~and Fuels~~

(1) **Exempt fuels**. The following fuels are exempt from the definition of regulated fuels ~~in~~under OAR 340-253-0200(2)(h):

(a) ~~An alternative~~A fuel sold, supplied or offered for ~~use~~sale in Oregon if all providers supply an aggregate volume of less than 360,000 ~~gasoline gallon equivalent~~gge per year in Oregon. The party must:

(A) Demonstrate that the exemption applies; and

~~(B) Complete and submit an alternative fuel exemption form; and~~

~~(C)~~(B) Obtain exemption approval from DEQ in writing.

(b) ~~An alternative~~A fuel ~~if a producer is~~produced from a research, development or demonstration facility as defined under OAR 330-090-0110~~; or has an~~ if the annual production volume ~~of~~is either 10,000 gallons or less or no more than 50,000 gallons ~~or less only if~~and the fuel producer uses the entire volume ~~in~~for its own motor vehicles. The party must:

(A) Demonstrate that the exemption applies; and

~~(B) Complete and submit an alternative fuel exemption form; and~~

~~(C)~~(B) Obtain exemption approval from DEQ in writing.

~~(2)~~ **Exempt fuels based on fuel uses.**

~~(3)~~(2) Fuels ~~sold or supplied for use in the following motor vehicles~~ are exempt from the definition of regulated fuels ~~in~~under OAR 340-253-0200(2~~):~~)(h) if:

(a) The fuel is sold, supplied or offered for sale for use in the following motor vehicles:

(A) Aircraft;

(B) Racing activity vehicles under ORS 801.404;

(C) Military tactical vehicles and tactical support equipment;

~~(D) Locomotives traveling on Class 1 railroads;~~

~~(E) Locomotives traveling on short line railroads under OAR 741-025-0020 until January 1, 2017;~~

(D) Railroad locomotives;

~~(F)~~(E) 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;

~~(G)~~(F) Motor vehicles registered as farm vehicles under ~~the provisions of~~ ORS 805.300;

~~(H)~~(G) Farm tractors, as defined ~~in~~under ORS 801.265;

~~(I)~~(H) Implements of husbandry, as defined ~~in~~under ORS 801.310; or

~~(J)~~(I) Motor trucks, as defined ~~in~~under ORS 801.355, used primarily to transport logs~~.~~; and

(b) ~~To be exempt, a~~The regulated or opt-in party ~~must document~~documents that the fuel was sold ~~or~~, supplied ~~to~~ or offered for sale for use in a motor vehicle listed in subsection (a~~).~~), as required under OAR 340-253-0600. Documentation that the fuel was ~~sold~~transferred through a dedicated source to ~~those~~one of the motor vehicles identified in subsection (a) is sufficient. If not ~~sold~~transferred through a dedicated source, all documentation must be on ~~a~~an individual fuel transaction basis.

~~(4) **Propane.** Propane is not subject to this division.~~

~~(5)~~(3) **Fuel possession.** Any fuel user or seller may possess any fuel ~~that does not meet relevant average~~regardless of its carbon intensity ~~requirement for gasoline or diesel fuel and their substitutes in Table 1 or 2~~value, including but not limited to owners of the motor vehicles listed under ~~subsections~~subsection (2)(~~g) through (2)(j~~a).

Designation of Regulated and Opt-in Parties

340-253-0310

Regulated Parties for Gasoline, Diesel Fuel, Biodiesel, Biomass-based Diesel and Ethanol and ~~other~~Other Regulated Fuels ~~except~~Except for Liquefied Natural Gas

(1) **Applicability.** This rule applies to all liquid blendstocks and liquid finished fuels listed under OAR 340-253-0200(2) except liquefied natural gas**.**

(2) **Initial regulated party.** The initial regulated party is the Oregon producer, large Oregon importer or small Oregon importer of the fuel.

(3) **Recipient notification requirement.** Before ~~the~~ actual ~~transfer of~~ fuel ownership is transferred from one party to another, the recipient of the fuel must notify the transferor of the fuel whether or not the recipient is an Oregon producer ~~or~~, a large Oregon importer, or a small Oregon importer.

(4) ~~**Recipient**~~ **Regulated party options and responsibilities for transfers if the recipient is an Oregon producer or large Oregon importer.** If the initial regulated party transfers ~~the~~ fuel to an Oregon producer or a large Oregon importer, then the transferor and the recipient have the options and responsibilities under this section.

(a) Unless the transferor elects to remain the regulated party under (4)(b):

(A) The recipient is now the regulated party who:

(i) Must comply with the registration, recordkeeping~~,~~ and reporting~~, and average carbon intensity~~ requirements ~~of~~under OAR 340-253-0100 for the fuel; and

(ii) ~~May generate credits~~Is responsible for ~~the fuel~~surplus and shortfall calculations under OAR 340-253-~~1000(5).~~1020.

(B) The transferor must provide the recipient a product transfer document by the time of transfer. The product transfer document must prominently indicate:

(i) The recipient is now the regulated party who must comply with the registration, recordkeeping~~,~~ and reporting~~, and average carbon intensity~~ requirements ~~of~~under OAR 340-253-0100 for the fuel; and

(ii) The ~~volume and carbon intensity of the transferred fuel~~information required under OAR 340-253-0600.

(C) The transferor is no longer required to comply with the ~~registration,~~ recordkeeping~~,~~ and reporting~~, and average carbon intensity~~ requirements ~~of~~under OAR 340-253-0100 for the fuel, except for maintaining the product transfer documentation under OAR 340-253-0600.

(b) The transferor and recipient may ~~elect~~ agree in writing for the transferor to remain the regulated party for the fuel, by the time fuel ownership is transferred ~~fuel~~. If the transferor elects to remain the regulated party:

(A) The transferor ~~must~~:

(i) Must provide the recipient a product transfer document at the time of transfer that prominently indicates~~:~~ that the transferor elects to remain the regulated party for the fuel;

~~(i) The transferor elects to remain the regulated party for the fuel; and~~

~~(ii) The recipient may not generate credits or deficits for the fuel.~~

(ii) The transferor must comply with the ~~registration,~~ recordkeeping~~,~~ and reporting~~, and average carbon intensity~~ requirements ~~of~~under OAR 340-253-0100 for the fuel; and

~~(B)~~ The transferor ~~may generate credits for the fuel~~is responsible for surplus and shortfall calculations under OAR 340-253-~~1000.~~

(iii) ~~The recipient is not required to comply with the registration, recordkeeping, reporting,~~1020; and ~~average carbon intensity requirements of OAR 340-253-0100 for the fuel, except for maintaining~~

(B) The recipient must maintain the product transfer documentation under OAR 340-253-0600.

(5) **~~Recipient is~~ Regulated party options and responsibilities for transfers if the recipient is a small Oregon ~~Importer~~importer or is not an ~~Importer~~importer and is not an Oregon producer.** If the initial regulated party transfers ~~the~~ fuel to ~~either~~ a small Oregon ~~Importer~~importer or a person who is not an importer~~,~~ and ~~the recipient is~~ not an Oregon producer, then 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 (5)(b), the transferor~~ The transferor remains the regulated party unless the transferor and the recipient agree that the recipient is the regulated or opt-in party under (b), who:

(A) Must comply with the registration, recordkeeping~~,~~ and reporting~~, and average~~

~~carbon intensity~~ requirements ~~of~~under OAR 340-253-0100 for the fuel; and

(B) ~~May generate credits~~Is responsible for ~~the fuel~~surplus and shortfall calculations under OAR 340-253-~~1000~~1020.

(b) The transferor and recipient may agree in writing ~~to be~~for the recipient to become the regulated party for the fuel~~. For the agreement to be effective~~, by the time fuel ownership is transferred. If the recipient elects to become the regulated party:

(A) ~~Both parties~~The transferor must ~~sign~~:

~~(C)~~ Provide the recipient a product transfer document ~~that is provided~~ at the time of transfer~~; and~~

~~(D) The product transfer document must clearly indicate:~~

~~(i) The recipient is now the regulated party who must comply with the registration, recordkeeping, reporting, and average carbon intensity requirements of OAR 340-253-0100 for the fuel; and~~

~~(ii) The volume and average carbon intensity of the transferred fuel.~~

(i) ~~If~~ that prominently indicates that the recipient elects to ~~be~~become the regulated party for the fuel ~~by written agreement under (5)(b):~~; and

~~(A) The recipient must comply with the registration, recordkeeping, reporting, and average carbon intensity requirements of OAR 340-253-0100 for the fuel;~~

~~(B) The recipient may generate credits for the fuel under OAR 340-253-1000; and~~

(ii) ~~The transferor is no longer required to comply with the registration, recordkeeping, reporting, and average carbon intensity requirements of OAR 340-253-0100 for the fuel, except for maintaining~~Maintain the product transfer documentation under OAR 340-253-0600.

(B) The recipient:

(i) Must comply with the recordkeeping and reporting requirements under OAR 340-253-0100 for the fuel;

(ii) Must maintain the product transfer documentation under OAR 340-253-0600; and

(iii) Is responsible for surplus and shortfall calculations under OAR 340-253-1020.

340-253-0320

Regulated Parties and Opt-in Parties for Compressed Natural Gas, Biogas, Liquefied Natural Gas and ~~Biogas~~Liquefied Petroleum Gas

(1) **Fossil compressed natural gas.** For ~~fuel that is solely~~ fossil compressed natural gas, the opt-in party is the owner of the fueling equipment at the facility where the fossil compressed natural gas is dispensed for use in motor vehicles.

~~(2)~~ **Biogas compressed natural gas ~~added to fossil compressed natural gas~~.** For ~~fuel that is a blend of fossil compressed natural gas and~~ biogas compressed natural gas~~, the initial opt-in party:~~

~~(a) For the fossil compressed natural gas is the owner of the fueling equipment at the facility where the fossil compressed natural gas and biogas compressed natural gas blend is dispensed for use in~~ that is dispensed directly into motor vehicles~~; and~~

(2) ~~For biogas compressed natural gas is the~~ in Oregon without first being blended with fossil compressed natural gas, the initial opt-in party is the Oregon producer or ~~the~~ importer of the biogas ~~compressed natural gas for use in motor vehicles~~.

(3) **Fossil liquefied natural gas.** For ~~fuel that is solely~~ fossil liquefied natural gas~~, the~~ :

(a) For fuel that is a regulated ~~or opt-in~~ fuel under OAR 340-253-0200(2)(c), the initial regulated party is the owner of the ~~fueling equipment at~~liquefied natural gas when it is transferred to the facility where the liquefied natural gas is dispensed for use ~~in~~into motor vehicles; or

~~(a)~~(b) For fuel that is an opt-in fuel under OAR 340-253-0200(3)(e), the initial opt-in party is the owner of the liquefied natural gas when it is transferred to the facility where the liquefied natural gas is dispensed for use into motor vehicles.

~~(3)~~ **Biogas liquefied natural gas ~~added to fossil liquefied natural gas.~~** ~~For fuel that is a blend of fossil liquefied natural gas and biogas liquefied natural gas, the initial regulated or opt-in party for the:~~

(4) ~~Fossil~~. For biogas liquefied natural gas that is dispensed directly into motor vehicles in Oregon without first being blended with fossil liquefied natural gas, the initial opt-in party is the Oregon producer or importer of the biogas liquefied natural gas.

(5) **Biogas compressed natural gas added to fossil compressed natural gas**. For blends of these fuels, the opt-in parties for each of the component fuel types of the blended fuel remains the same as provide in sections (1) through (4).

(6) **Biogas liquefied natural gas added to fossil liquefied natural gas.** For blends of these fuels, the regulated and opt-in parties for each of the component fuel types of the blended fuel remains the same as provide in sections (1) through (4).

~~(a)~~ **Liquefied petroleum gas.** For liquefied petroleum gas, the opt-in party is the owner of the fueling equipment at the facility where the liquefied ~~blend~~petroleum gas is dispensed for use ~~in motor vehicles; and~~

~~(b) Biogas liquefied natural gas is the Oregon producer or the importer of the biogas liquefied natural gas.~~

~~(3)~~(7) ~~**Direct supplied biogas compressed natural gas or biogas liquefied natural gas.** The initial opt-in party for biogas compressed natural gas or biogas liquefied natural gas is the Oregon producer or importer of the gas if the gas is dispensed directly to~~into motor vehicles ~~in Oregon for their transportation use without first being blended into fossil compressed natural gas or fossil liquefied natural gas~~.

~~(4)~~(8) **Regulated and opt-in party options and responsibilities~~.~~** ~~Whenever the initial regulated or opt-in party~~ **for transfers** ~~ownership~~ **of** ~~the fuel described in sections (2b), (4b)~~**compressed natural gas, biogas, liquefied natural gas and** ~~(5), the~~**liquefied petroleum gas.** The transferor and the recipient have the following options and responsibilities under this section whenever the initial regulated or opt-in party transfers ownership of the fuel.

(a) ~~Unless~~The transferor remains the regulated or opt-in party unless the transferor and the recipient agree that the recipient is the regulated or opt-in party under ~~subsection (b), the transferor remains the regulated or opt-in party~~ (b), who:

(A) Must comply with the registration, recordkeeping~~,~~ and reporting~~, and average carbon intensity~~ requirements ~~of~~under OAR 340-253-0100 for the fuel;

~~(A)~~(B) Is responsible for surplus and shortfall calculations under OAR 340-253-1020; and

~~(B)~~(C) May generate ~~credits~~surpluses under OAR 340-253-1000 ~~(6~~(4).

(b) ~~By the time fuel ownership is transferred, the~~The transferor and recipient may agree in writing ~~that~~for the recipient ~~of the acquired fuel is now~~to become the regulated or opt-in party~~.~~ for the fuel, by the time fuel ownership is transferred.

~~(A)~~ The product transfer document must clearly indicate~~:~~

(A) ~~The~~ that the recipient is now the regulated or opt-in party who must comply with the registration, recordkeeping~~,~~ and reporting~~, and average carbon intensity~~ requirements ~~of~~under OAR 340-253-0100 for the fuel;~~ and~~

~~(i) The volume and average carbon intensity of the transferred fuel.~~

(B) The recipient ~~must~~:

(i) Is responsible for surplus and shortfall calculations under OAR 340-253-1020; and

(ii) May generate surpluses under OAR 340-253-1000(4).

~~(B)~~(C) The transferor is no longer required to comply with ~~registration, the~~ recordkeeping~~, and~~ reporting~~, and average carbon intensity~~ requirements ~~of~~under OAR 340-253-0100 for the fuel, except for maintaining the product transfer documentation under OAR 340-253-0600.

340-253-0330

Opt-in Parties for Electricity

(1) **Opt-in party priority and deadlines.** ~~For electricity used as a transportation fuel, sections~~Sections (2) through (4) determine the opt-in party who may generate ~~credits~~surpluses under OAR 340-253-1000(~~6~~4) for ~~the~~ electricity used as a transportation fuel.

(2) **Electricity bundled services supplier.** ~~If the~~The electricity bundled services supplier ~~elects to generate credits, it~~ must opt in by submitting a complete application to register with DEQ under OAR 340-253-0500 by September 1 of the year prior to the calendar year in which the ~~credits~~surpluses will be generated~~.~~ if the electricity bundled services supplier elects to generate surpluses. Upon submitting a complete application ~~by September 1~~, the electricity bundled services supplier becomes ~~an~~the opt-in party until it opts out under OAR 340-253-0500.

~~**Electric Utility.** If the electricity bundled services supplier under section (2) did not submit a complete application to register with DEQ by September 1, the~~

(3) **Electric Utility.** The electric utility may opt in by submitting a complete application to register with DEQ under OAR 340-253-0500 by November 1 of the year prior to the calendar year in which the ~~credits~~surpluses will be generated~~.~~, if the electricity bundled services supplier under section (2) does not opt-in. Upon submitting a complete application ~~by November 1~~, the electric utility becomes the opt-in party for ~~that~~the following calendar year.

(4) **Owner or operator of electric-charging equipment.** ~~If the electricity bundled services supplier under section (2) and the electric utility under section (3) did not submit complete applications to register with DEQ by the respective registration deadlines, the~~ The owner or operator of electric-charging equipment, including residential charging equipment, may opt in by submitting a complete application to register with DEQ under OAR 340-253-0500 by December 1 of the year prior to the calendar year in which the surpluses will be generated, if the electricity bundled services supplier under section (2) and the electric utility ~~plans to generate credits.~~under section (3) do not opt-in. Upon submitting a complete application ~~by December 1~~, the owner or operator of electric-charging equipment becomes the opt-in party for ~~that~~the following calendar year.

340-253-0340

Opt-in Parties for Hydrogen Fuel or ~~a~~ Hydrogen ~~Blend~~Blends

(1) **Initial ~~regulated~~opt-in party.** The initial opt-in party for a volume of finished hydrogen fuel is the Oregon producer ~~first~~ or Oregon importer of the finished hydrogen fuel.

(2) **~~Regulated~~Opt-in party options and responsibilities~~.~~ ~~Whenever the initial opt-in party transfers ownership of the finished hydrogen fuel, the~~ for transfers.** The transferor and the recipient have the following options and responsibilities whenever the initial opt-in party transfers ownership of the finished hydrogen fuel:

(a) ~~Unless~~The transferor remains the opt-in party unless the transferor and ~~recipient agree~~ the recipient agree that the recipient is the opt-in party under ~~subsection (2)(~~(b), ~~the transferor remains the opt-in party~~ who ~~must~~:

(A) Must comply with the registration, recordkeeping~~,~~ and reporting~~, and average carbon intensity~~ requirements ~~of~~under OAR 340-253-0100 for the ~~finished hydrogen~~ fuel;

~~(A)~~(B) Is responsible for surplus and shortfall calculations under OAR 340-253-1020; and

(C) ~~At the time fuel ownership is transferred, the~~ May generate surpluses under OAR 340-253-1000(4).

(b) The transferor and recipient may agree in writing ~~that~~for the recipient ~~of the finished hydrogen fuel is now~~to be the opt-in party~~.~~ for the fuel, by the time fuel ownership is transferred.

~~(A)~~ The product transfer document must clearly indicate~~:~~

(A) ~~The~~ that the recipient is now the ~~regulated or~~ opt-in party who must comply with the registration, recordkeeping~~,~~ and reporting~~, and average carbon intensity~~ requirements ~~of~~under OAR 340-253-0100~~; and~~ for the fuel.

~~(i) The volume and average carbon intensity of the transferred fuel.~~

(B) The recipient ~~must~~:

(i) Must comply with the registration, recordkeeping~~,~~ and reporting ~~and average carbon intensity~~ requirements ~~of~~under OAR 340-253-0100~~.~~ for the fuel;

(ii) Is responsible for surplus and shortfall calculations under OAR 340-253-1020; and

(iii) May generate surpluses under OAR 340-253-1000(4).

~~(B)~~(C) The transferor is no longer required to comply with the registration, recordkeeping~~,~~ and reporting~~, and average carbon intensity~~ requirements ~~of~~under OAR 340-253-0100 for the fuel, except for maintaining the product transfer documentation under OAR 340-253-0600.

340-253-0400

Fuel Carbon Intensity Values

~~This rule lists the types of carbon intensity values that regulated and opt-parties may request from DEQ during the registration process.~~

(1) **Statewide carbon intensity values.**

(a) A regulated or opt-in party must use the statewide average carbon intensity value in Table ~~3~~1 or ~~Table 4~~2 under OAR 340-253-~~3030~~3010 or ~~3040~~-3020, as applicable, for the following fuels:

(A) Gasoline;

(B) Diesel fuel;

(C) Compressed fossil natural gas derived from natural gas not imported to North America in liquefied form; ~~and~~

(D) Liquefied petroleum gas; and

~~(D)~~(E) Electricity, unless an electricity provider meets the conditions under subsection (1)(b) and ~~chooses to obtain~~proposes a different carbon intensity value.

(b) ~~For electricity, the~~The opt-in party for electricity may ~~obtain~~propose a carbon intensity value different from the statewide average carbon intensity value if the electricity provider:

(A) Only provides electricity for transportation; and

(B) Is exempt from the definition of public utility under ORS 757.005 (1)(b)(G), and is not regulated by the Oregon Public Utility Commission.

(c) Every three years, DEQ must review the statewide average carbon intensity values in Table ~~3~~1 or ~~Table 4~~2 under OAR 340-253-~~3030~~3010 or ~~3040, as applicable,~~-3020 and must:

(A) Consider ~~at a minimum~~ the crude oil and other energy sources, production processes and flaring rates and other considerations ~~for~~that might affect the lifecycle carbon intensity of fuel used in Oregon; and

(B) Propose ~~that~~ the EQC revise and update statewide average carbon intensity values in ~~Tables~~Table 1 ~~and~~or 2 under OAR 340-253-3010 ~~and~~ or -3020~~, as applicable,~~ if DEQ determines that values ~~ought to~~should be changed by more than 5 gCO2e per MJ or 10 percent.

(2) **Carbon intensity values for established pathways.** Except as provided in section (3), ~~a~~ regulated ~~or~~and opt-in ~~party~~parties must use the carbon intensity values for ethanol, biodiesel, biomass-based diesel, liquefied natural gas, biogas compressed natural gas, biogas liquefied natural gas, hydrogen, liquefied petroleum gas and any fossil compressed natural gas produced from natural gas that arrives in North America in liquefied form that best matches ~~their fuel~~each fuel's carbon intensity, as listed in Table ~~3~~1 or ~~Table 4~~2 under OAR 340-253-~~3030~~3010 or ~~3040~~-3020, as applicable.

(3) **Individual carbon intensity values.**

(a) **Directed by DEQ.** A regulated or opt-in party must obtain 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~~1 or ~~Table 4~~2 under OAR 340-253-~~3030~~3010 or ~~3040, as applicable~~-3020; and

(B) Directs the regulated or opt-in party to obtain an individual carbon intensity value under OAR 340-253-0450.

(b) **Election of the party.** A regulated or opt-in party may ~~obtain~~propose an individual carbon intensity value for a fuel if ~~the party elects to obtain an individual carbon intensity value and~~:

~~(A) It applies for and obtains DEQ approval under OAR 340-253-0450;~~

~~(B)~~(A) The fuel's carbon intensity, when compared to the carbon intensity value for the most similar fuel type in Table ~~3~~1 or ~~Table 4~~2 under OAR 340-253-~~3030~~3010 or ~~3040~~-3020, as applicable, ~~would change~~changes by at least 5.0 gCO2e per MJ or 10 percent~~, whichever is less; and~~;

(B) The ~~regulated or opt-in~~ party has the capacity and intent to provide more than one million ~~gasoline gallon equivalents~~gge per year of the fuel in Oregon unless all providers of that fuel type supply less than one million ~~gasoline gallon equivalents~~gge per year in ~~aggregate.~~ total; and

(C) The party applies for and obtains DEQ approval under OAR 340-253-0450.

(c) **New fuel or feedstock.** A regulated or opt-in party must obtain approval for an individual carbon intensity value under OAR 340-253-0450 for any fuel not included in ~~the~~ Table ~~3~~1 or ~~Table 4~~2 under OAR 340-253-~~3030~~3010 or ~~3040, as applicable,~~-3020 and for any fuel made from a feedstock not represented in a carbon intensity value in Table ~~3~~1 or ~~Table 4~~2 under OAR 340-253-~~3030~~3010 or ~~3040, as applicable.~~ -3020. The party must submit a modification to the original registration under OAR 340-253-0500(5) within 30 days,

(d) **Process change notification**. ~~If a fuel's carbon intensity~~The regulated or opt-in party must notify DEQ and obtain approval for an individual carbon intensity value under OAR 340-253-0450 for any changes ~~in a way that increases~~to the fuel production process, if the fuel's carbon intensity value changes by more than 5.0 gCO2e per MJ or 10 percent~~, the regulated or opt-in party must notify DEQ and obtain an individual carbon intensity value under OAR 340-253-0450 by submitting~~. The party must submit a modification to the original registration under OAR 340-253-0500(~~7~~5) within 30 days.

(4) ~~**Calculation method**~~**OR-GREET.** The regulated or opt-in party must calculate all carbon intensity values using the approved version of OR-GREET, or a DEQ-approved comparable model for ~~a~~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)~~(5) **Calculation requirements**. When ~~calculating~~a regulated or opt-in party calculates a carbon intensity value of:

(a) ~~Fuel~~Fuels made from biomass feedstock, the party may assume that the combustion and growing components of the fuel's lifecycle greenhouse gas emissions have net zero lifecycle carbon dioxide emissions.

(b) ~~Fuel~~Fuels made from petroleum feedstock, including waste petroleum feedstock, the party may not assume that the combustion of the fuel ~~does not have a~~has net zero carbon dioxide emissions.

(c) ~~Fuel~~Fuels made from waste feedstock, the party may assume that the lifecycle greenhouse gas emissions analysis of the carbon intensity value begins when the original product becomes waste.

340-253-0450

Approval for Individual Carbon Intensity Values

(1) **Individual carbon intensity value approval**. The regulated or opt-in party may not use an individual carbon intensity value without written DEQ approval under this rule. Individual carbon intensity values are not available for the fuels listed ~~in~~under OAR 340-253-0400(1)(a).

(a) ~~-~~**OR-GREET input modifications.** ~~To obtain an individual carbon intensity value, the~~ The regulated or opt-in party may propose a modification to inputs into the OR-GREET model that more accurately reflect the specific carbon intensity of the fuel.

(b) **OR-GREET model modifications.** ~~To obtain an individual carbon intensity value, the~~The regulated or opt-in party may propose modifications to the OR-GREET model. 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.

(c) **Non-OR-GREET modifications**. ~~To obtain an individual carbon intensity value, the~~The regulated or opt-in party may propose modifications based on any lifecycle assessment model other than OR-GREET. 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 or opt-in party must supply documentation necessary for DEQ to determine that the method used to calculate the individual carbon intensity value under ~~sections (2) or (3) is reliable and at least comparable to OR-GREET. Documentation may include the publication of the proposed calculation method in a well-established and peer-reviewed scientific journal such as *Science*, *Nature*, *Journal of the Air and Waste Management Association*, or *Proceedings of the National Academies of Science*~~section (1) is reliable and at least comparable to the approved version of OR-GREET.

(3) **Modification submittal.** The regulated or opt-in party must submit all documentation for the proposed modifications under this rule ~~electronically~~ including all:

(a) Supporting data;

(b) Calculations;

(c) Flow diagrams;

(d) Equipment description;

(e) Maps; and

(f) Any other information DEQ may need to verify the fuel type and the method for calculating the proposed~~,~~ individual carbon intensity value.

(4) **Review process**. ~~Within~~DEQ must determine whether the proposal is complete within 15 workdays after receipt of any modification ~~proposal~~ submitted under ~~sections~~section (3~~), DEQ must determine whether the proposal is complete:~~):

(a) If DEQ determines the proposal is incomplete, DEQ must notify the regulated or opt-in party 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~~,~~.

(b) If DEQ determines the proposal is complete, DEQ must:

(A) Publish the application on the Oregon Clean Fuels Program website; and

(B) Approve or deny an individual carbon intensity value~~.~~ under section (5) or (6).

(5) **DEQ approval**. A regulated or opt-in party 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~~1 or ~~Table 4~~2 under OAR 340-253-~~3030~~3010 or ~~3040~~-3020, as applicable, in a future rulemaking.

(6) **DEQ denial**. If DEQ determines the proposal for an individual carbon intensity value is not complete or adequately documented to establish its reliability, DEQ must deny the modification proposal, notify the party which carbon intensity value to use and identify the basis for the denial.

340-253-0500

Registration

~~(1) Beginning on January 1, 2013, a regulated or opt-in party must submit a complete registration for each fuel type in accordance with OAR 340-253-0100(4)(a).~~

(1) **Registration information**. To register, a regulated or opt-in party must submit the following to DEQ:

(a) Company identification, including a physical and mailing address, phone number, e-mail address~~,~~ and a contact name.

(b) The fuel type(s) that will be sold, supplied or offered for sale in Oregon.

~~(d) A fuel route report, as described under section (3), for each fuel.~~

(c) The producer of the fuel, including its physical address and a contact name, for each fuel type.

(d) The regulated or opt-in party's proposed carbon intensity value for each fuel type. The proposed carbon intensity value must be:

(A) A statewide carbon intensity value for any fuel listed under OAR 340-253-0400(1);

(B) An individual carbon intensity value listed ~~under~~in Table ~~3~~1 or ~~4~~2 under OAR 340-253-~~3030~~3010 or ~~3040, as applicable~~-3020; or

(C) A proposal to obtain a new individual carbon intensity value under OAR 340-253-0450.

(e) Other information requested by DEQ related to registration.

~~**(2) Fuel route report.** The regulated or opt-in party must submit a complete fuel route report. The report must include:~~

~~(a) Maps that:~~

~~(A) Highlight the complete fuel route including all applicable truck routes, rail lines, pipelines, transmission lines and other delivery methods;~~

~~(B) Uniquely identify each segment of the fuel route where a different company becomes involved in the fuel delivery; and~~

~~(b) Contact information for each company associated with a different segment of fuel~~

~~delivery including: legal company name, physical and mailing addresses, e-mail address, telephone number and a contact name.~~

(2) **Completeness of submittal.** DEQ must review the information submitted under section (~~2~~1) to determine if the submission is complete.

(a) If DEQ determines the submission is incomplete, DEQ ~~will~~must notify the ~~regulated or opt-in~~ party of the information needed to complete the submission. The ~~regulated or opt-in~~ party 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~~must 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 automatically deemed complete.

~~(3) **Approval**~~**Determination of carbon intensity values.** DEQ ~~shall~~must review the proposed carbon intensity values to determine if they are accurate.

(3) DEQ ~~shall~~must review proposed carbon intensity values as follows:

(a) For a proposed carbon intensity value listed ~~under~~in Table ~~3~~1 or ~~4~~2 under OAR 340-253-~~3030~~3010 or ~~3040, as applicable~~-3020, DEQ ~~shall~~must review whether the fuel type accurately matches the fuel and fuel production process of the proposed carbon intensity value listed.

~~(A)~~ For a proposed individual carbon intensity value, DEQ ~~shall review~~must approve the ~~OR-GREET inputs.~~

~~(b) If DEQ determines that the proposed~~ carbon intensity value ~~accurately reflects~~or notify the party which carbon intensity ~~of the fuel type, DEQ shall approve the proposed~~ value~~. Approval of carbon intensity values is confirmed in the registration approval~~ to use under ~~section (6).~~

~~(c) If DEQ determines that a different carbon intensity value more accurately reflects the information submitted, DEQ will notify the regulated or opt-in party of its determination including DEQ's proposed carbon intensity value and the reason(s) for selecting it within 45 days of the completeness determination.~~

~~(A) The regulated or opt-in party must accept or appeal DEQ's determination in writing within 15 days of receiving DEQ's carbon intensity value determination.~~

~~(B) If the regulated or opt-in party accepts DEQ's determination, then confirmation will be through the registration approval under section (6) of this rule.~~

(b) ~~If the regulated or opt-in party appeals DEQ's determination, then additional supporting information must be submitted to DEQ within 30 days of its appeal notification~~OAR 340-253-0450.

(4) **Registration approval**. ~~Once the carbon intensity values are approved pursuant to OAR 340-253-0500(5), DEQ will~~ DEQ must notify the ~~regulated or opt-in~~ party in writing of its registration approval. The notification ~~will~~must include confirmation of the carbon intensity value for each fuel type to be used in calculating ~~credits~~surpluses and ~~deficits~~shortfalls under OAR 340-253-~~1000~~1020.

(5) **Modifications to registration**.

(a) The ~~regulated or opt-in~~ party must submit an amended registration to DEQ within 30 days of ~~a~~any change occurring to information described in section (~~2).~~1), including any change that would result in a different carbon intensity value.

(b) DEQ may ~~request the regulated or opt-in~~require a party to submit an amended registration based on new information that DEQ obtains from any source.

(6) **Opting out**. To opt-out, an opt-in party must notify DEQ in writing. Regulated parties may not opt-out.

340-253-0600

Records

(1) **Records.** ~~The~~Each regulated ~~or~~and opt-in party must retain the following records for at least ~~5~~five years:

(a) Copies of all data and reports submitted to DEQ;

(b) Records of each fuel transaction made including:

(A) Volume of fuel;

(i) In gallons for liquid fuels including gasoline, diesel fuel, ethanol, biomass-based diesel, liquefied natural gas and liquefied ~~natural~~petroleum gas;

(ii) In standard cubic feet for compressed natural gas;

(iii) In kilowatt-hours for electricity; and

(iv) In kilograms for hydrogen fuel.

(B) Names of the transferor and recipient;

(C) Whether the compliance obligation was transferred from the transferor to the recipient or retained;

~~(B)~~(D) Carbon intensity of the fuel;

~~(C)~~(E) Producer of the fuel;

(F) Invoice date;

(G) Unique transaction identification such as a bill of lading number;

~~(D)~~(H) Product transfer documents;

~~(E)~~(I) Exempt status documentation under OAR 340-253-0250, if fuel is excluded from ~~credit~~surplus and ~~deficit~~shortfall calculations under OAR 340-253-1010; and

~~(F)~~(J) ~~If the~~For fuel that is exported outside Oregon, where the party is the exporter of record.

(c) Records ~~of each transfer of credits or deficits, including:~~used to document how a fuel is transported or conveyed to Oregon, if not produced in Oregon;
~~(A) The amount transferred;~~

~~(B) Name of the regulated or opt-in party to whom the credits or deficits were transferred to; and~~

~~(C) Credit transfer documents.~~

(d) Records used to calculate the carbon intensity of the fuel;

~~(e) Records used to document a fuel route;~~

~~(f)~~(e) Records used to calculate ~~credits~~surpluses and ~~deficits~~shortfalls; and

~~(g)~~(f) Other records used to determine compliance with the Oregon Clean Fuels Program.

(2) **Review**. All data, records~~,~~ and calculations used by a regulated or opt-in party to comply with the Oregon Clean Fuels Program are subject to verification by DEQ. The ~~regulated or opt-in~~ party must provide records retained under section (1) within ~~15~~60 calendar days after the date DEQ requests a review of the records, unless otherwise specified.

340-253-0630

Quarterly Reports. Quarterly reports must include the following information, in a format provided or approved by DEQ:

(1) ~~**Quarterly Reports**. Each quarter, according to the schedule under OAR 340-253-0100(8), the regulated or opt-in party must submit the following information for~~ For each fuel type sold, supplied or ~~sold~~offered for sale in Oregon:

(a) The total volume ~~supplied or sold;~~; and

(b) Carbon intensity~~;~~.

(2) ~~Credits or deficits for each fuel type~~ Surpluses and shortfalls as calculated under OAR 340-253-1020, including the;

(a) Amount of surpluses and shortfalls generated during the quarter; and

(b) Quarterly and year-to-date net balance calculations under OAR 340-253-1030 for gasoline and gasoline substitutes and diesel and diesel substitutes.

~~(2)~~(3) The volumes of any exempt fuels or fuels transferred to exempt users under OAR 340-253-0250; and

~~(3)~~(4) Volumes exported outside Oregon.

340-253-0650

Annual Reports. Annual reports must include the following information, in a format provided or approved by DEQ:

(1) Company name of the regulated or opt-in party;

(2) Signature of a responsible official representing the regulated or opt-in party and certifying that the report is accurate to the best of the official's knowledge;

(3) For each fuel type sold, supplied or offered for sale during the calendar year:

(a) The total volume; and

(b) Carbon intensity.

(4) Surpluses or shortfalls as calculated under OAR 340-253-1020, including the;

(a) Amount of surpluses and shortfalls carried over from the previous year; and

(b) Amount of surpluses and shortfalls generated during the year.

~~(1)~~(5) Net balance calculations under OAR 340-253-1030 for gasoline and gasoline substitutes and diesel and diesel substitutes;

~~(2)~~(6) The volumes of any exempt fuels or fuels transferred to exempt users under OAR 340-253-0250; and

~~(3)~~(7) Volumes exported outside Oregon.

~~(4) **Progress towards annual compliance**. Each quarter, according to the schedule under OAR 340-253-0100(8), the regulated or opt-in party must calculate its progress towards meeting the annual average carbon intensity requirements. Quarterly calculations will not be used to determine compliance with the annual average carbon intensity requirements. Calculations must include:~~

~~(a) Amount of credits and deficits carried over from previous quarter;~~

~~(b) Amount of credits and deficits generated during the quarter;~~

~~(c) Amount of credits and deficits transferred between other regulated or opt-in parties during the quarter; and~~

~~(d) Net balance calculation under OAR 340-253-1030.~~

~~340-253-0650~~

~~Annual Compliance Report~~

~~(1) **Annual compliance report**. Each year according to the schedule under OAR 340-253-0100(9), the regulated or opt-in party must submit an annual compliance report. Each annual compliance report must include:~~

~~(a) Company name;~~

~~(b) Signature of responsible official;~~

~~(c) The following information for each fuel type supplied or sold during the compliance period:~~

~~(A) The total volume supplied or sold;~~

~~(B) Carbon intensity;~~

~~(C) Credits or deficits for each fuel type as calculated under OAR340-253-1020;~~

(5) ~~The volumes of any exempt fuels or fuels transferred to exempt users under OAR 340-253-0250; and~~

(6) ~~Volumes exported outside Oregon.~~

~~(d) The following summary information for credits or deficits during the calendar year:~~

~~(A) Amount of credits and deficits carried over from previous year;~~

~~(B) Amount of credits and deficits generated during the year; and~~

~~(C) Amount of credits and deficits transferred between other regulated or opt-in parties during the year.~~

~~(e) Net balance calculation under OAR 340-253-1030; and~~

~~(4) The report must include:~~

~~(a) Gasoline and gasoline substitutes; and~~

~~(b) Diesel and diesel substitutes.~~

~~The report must include a signed statement certifying that the report is accurate to the best of the certifying individual's knowledge.~~

340-253-1000

~~Credit~~Surplus and ~~Deficit~~Shortfall Basics

(1) **Carbon intensity values.**

~~(a)~~ Except as provided in subsection (b), when calculating carbon intensity values, the regulated or opt-in party must~~:~~

~~(b)~~(a) ~~Use a~~ use the DEQ carbon intensity value approved under OAR 340-253-0500~~;~~ ~~and~~ .

~~(A) Express the carbon intensity value to the same number of significant figures as shown in Tables 3 and 4 under OAR 340-253-3030 and 3040, as applicable.~~

~~(c)~~(b) If the regulated or opt-in party 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 party must use the carbon intensity value proposed in its registration.

(2) **Fuel quantities.** When calculating and reporting fuel quantities, the regulated or opt-in party must:

(a) Use energy units ~~of megajoules.~~in MJ. To convert other energy units to ~~megajoules~~MJ, the party must multiply the unit by the corresponding energy density ~~factor based on~~under Table 3 under OAR 340-253-3030, and use the ~~lower heating values of fuels in OR-GREET using~~ BTU ~~-~~to ~~megajoules~~ MJ conversion factor of 1,055 J per BTU. ~~Table 5 under OAR 340-253-3050 includes energy density conversions for the Oregon Clean Fuels Program.~~

~~(b) Calculate gasoline gallon equivalent (gge) to the nearest:~~

~~(A) 10 gge for fuel volumes less than 10,000 gge;~~

~~(B) 100 gge for fuel volumes greater than 9,999 gge and less than 100,000 gge;~~

~~(C) 1,000 gge for fuel volumes greater than 99,999 gge and less than 1,000,000 gge; and~~

~~(D) 10,000 gge for fuel volumes greater than 999,999 gge.~~

~~(c)~~(b) Express quantities ~~not specified under subsection (2)(b)~~ to the nearest whole unit applicable for that quantity such as gallons, standard cubic feet, kilowatt-hours or pounds.

(3) **Metric tons of CO2 equivalent.** When reporting ~~credits~~surpluses and ~~deficits~~shortfalls, the

regulated or opt-in party must express ~~fuel~~ quantities to the nearest whole metric ton of carbon dioxide equivalent.

~~(4) **Rounding intermediate calculated values.** When rounding all intermediate calculated values, the regulated or opt-in party must use:~~

~~(a) ASTM E 29-08 (October 1, 2008), Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications, which is incorporated herein by reference; or~~

~~(b) Any other practice that the regulated party demonstrates to DEQ's satisfaction as providing equivalent or better results as compared with the method specified under subsection (4)(a). The regulated party must demonstrate to DEQ the equivalent or better results and obtain DEQ's written approval of the practice.~~

(4) ~~**Credit**~~**Surplus generation.** A ~~regulated or opt-in~~ party generates a clean fuel ~~credit~~surplus when ~~the~~:

(a) The carbon intensity of a fuel identified ~~in~~under OAR 340-253-1010 is lower than the ~~average~~corresponding baseline carbon intensity ~~requirement~~value for gasoline and gasoline substitutes or diesel fuel and ~~their~~diesel substitutes ~~in Table 1 or 2 under OAR 340-253-3010 or 3020, as applicable,~~;

~~(c)~~(b) The party has a DEQ-approved carbon intensity value~~, and demonstrates that the fuel is:~~; and

(c) The party demonstrates that the fuel is:

(A) Biodiesel, ethanol, or any other liquid fuel other than liquefied natural gas delivered to a public or private access fueling facility in Oregon;

(B) Electricity used in Oregon to charge a motor vehicle; ~~and~~or

(C) Compressed~~,~~ or liquefied natural gas ~~and~~, hydrogen fuel or liquefied petroleum gas dispensed in Oregon for use in a motor vehicle.

(5) ~~**Deficit**~~**Shortfall generation.** A ~~regulated or opt-in~~ party generates a clean fuel ~~deficit~~shortfall when ~~the~~:

(a) The carbon intensity of a fuel identified ~~in~~under OAR 340-253-1010 is higher than the ~~average~~corresponding baseline carbon intensity ~~requirement~~value for gasoline and gasoline substitutes or diesel fuel and ~~their~~diesel substitutes ~~in Table 1 or 2 under OAR 340-253-3010 or 3020, as applicable,~~; and ~~the~~

~~(d)~~(b) The fuel is imported to Oregon or produced by an Oregon producer for use in Oregon for use in a motor vehicle.

~~(5) **Credit acquisition, banking, and transfer**. A regulated or opt-in party:~~

~~(a) May:~~

~~(A) Acquire clean fuel credits from other regulated and opt-in parties;~~

~~(B) Transfer clean fuel credits that the party has generated or has acquired from other regulated and opt-in parties; and~~

~~(C) Bank clean fuel credits. Banked credits do not expire.~~

~~(b) May not:~~

~~(A) Use credits generated by any other program be used to comply with the Oregon Clean Fuels Program;~~

~~(B) Transfer or use any clean fuel credit that has not been generated in a credit and deficit calculation pursuant to this rule; and~~

~~(C) Generate credits for:~~

~~(i) Fuels not covered under OAR 340-253-0200;~~

~~(ii) Exempt fuels under OAR 340-253-0250; or~~

~~(iii) Excluded fuels under OAR 340-253-1010.~~

~~(c) A person who transfers a clean fuel credit that has not been properly generated must provide a clean fuel credit to replace the one that was not properly generated. The transferor is subject to enforcement. The person acquiring the credit is not subject to enforcement if DEQ determines:~~

~~(A) The credit was acquired from a registered DEQ regulated or opt-in party;~~

~~(B) The carbon intensity value of the fuel matches the carbon intensity value approved by DEQ for that fuel producer; and~~

~~(C) If the credits are acquired from a biofuels producer, the number of credits acquired did not exceed the registered annual credit generation capacity of the transferor's production plant.~~

~~(d) A non-regulated third party or a party acting on behalf of a non-regulated third party may not acquire or transfer clean fuel credits.~~

(6) **Nature of ~~credits~~surpluses**. Clean fuel ~~credits~~surpluses are a regulatory instrument and do

not constitute personal property, instruments, securities or any other form of property. Surpluses are not credits and may not be used to meet any compliance obligations other than as specified in this division.

340-253-1010

Fuels to include in ~~credit~~surplus and ~~deficit~~shortfall calculation

(1) **Fuels included.** A regulated or opt-in party must calculate ~~credits~~surpluses and ~~deficits~~shortfalls for all regulated and opt-in fuels under OAR 340-253-0200 ~~which~~that are not otherwise exempt under OAR 340-253-0250, excluding fuels that are exported outside Oregon.

(2) **Fuels excluded**. Except as provided in section (3), the regulated or opt-in party may not ~~utilize~~include fuels ~~exempted~~excluded under OAR 340-253-~~250~~0250 in ~~credit~~surplus and ~~deficit~~shortfall calculations.

(3) **Fuels sold to exempt users**. The regulated or opt-in party may include or exclude fuel sold to an exempt user under OAR 340-253-0250 from the ~~credits~~surpluses and ~~deficits~~shortfalls calculations. ~~If the party:~~

(a) ~~Includes~~If the party includes the fuel, the party must include all fuel volumes listed on an invoice or all fuels included in a single or simultaneous delivery of fuel, regardless of how many invoices are used~~; and~~.

(b) ~~Excludes~~If the party excludes the fuel, the party must document and report all excluded fuels under OAR 340-253-0600 ~~and~~through OAR 340-253-0650.

340-253-1020

Calculating ~~Credits~~Surpluses or ~~Deficits~~Shortfalls

~~(1) **Calculating credits or deficits.**~~ The regulated or opt-in party must calculate ~~credits~~surpluses and ~~deficits separately~~shortfalls for each fuel type included under 340-253-1010 using~~:~~

~~(2)~~(1) ~~Credit~~ the surplus and ~~deficit~~shortfall basics under OAR 340-253-~~1000;~~1020 to calculate the following:

(a) ~~Calculate ***energy***~~Energy in ~~***megajoules***~~MJs by multiplying the amount of fuel by the energy density of the fuel in Table ~~5~~3 under OAR 340-253-~~3050~~3030;

(b) ~~Calculate the ***adjusted***~~Adjusted energy in ~~***megajoules***~~MJs by multiplying the energy in ~~*megajoules*~~MJs from (1)(~~b~~a) by the energy economy ratio of the fuel using Table ~~6~~4 or 5 under OAR 340-253-~~3060~~3040 or -3050 for gasoline and gasoline substitutes or

~~Table 7 under OAR 340-253-3070 for~~ diesel fuel and diesel substitutes;

(c) ~~Calculate the ***carbon***~~Carbon intensity difference by subtracting the fuel's ~~DEQ-approved~~ carbon intensity value from the ~~average~~corresponding baseline carbon intensity ~~requirement~~value for gasoline and gasoline substitutes or diesel fuel and ~~their~~diesel substitutes ~~in Table 1 or 2 under OAR 340-253-3010 or 3020, as applicable~~;

(d) ~~Calculate the ***grams***~~Grams of carbon dioxide equivalent by multiplying the adjusted energy in ~~*megajoules*~~MJs in (1)(~~c~~b) by the carbon intensity difference in (1)(~~d~~c); and

(e) ~~Calculate the ***metric***~~Metric tons of carbon dioxide equivalent by dividing the grams of carbon dioxide equivalent in (1)(~~d~~c) by 1,000,000.

~~(3)~~(2) If the fuel has a carbon intensity:

(a) Higher than the ~~average~~corresponding baseline carbon intensity ~~requirement~~value for gasoline and gasoline substitutes or diesel fuel and ~~their~~diesel substitutes ~~in Table 1 or 2~~, the absolute value of the metric tons of carbon dioxide equivalent under ~~OAR 340-253-3010 or 3020, as applicable,~~subsection (1)(e) is a shortfall.

~~(a)~~(b) Lower than the corresponding baseline carbon intensity value for ~~the compliance period~~gasoline and gasoline substitutes or diesel fuel and diesel substitutes, the absolute value of the metric tons of carbon dioxide equivalent under subsection (1)(~~f~~e) is a ~~deficit.~~ surplus.

~~(A) Lower than the average carbon intensity requirement for gasoline or diesel fuel and their substitutes in Table 1 or 2 under OAR 340-253-3010 or 3020, as applicable, for the compliance period, the absolute value of the *metric tons of carbon dioxide equivalent* in (1)(f) is a credit.~~

340-253-1030

Net Balance Calculation ~~at End of Compliance Period~~

~~Net balance calculation~~. A regulated or opt-in party must calculate the ~~*Net Balance*~~net balance at the end of ~~a compliance~~the reporting period using~~: *Net Balance = Credits$_{Generated}$ + Credits$_{Forward}$ + Credits$_{Aquired}$ – Deficits$_{Generated}$ – Deficits$_{Forward}$ – Credits$_{Sold}$ – Credits$_{Used}$*~~ the following formula: Net balance = Surpluses$_{Generated}$ + Surpluses$_{Forward}$ – Shortfalls$_{Generated}$ – Shortfalls$_{Forward}$ where:

(1) ~~*Credits$_{Generated}$*~~Surpluses$_{Generated}$ is the total ~~credits~~surpluses generated ~~from all fuels under OAR 340-253-1010~~ using calculations under OAR 340-253-1020 ~~during the current compliance period~~;

(2) ~~*Credits$_{Forward}$*~~Surpluses$_{Forward}$ is the ~~unused credits~~surpluses carried forward from the previous

~~compliance~~reporting period;

~~(a) *Credits*$_{Aquired}$ is the credits purchased or otherwise acquired in the current compliance period;~~

(3) ~~*Deficits*$_{Generated}$~~Shortfalls$_{Generated}$ is the total ~~deficits~~shortfalls generated ~~from diesel fuel, diesel substitutes, gasoline and gasoline substitutes under OAR 340-253-1010~~ using calculations under OAR 340-253-1020 ~~during the current compliance period;~~; and

(4) ~~*Deficits*$_{Forward}$~~Shortfalls$_{Forward}$ is the ~~remaining deficits~~shortfall carried forward from the previous ~~compliance~~reporting period~~;~~.

~~(a) *Credits*$_{Sold}$ is the credits sold or otherwise transferred during the current compliance period; and~~

~~(b) *Credits*$_{Used}$ is the credits used to comply with the average carbon intensity requirement for the current compliance period.~~

~~(5) **Small and large deficits.** A regulated or opt-in party that has a negative *Net Balance* under section (1) has remaining deficits and:~~

~~(a) May carry forward a small deficit to the next compliance period without penalty. A small deficit exists if the sum of Credits$_{Generated}$, Credits$_{Forward}$ and Credits$_{Aquired}$ is greater than or equal to 90 percent of the sum of Deficits$_{Generated}$, Deficits$_{Forward}$, Credits$_{Sold}$ and Credits$_{Used}$ during the current compliance period.~~

~~(b) May not carry forward a large deficit to the next compliance period. A large deficit exists if the sum of Credits$_{Generated}$, Credits$_{Forward}$ and Credits$_{Aquired}$ is less than 90 percent of the sum of Deficits$_{Generated}$, Deficits$_{Forward}$, Credits$_{Sold}$ and Credits$_{Used}$ for the current compliance period.~~

~~(6) **Deficit reconciliation.** If the regulated or opt-in party has a small deficit carried forward from the previous compliance period, the party must eliminate the small deficit by the end of the current compliance period by using an equal amount of clean fuel credits.~~

340-253-2000

Emergency Deferral Due to Fuel Supply

(1) **Determining whether to issue an emergency deferral.** DEQ must issue an order declaring an emergency deferral from the average carbon intensity requirement for gasoline or diesel fuel and their substitutes in Table 1 or 2 under OAR 340-253-3010 or 3020, as applicable, if DEQ determines:

(a) There is a shortage in fuel that is needed to comply with the average carbon intensity requirement for gasoline or diesel fuel and their substitutes in Table 1 or 2, as applicable, due to:

(A) A natural disaster; or

(B) An unanticipated disruption in production or transportation of lower carbon 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 five percent of the total credits generated by all regulated and opt-in parties under OAR 340-253-1020 in the previous calendar year. To determine the magnitude of the shortage, DEQ shall 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 or both of the following options could mitigate compliance with the average carbon intensity requirement for gasoline or diesel fuel and their substitutes in Table 1 or 2 under OAR 340-253-3010 or 3020, as applicable:

(i) The use of fuels from other sources, and the carbon intensity of those fuels; or

(ii) Banked clean fuel credits; and

(D) 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 a deferral must be issued, DEQ must 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));

(b) The fuel deferred from complying with the average carbon intensity requirement for gasoline or diesel fuel and their substitutes in Table 1 or 2 under OAR 340-253-3010 or 3020, as applicable; and

(c) The method selected by DEQ to comply with the average carbon intensity requirement for gasoline or diesel fuel and their substitutes in Table 1 or 2 under OAR 340-253-3010 or 3020, as applicable, during the temporary deferral period:

(A) Allow deficits to be carried over into future compliance periods, notwithstanding OAR 340-253-1030(2) – (3). DEQ may allow deficits to be carried over for one, two, or three future compliance periods before the deficits must be reconciled; or

(B) Suspend deficit accrual, but allow credits to accrue, during the emergency deferral period.

(3) **Issuing an emergency deferral.** DEQ must issue an emergency deferral order that notifies the affected regulated and opt-in parties with 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).

340-253-2100

Forecasted Deferral Due to Fuel Supply

(1) **DEQ forecast.** DEQ must 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 credits available;

(c) The estimated credits needed to meet the average carbon intensity requirement for gasoline or diesel fuel and their substitutes in Table 1 or 2 under OAR 340-253-3010 or 3020, as applicable; 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 must consider available data to develop the forecast including:

(a) Past Oregon fuel consumption volumes and trends;

(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 alternative fuel production facilities nationwide;

(h) Applicable updates to the carbon intensities of fuels;

(i) Nationwide volumes for advanced biofuels and biomass-based diesel 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 5 percent of the credits needed under (1)(c) to comply with the average carbon intensity requirement for gasoline or diesel fuel and their substitutes in Table 1 or 2 under OAR 340-253-3010 or 3020, as applicable, DEQ shall determine whether a forecasted deferral is needed by considering the following:

(a) Timing of fuel availability;

(b) Timing, duration and magnitude of the estimated 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) Lower carbon fuel infrastructure development in Oregon.

(d) Any other information DEQ may need in the analysis.

(4) **Content of a forecasted deferral.** If DEQ determines under section (3) that a forecasted deferral must be issued, DEQ must determine:

(a) The start date and end date of the forecasted deferral period, which may not exceed one year (but which may be renewed if DEQ makes a subsequent determination under section (3));

(b) The fuel deferred from complying with the average carbon intensity requirement for gasoline or diesel fuel and their substitutes in Table 1 or 2 under OAR 340-253-3010 or 3020, as applicable; and

(c) The method selected by DEQ to comply with the average carbon intensity requirement for gasoline or diesel fuel and their substitutes in Table 1 or 2 under OAR 340-253-3010 or 3020, as applicable, during the forecasted deferral period:

(A) Defer the requirement to comply with the average carbon intensity requirement for gasoline or diesel fuel and their substitutes in Table 1 or 2 under OAR 340-253-3010 or 3020, as applicable, for up to one year, and allow credits to accrue during the deferral period; or

(B) Propose that the EQC revise the Oregon Clean Fuels Program through a rulemaking to:

(i) Amend the average carbon intensity requirement for gasoline or diesel fuel and their substitutes in Table 1 or 2 under OAR 340-253-3010 or 3020, as applicable;

(ii) Amend the average carbon intensity requirement for gasoline or diesel fuel and their substitutes in Table 1 or 2 under OAR 340-253-3010 or 3020, as applicable, to extend beyond 2025 the date by which the lowest average carbon intensity values must be met, which would allow for less stringent annual reductions while still reaching the same average carbon intensity value at the end of the period; or

(iii) Otherwise amend the Oregon Clean Fuels Program to address the forecasted fuel supply shortage, such as a multi-year deferral.

(5) **Issuing a forecasted deferral.** DEQ must issue a forecasted deferral order that notifies the affected regulated and opt-in 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).

340-253-2200

Fuel Price Deferral

(1) **Definitions.** As used in this rule:

(a) "**Fuel**" means gasoline, gasoline blended with ethanol, diesel fuel, and diesel fuel blended with biodiesel or biomass-based diesel.

(b) "**Price evaluation threshold**" means that the 12-month rolling weighted average price of gasoline (including gasoline blended with ethanol) or diesel fuel (including diesel fuel blended with biodiesel or biomass-based diesel) in Oregon is more than 5 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 shall calculate the 12-month rolling average price for fuel using data available from the U.S. Energy Information Administration or a comparable source, as follows:

(a) **12-month rolling average price for Oregon.** Each month, DEQ shall calculate the 12-month rolling average price for gasoline (including gasoline blended with ethanol) and diesel fuel (including diesel fuel blended with biodiesel or biomass-based diesel).

(b) **Gasoline 12-month rolling weighted-average price for PADD 5.** Each month, DEQ shall calculate the 12-month rolling volume-weighted average price for gasoline (including gasoline blended with ethanol) using the statutory PADD 5 data.

(c) **Diesel 12-month rolling weighted-average price for PADD 5.** Each month, DEQ shall calculate the 12-month rolling volume-weighted average price for diesel (including diesel fuel blended with biodiesel or biomass-based diesel) using the actual PADD 5 or, if available, the statutory PADD5 data.

(3) **Determining need for cost mitigation.** If the price of gasoline or diesel fuel in Oregon exceeds the price evaluation threshold:

(a) DEQ must provide fuel data and analysis to the EQC that includes the applicable information under sections (4) and (5);

(b) The EQC shall determine the need to mitigate the costs of complying with the Oregon

~~Clean Fuels Program after considering the DEQ fuel data and analysis. The EQC will direct DEQ to implement one or more cost mitigation strategies upon making the following two determinations that:~~

~~(A) The price of Oregon gasoline or diesel fuel exceeds the price evaluation threshold due to the costs of complying with the average carbon intensity requirement for gasoline or diesel fuel and their substitutes in Table 1 or 2 under OAR 340-253-3010 or 3020, as applicable; and~~

~~(B) One of the strategies under section (6) is necessary to mitigate the costs of compliance with the average carbon intensity requirement for gasoline or diesel fuel and their substitutes in Table 1 or 2 under OAR 340-253-3010 or 3020, as applicable.~~

~~(4) **Determining whether or not the average carbon intensity requirement caused the price evaluation threshold exceedance.** The EQC must determine whether or not the price of Oregon gasoline or diesel fuel exceeds the price evaluation threshold due to the costs of complying with the average carbon intensity requirement for gasoline or diesel fuel and their substitutes in Table 1 or 2 under OAR 340-253-3010 or 3020, as applicable. DEQ must analyze and provide the following information to the Commission:~~

~~(a) Whether fuel volume and price data is faulty or incomplete;~~

~~(b) Price of gasoline substitutes and diesel fuel substitutes;~~

~~(c) Changes in demand for gasoline and diesel fuel 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 and diesel fuel 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) Whether prices for Oregon sources of crude oil are higher than prices for crude oil supplied to the statutory PADD 5 as a whole;~~

~~(h) Change in the usage of reformulated gasoline or other special fuel in any state in the statutory PADD 5; and~~

~~(i) Any other information DEQ or the EQC may need to determine whether the average carbon intensity requirement for gasoline or diesel fuel and their substitutes in Table 1~~

or 2 under OAR 340-253-3010 or 3020, as applicable, caused the price of Oregon gasoline or diesel fuel to exceed the price evaluation threshold.

(5) **Factors in determining whether a price mitigation strategy is necessary.** The EQC shall consider the following factors to determine whether it is necessary to mitigate the costs of compliance with the average carbon intensity requirement for gasoline or diesel fuel and their substitutes in Table 1 or 2 under OAR 340-253-3010 or 3020, as applicable, or whether the price of gasoline or diesel fuel will fall below the price evaluation threshold within 6 months without implementing a cost mitigation strategy:

(a) Fuel price trends;

(b) Price of gasoline substitutes and diesel fuel substitutes;

(c) Availability and use of gasoline substitutes and diesel fuel substitutes in Oregon;

(d) Compliance schedule for the fuel;

(e) Future supply of gasoline substitutes and diesel fuel substitutes; and

(f) Any other information DEQ or the EQC may need to determine whether standard cost mitigation strategy is necessary.

(6) **Cost mitigation strategies.** If the EQC determines under subsection (3)(b) that mitigating the cost of compliance is necessary, it must order, and DEQ must implement, one of the following cost mitigation strategies with an EQC-approved start and stop dates:

(a) Suspend deficit accrual during a cost mitigation period and allow credits to accrue during that period;

(b) Allow credits to accrue and allow deficits to be carried over into future compliance periods, notwithstanding OAR 340-253-1030(2) – (3), during a cost mitigation period. The EQC may allow deficits to be carried over for one, two, or three future compliance periods before the deficits must be reconciled;

(c) Suspend deficit accrual for a percentage of the fuel during the cost mitigation period and allow credits to accrue during the period;

(d) Eliminate requirement to comply with the average carbon intensity requirement for gasoline or diesel fuel and their substitutes in Table 1 and 2 under OAR 340-253-3010 or 3020, as applicable, for up to one year; or

(e) Adopt any other price mitigation strategy that the EQC determines to be necessary effective to mitigate the cost of compliance.

(7) **EQC reconsideration.** The EQC may reconsider and revise its determinations under sections

(4) and (5), and as a result may reconsider and revise or withdraw any cost mitigation strategies ordered under section (6), if the information it considered under sections (4) and (5) has changed.

(8) **DEQ implementation.** In implementing a cost mitigation strategy as directed by the EQC, DEQ must notify the affected parties with the following information:

(a) The EQC's determinations under sections (4) – (6);

(b) The start date and end date for the cost mitigation strategy period, which may not exceed one year (but which may be renewed if the EQC makes subsequent determinations under sections (4) and (5));

(c) The fuel affected by the price mitigation strategy; and

(d) The cost mitigation strategy under section (6).

340-253-2300

Memorandum of Agreement with other agencies

(1) DEQ may enter into a memorandum of agreement with the Oregon Department of Energy, the Oregon Public Utility Commission, the Oregon Department of Agriculture, the Oregon Department of Transportation, or other state agencies, to perform any or all of DEQ's duties under OAR 340-253-2100(1) & (2) and 2200(2) and to provide any other information DEQ may need under OAR 340-253-2000 or OAR 340-253-0000(5).

340-253-3000

Tables used for the Oregon Clean Fuels Program

340-253-3010

Table 1 –- Oregon ~~Average~~ Carbon Intensity ~~Requirement~~Lookup Table for Gasoline and Gasoline Substitutes

Table ~~1~~1

Oregon ~~Average~~ Carbon Intensity ~~Requirement~~Lookup Table for Gasoline and Gasoline Substitutes

~~Note: Average carbon intensity requirements do not apply until the Commission triggers their application in a future rulemaking. Requirements listed below for 2015 and later years are not applicable until such rulemaking is completed in the future.~~

~~Calendar Year~~Fuel	~~Average Carbon Intensity Requirement (gCO2e per MJ)~~ Feedstock/Fuel Production Process	~~Percent Reduction~~ Carbon Intensity Values (gCO2e per MJ)			
		Direct Emissions	Land Use Change or Other Indirect Effect	Energy Economy Ratio Applied	Final
~~None (~~Gasoline ~~Baseline is 90.38)~~	Based on a weighted average of gasoline supplied to Oregon	92.34	-	1	92.34
Ethanol from Corn	GREET default adjusted for transport to Oregon	64.80	-	1	64.80
	Wet Mill, Natural Gas	64.52	-	1	64.52
	Wet Mill, Coal	90.~~15~~99	~~0.25 percent~~ -	1	90.99
~~2016~~	~~89.93~~	~~0.50 percent~~			
~~2017~~	~~89.70~~	~~0.75 percent~~			
	~~89.48~~Dry Mill, Wet DGS, Natural Gas	~~1~~57.00 ~~percent~~	-	1	57.00
~~2019~~Ethanol from Sugarcane	~~89.02~~GREET defaults adjusted for transport to Oregon	26.44	-	~~1.50 percent~~	26.44
Cellulosic Ethanol	Farmed trees	15.54	-	1	15.54
	Wheat straw	20.90	-	1	20.90
	Forest residue	20.49	-	1	20.49
	Mill waste	~~88.~~12.31	~~2.50 percent~~ -	1	12.31
~~2021~~Compressed Natural Gas	~~87.22~~North American natural gas delivered via pipeline; compressed in Oregon	~~3.50 percent~~71.41	-	1	71.41
	~~85.86~~Landfill gas cleaned to pipeline quality	~~5.00 percent~~11.26	-	1	11.26
~~2023~~	~~84.51~~	~~6.50 percent~~			

2024Liquefied Natural Gas	North American natural gas delivered via pipeline; liquefied in Oregon w/ 80% efficiency	83.1513	8.00 percent	1	83.13
2025 and subsequent years	81.34	10.00 percent			

340-253-3020

Table 2 – Oregon Average Carbon Intensity Requirement for Diesel Fuel and Diesel Substitutes

Table 2

Oregon Average Carbon Intensity Requirement for Diesel Fuel and Diesel Substitutes

Note: Average carbon intensity requirements do not apply until the Commission triggers their application in a future rulemaking. Requirements listed below for 2015 and later years are not applicable until such rulemaking is completed in the future.

Calendar Year	Average Carbon Intensity Requirement (gCO_2e per MJ)	Percent Reduction
2013	None (Diesel Baseline is 90.00)	
2014	None (Diesel Baseline is 90.00)	
20.15	89.78	0.25 percent
2016	89.55	0.50 percent
2017	89.33	0.75 percent
2018	89.10	1.00 percent
2019	88.65	1.50 percent
2020	87.75	2.50 percent
2021	86.85	3.50 percent
2022	85.50	5.00 percent
2023	84.15	6.50 percent
2024	82.80	8.00 percent
2025 and subsequent years	81.00	10.00 percent

340-253-3030

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

Table 3

Oregon Carbon Intensity Lookup Table for

Gasoline and Gasoline Substitutes					
Fuel	Fuel Production Process	Carbon Intensity Values (gCO2e per MJ)			
		Direct Emissions	Land Use Change or Other Indirect Effect[2]	Energy Economy Ratio Applied[3]	Final
Gasoline	Based on a weighted average of gasoline supplied to Oregon[1]	92.34	-	1	92.34
Ethanol from Corn	GREET default adjusted for transport to Oregon[1]	64.80	-	1	64.80
	Wet Mill, Natural Gas[2]	64.52	-	1	64.52
	Wet Mill, Coal[2]	90.99	-	1	90.99
	Dry Mill, Wet DGS, Natural Gas[1]	57.00	-	1	57.00
Ethanol from Sugarcane	GREET defaults adjusted for transport to Oregon[1]	26.44	-	1	26.44
Cellulosic Ethanol	Farmed trees[1]	15.54	-	1	15.54
	Wheat straw[1]	20.90	-	1	20.90
	Forest residue[1]	20.49	-	1	20.49
	Mill waste[1]	12.31	-	1	12.31
Compressed Natural Gas	North American natural gas delivered via pipeline; compressed in Oregon[1]	71.41	-	1	71.41
	Landfill gas cleaned to pipeline quality[2]	11.26	-	1	11.26
Liquefied Natural Gas[2]	North American natural gas delivered via pipeline; liquefied in Oregon w/ 80% efficiency	83.13	-	1	83.13
	Overseas liquefied natural gas delivered to Oregon; re-gasified then re-liquefied w/ 80% efficiency	93.37	-	1	93.37
	Overseas liquefied natural gas delivered to Oregon; no re-gasification or re-liquefactionliquefaction	77.50	-	1	77.50
Electricity[1]Electricity	Oregon average electricity mix 2015	154.98	-	4.1	37.81
	Oregon average electricity mix 2016	154.98	-	4.0	38.75
	Oregon average electricity mix 2017	154.98	-	3.9	39.74
	Oregon average electricity mix 2018	154.98	-	3.8	40.78
	Oregon average electricity mix 2019	154.98	-	3.7	41.89
	Oregon average electricity mix 2020	154.98	-	3.6	43.05
	Oregon average electricity mix 2021	154.98	-	3.5	44.28
	Oregon average electricity mix 2022	154.98	-	3.4	45.58
	Oregon average electricity mix 2023	154.98	-	3.3	46.96
	Oregon average electricity mix 2024	154.98	-	3.2	48.43
	Oregon average electricity mix 2025	154.98	-	3.1	49.99

[1] The carbon intensity values listed above are adjusted for Oregon by DEQ and are subject to change prior to being placed on public notice.
[2] The carbon intensity values listed above are taken from California and are subject to change prior to being placed on public notice.
[3] The Energy Economy Ratio under OAR 340-253-3060 and 3070, as applicable, listed above are preliminary and will be updated prior to being placed on public notice.

340-253-3040
Table 4 - Oregon Carbon Intensity Lookup Table for Diesel Fuel and Diesel Substitutes

~~Table 4~~

~~Oregon Carbon Intensity Lookup Table for Diesel Fuel and Diesel Substitutes~~

~~Fuel~~	~~Fuel Production Process~~	~~Carbon Intensity Values (gCO2e per MJ)~~			
		~~Direct Emissions~~	~~Indirect Land Use Change or Other Indirect Effect[2]~~	~~Energy Economy Ratio Applied[3]~~	~~Final~~
~~Ultra Low Sulfur Diesel[1]~~	~~Based on a weighted average of diesel supplied to Oregon~~	~~91.53~~	~~-~~	~~1~~	~~91.53~~
~~Renewable Diesel[1]~~	~~soybeans to renewable diesel~~	~~21.70~~	~~–~~	~~1~~	~~21.70~~
~~Biodiesel~~	~~Soybean GREET default adjusted for transport to Oregon1~~	~~20.00~~	~~–~~	~~1~~	~~20.00~~
	~~Canola[1]~~	~~27.31~~	~~–~~	~~1~~	~~27.31~~
	~~Used cooking oil to fatty acid methyl esters – FAME[1]~~	~~10.3~~	~~–~~	~~1~~	~~10.3~~
	~~Tallow[1]~~	~~16.85~~	~~–~~	~~1~~	~~16.85~~
~~Compressed Natural Gas~~	~~North American natural gas delivered via pipeline; compressed in Oregon[1]~~	~~71.41~~	~~–~~	~~0.94~~	~~75.97~~
	~~Landfill gas cleaned to pipeline quality[2]~~	~~11.26~~		~~0.94~~	~~11.98~~
Liquefied ~~Natural Gas[2]~~Petroleum Gas	~~North American natural gas delivered via pipeline; liquefied in Oregon w/ 80% efficiency~~Liquefied Petroleum Gas, Crude and NG Mix	83.~~13~~05	-	~~0.94~~1	~~88.44~~ 83.05

340-253-3020
Table 2 - Oregon Carbon Intensity Lookup Table for Diesel Fuel and Diesel Substitutes

Table 2

Oregon Carbon Intensity Lookup Table for Diesel Fuel and Diesel Substitutes

Fuel	Feedstock/Fuel Production Process	Carbon Intensity Values (gCO2e per MJ)			
		Direct Emissions	Indirect Land Use Change or Other Indirect Effect	Energy Economy Ratio Applied	Final
Ultra Low Sulfur Diesel	Based on a weighted average of diesel fuel supplied to Oregon	91.53	-	1	91.53
Renewable Diesel	Soybeans to renewable diesel	21.70	-	1	21.70
Biodiesel	Soybean GREET default adjusted for transport to Oregon	20.00	-	1	20.00
	Canola	27.31	-	1	27.31
	Used cooking oil to fatty acid methyl esters – FAME	10.3	-	1	10.3

	Tallow	16.85	-	1	16.85
Compressed Natural Gas	North American natural gas delivered via pipeline; compressed in Oregon	71.41	-	0.94	75.97
	Landfill gas cleaned to pipeline quality	11.26		0.94	11.98
Liquefied Natural Gas	North American natural gas delivered via pipeline; liquefied in Oregon w/ 80% efficiency	83.13	-	0.94	88.44
	Overseas liquefied natural gas delivered to Oregon; re-gasified then re-liquefied w/ 80% efficiency	93.37	-	0.94	99.33
	Overseas liquefied natural gas delivered to Oregon; no re-gasification or re-~~liquefication~~liquefaction	77.50	-	0.94	82.45
~~Electricity~~[1] Electricity	Oregon average electricity mix	154.98	-	2.70	57.4
Liquefied Petroleum Gas	Liquefied Petroleum Gas, Crude and NG Mix	83.05	-	1	83.05

~~[1] The carbon intensity values listed above are adjusted for Oregon by DEQ and are subject to change prior to being placed on public notice.~~
~~[2] The carbon intensity values listed above are taken from California and are subject to change prior to being placed on public notice.~~
~~[3] The Energy Economy Ratio under OAR 340-253-3060 and 3070, as applicable, listed above are preliminary and will be updated prior to being placed on public notice.~~

~~**340-253-3050**~~

340-253-3030

Table ~~5~~3 - Oregon Energy Densities of Fuels

Table ~~5~~3 **Oregon Energy Densities of Fuels**	
Fuel (units)	**MJ/unit**
Gasoline (gallon)	116.09 (MJ/gallon)
Diesel fuel (gallon)	129.49 (MJ/gallon)
Compressed natural gas (standard cubic feet)	0.98 (MJ/standard cubic feet)
Electricity (kilowatt hour)	3.60 (MJ/kilowatt hour)
~~Anhydrous~~Denatured Ethanol (gallon)	~~77~~80.53 (MJ/gallon)
Neat Biomass-based Diesel (gallon)	119.55 (MJ/gallon)
Liquefied natural gas (gallons)	100.00 (MJ/gallon)
Hydrogen (kilograms)	123.00 (MJ/kilogram)

~~**340-253-3060**~~

~~**Table 6 - Oregon Energy Economy Ratios for Fuel used in Light-Duty Applications**~~

~~**Table 6**~~	96.5 (MJ/gallon)

~~Oregon Energy Economy Ratios for Fuel Used in Light-Duty Applications~~ Liquefied petroleum gas (gallons)	

340-253-3040

Table 4 - Oregon Energy Economy Ratios for Fuel used in Light-Duty Applications

Table 4

Oregon Energy Economy Ratios for Fuel Used in Light-Duty Applications

Year	Fuel/Vehicle Combination Energy Economy Ratio			
	Gasoline or any ethanol blend	Compressed natural gas / liquefied petroleum gas/ Internal combustion engine vehicle	Hydrogen or fuel cell vehicle	Electricity / battery electric vehicle, or plug-in hybrid electric vehicle
2015	1.0	1.0 (needs to be adjusted: not reformulated gasoline)	3.0 (needs to be adjusted: not reformulated gasoline)	4.1
2016	1.0	To be announced[1]	3.0	4.0
2017	1.0	To be announced[1]	2.9	3.9
2018	1.0	To be announced[1]	2.8	3.8
2019	1.0	To be announced[1]	2.8	3.7
2020	1.0	To be announced[1]	2.7	3.6
2021	1.0	To be announced[1]	2.6	3.5
2022	1.0	To be announced[1]	2.5	3.4
2023	1.0	To be announced[1]	2.5	3.3
2024	1.0	To be announced[1]	2.4	3.2
2025	1.0	To be announced[1]	2.3	3.1

[1] ~~The 2014~~A future Clean ~~Fuel Standards~~Fuels Program review will include analysis of the energy economy ratios for light-duty applications to determine the values for 2015 through 2025.

340-253-~~3070~~3050

Table ~~7~~5 - Oregon Energy Economy Ratios for Fuel Used in Heavy-Duty Applications

Table ~~7~~5

Oregon Energy Economy Ratios for Fuel Used in Heavy-Duty Applications

Fuel/Vehicle Combination Energy Economy Ratio			
Diesel fuel or Biomass-based diesel blends	CNG or LNG	Hydrogen or fuel cell vehicle	Electricity / battery electric vehicle, or plug-in hybrid electric vehicle
1.0	0.94	1.9	2.7

DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION 253

OREGON CLEAN FUELS PROGRAM

340-253-0000

Overview

(1) **Context**. The Oregon Legislature has found that climate change poses a serious threat to the economic well-being, public health, natural resources and environment of Oregon, among other findings. 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 average amount of lifecycle greenhouse gas emissions per unit of fuel energy used in Oregon by a minimum of 10 percent below 2010 levels over a 10-year period.

(3) **Authority**. The 2009 Oregon Legislature adopted House Bill 2186, which was enacted as chapter 754 of Oregon Laws 2009, and 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 (2011 Edition). OAR Chapter 340 Division 253 implements section 6.

(4) **Flexible Implementation Approach**. This division requires regulated parties, and those parties that choose voluntarily to opt–in to the program, to register, keep records, report the carbon intensity of the fuel they produce or import for use in Oregon, and calculate surpluses and shortfalls against the baseline carbon intensity values. These values are based on the mix of regulated and opt-in fuels that were supplied in Oregon in 2010. While reporting of net carbon balance is required, regulated and opt-in parties are not required to balance surpluses and shortfalls at this time. This flexible implementation approach is designed to put in place only the administrative procedures necessary to implement the program. This approach is intended to minimize the initial costs to regulated parties by not requiring compliance with declining carbon intensity standards. DEQ will utilize the reports and other information to assess, at a minimum, the following factors to make a recommendation to the EQC about the next phase of the program:

(a) The cost and administrative burden of compliance for regulated and opt-in parties;

(b) The benefits of the program to Oregon's economy and environment;

(c) The current and projected availability of lower carbon fuels,

(d) The methodologies to provide exemptions and deferrals necessary to mitigate the cost of complying with the program, in accordance with Section 6(2)(d) of chapter 754, Oregon Laws 2009;

(e) The progress and adoption rates of cleaner fuels and vehicle technologies;

(f) The appropriate methods, based on the latest science, to establish baseline carbon intensity values and declining carbon intensity standards, including methodologies to incorporate land use change and other indirect effects;

(g) The latest information on the policies and legal issues regarding low carbon fuel standards;

(h) The status of federal and other state programs that address the carbon content of transportation fuel;

(i) The costs and administrative capacity of DEQ to implement the program; and

(j) The likely impact on all of the above elements, if declining average carbon intensity standards are implemented in the future.

(5) **Construction.** This division uses the following construction:

(a) OAR 340-253-#### followed by a bolded title is the number and title of the rule where:

(A) OAR is the acronym for *Oregon Administrative Rules*;

(B) 340 is the *chapter* number;

(C) 253 is the *division* number; and

(D) #### is the unique *rule* number.

(b) The subunits of a rule are within parenthesis in the following order:

(A) *Section*. The section is a Hindu-Arabic numeral expressed in sequence as (1), (2), (3) and so forth. Each section has a bold title;

(B) *Subsection.* The subsection is a lowercase English alphabet character expressed in sequence as (a), (b), (c) and so forth;

(C) *Paragraph*. The paragraph is an uppercase English alphabet character expressed

in sequence as (A), (B), (C) and so forth; and

(D) *Subparagraph*. The subparagraph is a lowercase Roman numeral expressed in sequence as (i), (ii), (iii) and so forth.

(c) A reference prefaced with the word *section*, *subsection*, *paragraph* or *subparagraph* is a reference to a subunit within the same rule; and

(d) A reference prefaced with OAR 340-253 is a reference to another rule under the Oregon standards.

(6) **LRAPA**. Notwithstanding 340-200-0010(3), the DEQ administers this division in all areas of the State of Oregon.

Stat. Auth.: ORS 468.020 and section 6, chapter 754, Oregon Laws 2009, which is printed as a note following ORS 468A.270 (2011 Edition).
Stats. Implemented: Section 6, chapter 754, Oregon Laws 2009, which is printed as a note following ORS 468A.270 (2011 Edition).
History must be added at the time of rule adoption.
This language must be added at the end of each rule at the time of rule adoption.

340-253-0040

Definitions

The definitions in OAR 340-200-0020 and this rule apply to this division. If the same term is defined in this rule and OAR 340-200-0020, 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) "**Baseline carbon intensity value**" is 90.38 gCO2e per MJ for gasoline and gasoline substitutes and 90.00 gCO2e per MJ for diesel fuel and diesel substitutes. These values are based on the mix of regulated and opt-in fuels supplied for use as a transportation fuel in Oregon in 2010.

(3) "**Biodiesel**" has the same meaning as defined under OAR 603-027-0410.

(4) "**Biogas**" means natural gas that meets the purity requirements under OAR 860-023-0025 and is produced from the breakdown of organic material in the absence of oxygen. Biogas production processes include, but are not limited to, anaerobic digestion, anaerobic decomposition and thermo-chemical decomposition:

(a) Applied to biodegradable biomass materials, such as manure, sewage, municipal solid waste, and waste from energy crops; and

(b) Used to produce landfill gas and digester gas.

(5) "**Biogas compressed natural gas**" means compressed natural gas consisting solely of compressed biogas.

(6) "**Biogas liquefied natural gas**" means liquefied natural gas consisting solely of liquefied biogas.

(7) **"Biomass**" has the same meaning as defined under OAR 603-027-0410.

(8) "**Biomass-Based diesel**" has the same meaning as defined under OAR 603-027-0410.

(9) "**Blendstock**" means a component used alone or blended with one or more other components to produce a finished fuel used in a motor vehicle.

(10) "**Carbon intensity**" 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).

(11) "**Compressed natural gas**" means either biogas or fossil natural gas that meets the standards listed under OAR 860-023-0025 compressed to a pressure greater than ambient

pressure.

(12) **"Diesel fuel**" has the same meaning as defined under OAR 603-027-0410.

(13) "**Diesel substitute**" means any fuel, other than diesel fuel, that may be used in light-duty or heavy-duty vehicles, and off-road vehicles that typically use diesel as a fuel. Diesel substitutes include but are not limited to liquefied natural gas used in a heavy duty motor vehicle and biodiesel used in a heavy duty motor vehicle.

(14) "**Electricity bundled services supplier**" means any person or entity that provides charging infrastructure and provides access to vehicles charging under contract with a charging service recipient or charging equipment owner.

(15) "**Electric utility**" has the same meaning as defined in ORS 757.600.

(16) "**Ethanol**," or "**Denatured fuel ethanol**" has the same meaning as defined under OAR 603-027-0410.

(17) "**Feedstock**" means the material a fuel is made from.

(18) "**Finished fuel**" means a transportation fuel used directly in a motor vehicle without additional chemical or physical processing.

(19) "**Finished hydrogen fuel**" means a finished fuel that consists of:

(a) Hydrogen; or

(b) A blend of hydrogen and another fuel.

(20) "**Fossil compressed natural gas**" means compressed natural gas derived solely from petroleum or fossil sources such as oil fields and coal beds.

(21) "**Fossil liquefied natural gas**" means liquefied natural gas derived solely from petroleum or fossil sources such as oil fields and coal beds.

(22) "**Fuel type**" means any unique fuel feedstock and production process combination.

(23) "**Gasoline**" has the same meaning as defined under OAR 603-027-0410.

(24) "**Gasoline substitute**" means any fuel, other than gasoline, that may be used in light-duty vehicles that typically use gasoline as a fuel. Gasoline substitutes include but are not limited to electricity used in a light-duty motor vehicle and natural gas used in a light-duty motor vehicle.

(25) "**Heavy duty motor vehicle**" has the same meaning as defined under OAR 340-256-0010.

(26) "**Import**" means to bring a product from outside Oregon into Oregon.

(27) "**Importer**" means the person who owns a product imported from outside Oregon into Oregon:

(a) With respect to any imported liquid product, it means the person who owns the fuel in the stationary storage tank into which the product was first transferred after it was imported into Oregon; or

(b) With respect to any biogas, it means the person who owns the imported product upon receipt at a pipeline in Oregon through which the biogas is delivered in Oregon.

(28) "**Large Oregon importer**" means any person who imports more than 250,000 gallons of fuel in a given calendar year into Oregon.

(29) "**Light-duty motor vehicle**" has the same meaning as defined under OAR 340-256-0010.

(30) "**Lifecycle greenhouse gas emissions**" means the:

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

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

(c) Mass values for all greenhouse gases as adjusted to account for their relative global warming potential.

(31) "**Liquefied natural gas**" means biogas or fossil natural gas converted to liquid form.

(32) "**Liquefied petroleum gas**" or "**propane**" has the same meaning as defined under OAR 603-027-0395.

(33) "**Motor vehicles**" has the same meaning as defined under OAR 603-027-0410.

(34) "**Natural gas**" means a mixture of gaseous hydrocarbons and other compounds from either fossil or biogas sources, with at least 80 percent methane by volume, and typically sold or distributed by utilities such as any utility company regulated by the Oregon Public Utility Commission.

(35) "**Opt-in party**" means a person who is not a regulated party and who elects to register with DEQ under OAR 340-253-0100(4).

(36) "**Oregon producer**" means:

(a) With respect to any liquid blendstock or finished fuel, the person who makes the liquid blendstock or finished fuel at the Oregon production facility; or

(b) With respect to any biogas produced in Oregon, the person who refines the gas to pipeline quality.

(37) "**Oregon production facility**" means a facility located in Oregon that:

(a) Produces any liquid blendstock or finished fuel other than liquefied natural gas; or

(b) Converts, compresses, liquefies, refines, treats or otherwise processes natural gas into compressed natural gas or liquefied natural gas that is ready for use as a transportation fuel in a motor vehicle without further physical or chemical processing.

(38) "**OR-GREET**" means the Greenhouse gases, Regulated Emissions, and Energy in Transportation (GREET) Argonne National Laboratory model modified and maintained for Oregon. Copies of OR-GREET are available from DEQ upon request.

(39) "**Private access fueling facility**" means an Oregon fueling facility that restricts access by use of a card or key-activated fuel dispensing device to dispensing fuel to nonretail customers.

(40) "**Product transfer document**" means an invoice, bill of lading, purchase contract, or any other proof of fuel ownership transfer.

(41) "**Public access fueling facility**" means an Oregon fueling facility that is not a private access fueling facility.

(42) "**Regulated party**" means a person identified as a regulated party under OAR 340-253-0310 through 340-253-0340. Regulated parties must comply with the requirements under OAR 340-253-0100.

(43) "**Shortfall(s)**" means a state in which the carbon intensity of a fuel is higher than the baseline carbon intensity value for gasoline and gasoline substitutes or diesel fuel and diesel substitutes. Shortfalls are expressed in units of metric tons of carbon dioxide equivalent (CO2e) and are calculated under OAR 340-253-1020.

(44) "**Small Oregon importer**" means any person who imports 250,000 gallons or less of fuel in a given calendar year into Oregon.

(45) "**Statutory PADD 5**" means a portion of Petroleum Administration for Defense District 5, which includes Oregon, Washington, Arizona and Nevada.

(46) "**Surplus(es)**" means a state in which the carbon intensity of a fuel is lower than the baseline carbon intensity value for gasoline or diesel fuel and their substitutes. Surpluses are

expressed in units of metric tons of carbon dioxide equivalent (CO2e) and are calculated under OAR 340-253-1020.

(47) "**Transportation fuel**" means any fuel used or intended for use in motor vehicles as defined under OAR 603-027-0410.

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.

(3) "DEQ" means Oregon Department of Environmental Quality.

(4) "EQC" means Oregon Environmental Quality Commission.

(5) "gCO2e" means grams of carbon dioxide equivalent.

(6) "gge" means gasoline gallon equivalents.

(7) "MJ" means megajoule.

340-253-0100

Oregon Clean Fuels Program

(1) **Applicability.**

(a) All regulated parties under section (3) that import or produce, sell, supply or offer for sale in Oregon any regulated fuel, as defined under OAR 340-253-0200, are subject to this rule.

(b) Any person may become an opt-in party by registering with DEQ under section (4) of this rule. All opt-in parties under section (3) that import or produce, sell, supply or offer for sale in Oregon any opt-in fuel, as defined under OAR 340-253-0200, are subject to this rule.

(2) **Requirements.** Beginning January 1, 2013:

(a) Regulated and opt-in parties, except for small Oregon importers, must register under section (4) of this rule, keep records under section (5) of this rule, and submit reports under sections (6) and (7) of this rule; and

(b) Small Oregon importers must register under section (4) of this rule and are exempt from keeping records under section (5) of this rule and submitting reports under sections (6) and (7) of this rule.

(3) **Regulated party or opt-in party.** The following rules designate regulated and opt-in parties, by type of fuel:

(a) OAR 340-253-0310 for gasoline, diesel fuel, biodiesel, biomass-based diesel, ethanol, and any other liquid fuel except liquefied natural gas and liquefied petroleum gas;

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

(c) OAR 340-253-0330 for electricity; and

(d) OAR 340-253-0340 for hydrogen fuel or a hydrogen blend.

(4) **Registration.**

(a) After January 1, 2013, but no later than June 30, 2013, each regulated party must submit a complete application under OAR 340-253-0500 to register with DEQ for each fuel type the party imports or produces, sells, supplies or offers for sale in Oregon on or before July 1, 2013, and that it plans to continue to import or produce, sell, supply or offer for sale in Oregon after July 1, 2013.

(b) Beginning on July 1, 2013, each regulated party must submit a complete application

under OAR 340-253-0500 to register with DEQ for each fuel type, on or before the date upon which it begins to import or produce, sell, supply or offer for sale in Oregon such fuel.

(c) To become an opt-in party a person must submit a complete application under OAR 340-253-0500 to register with DEQ.

(5) **Records**.

(a) Beginning on July 1, 2013, each regulated party must develop and retain all records required under OAR 340-253-0600.

(b) Beginning on the latter of either July 1, 2013, or the date that an opt-in party submits a complete application, as determined by DEQ, under subsection (4)(c) of this rule, each opt-in party must develop and retain all records required under OAR 340-253-0600.

(6) **Quarterly report**. Beginning on January 1, 2014, each regulated and opt-in party must submit quarterly reports under OAR 340-253-0630. Reports must be submitted to DEQ for:

(a) January through March of each year, by May 31;

(b) April through June of each year, by August 31;

(c) July through September of each year, by November 30; and

(d) October through December of each year, by February 28 of the following year.

(7) **Annual report.** Each regulated party and opt-in party must submit an annual report each year under OAR 340-253-0650. The report must be submitted to DEQ by April 30 of each year to report for the prior calendar year; except for 2013, when the reporting period is from July 1 through December 31.

340-253-0200

Regulated and Opt-in Fuels

(1) **Applicability**. The transportation fuels listed in this rule are subject to Division 253, unless exempt under OAR 340-253-0250.

(2) **Regulated fuels.** Regulated fuels means the following transportation fuels or blendstocks:

(a) Gasoline;

(b) Diesel fuel;

(c) Fossil liquefied natural gas that is imported, but not transferred by a natural gas pipeline in Oregon;

(d) A fuel blend containing ethanol;

(e) A fuel blend containing biomass-based diesel or biodiesel;

(f) Ethanol or denatured ethanol, also referred to as E100;

(g) Neat biomass-based diesel and biodiesel, also referred to as B100; and

(h) Any other liquid or non-liquid fuel not listed in section (3) or exempted under OAR 340-253-0250.

(3) **Opt-in fuels.** Opt-in fuels means the following transportation fuels:

(a) Electricity;

(b) Hydrogen fuel;

(c) Hydrogen blends;

(d) Fossil compressed natural gas;

(e) Fossil liquefied natural gas derived from fuel delivered through a natural gas pipeline;

(f) Biogas compressed natural gas;

(g) Biogas liquefied natural gas; and

(h) Liquefied petroleum gas.

340-253-0250

Exempt Fuels and Fuel Uses

(1) **Exempt fuels**. The following fuels are exempt from the definition of regulated fuels under OAR 340-253-0200(2)(h):

(a) A fuel sold, supplied or offered for sale in Oregon if all providers supply an aggregate volume of less than 360,000 gge per year in Oregon. The party must:

(A) Demonstrate that the exemption applies; and

(B) Obtain exemption approval from DEQ in writing.

(b) A fuel produced from a research, development or demonstration facility as defined under OAR 330-090-0110 if the annual production volume is either 10,000 gallons or less or no more than 50,000 gallons and the fuel producer uses the entire volume for its own motor vehicles. The party must:

(A) Demonstrate that the exemption applies; and

(B) Obtain exemption approval from DEQ in writing.

(2) **Exempt fuels based on fuel uses.** Fuels are exempt from the definition of regulated fuels under OAR 340-253-0200(2)(h) if:

(a) The fuel is sold, supplied or offered for sale for use in the following motor vehicles:

(A) Aircraft;

(B) Racing activity vehicles under ORS 801.404;

(C) Military tactical vehicles and tactical support equipment;

(D) Railroad locomotives;

(E) 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 under ORS 805.300;

(G) Farm tractors, as defined under ORS 801.265;

(H) Implements of husbandry, as defined under ORS 801.310; or

(I) Motor trucks, as defined under ORS 801.355, used primarily to transport logs; and

(b) The regulated or opt-in party documents that the fuel was sold, supplied or offered for sale for use in a motor vehicle listed in subsection (a), as required under OAR 340-253-0600. Documentation that the fuel was transferred through a dedicated source to one of the motor vehicles identified in subsection (a) is sufficient. If not transferred through a dedicated source, all documentation must be on an individual fuel transaction basis.

(3) Fuel possession. Any fuel user or seller may possess any fuel regardless of its carbon intensity value, including but not limited to owners of the motor vehicles listed under subsection (2)(a).

Designation of Regulated and Opt-in Parties

340-253-0310

Regulated Parties for Gasoline, Diesel Fuel, Biodiesel, Biomass-based Diesel and Ethanol and Other Regulated Fuels Except for Liquefied Natural Gas

(1) **Applicability.** This rule applies to all liquid blendstocks and liquid finished fuels listed under OAR 340-253-0200(2) except liquefied natural gas**.**

(2) **Initial regulated party.** The initial regulated party is the Oregon producer, large Oregon importer or small Oregon importer of the fuel.

(3) **Recipient notification requirement.** Before actual fuel ownership is transferred from one party to another, the recipient of the fuel must notify the transferor of the fuel whether or not the recipient is an Oregon producer, a large Oregon importer, or a small Oregon importer.

(4) **Regulated party options and responsibilities for transfers if the recipient is an Oregon producer or large Oregon importer.** If the initial regulated party transfers fuel to an Oregon producer or a large Oregon importer, then the transferor and the recipient have the options and responsibilities under this section.

(a) Unless the transferor elects to remain the regulated party under (4)(b):

(A) The recipient is now the regulated party who:

(i) Must comply with the registration, recordkeeping and reporting requirements under OAR 340-253-0100 for the fuel; and

(ii) Is responsible for surplus and shortfall calculations under OAR 340-253-1020.

(B) The transferor must provide the recipient a product transfer document by the time of transfer. The product transfer document must prominently indicate:

(i) The recipient is now the regulated party who must comply with the registration, recordkeeping and reporting requirements under OAR 340-253-0100 for the fuel; and

(ii) The information required under OAR 340-253-0600.

(C) The transferor is no longer required to comply with the recordkeeping and

reporting requirements under OAR 340-253-0100 for the fuel, except for maintaining the product transfer documentation under OAR 340-253-0600.

(b) The transferor and recipient may agree in writing for the transferor to remain the regulated party for the fuel, by the time fuel ownership is transferred. If the transferor elects to remain the regulated party:

(A) The transferor:

(i) Must provide the recipient a product transfer document at the time of transfer that prominently indicates that the transferor elects to remain the regulated party for the fuel;

(ii) The transferor must comply with the recordkeeping and reporting requirements under OAR 340-253-0100 for the fuel; and

(iii) The transferor is responsible for surplus and shortfall calculations under OAR 340-253-1020; and

(B) The recipient must maintain the product transfer documentation under OAR 340-253-0600.

(5) **Regulated party options and responsibilities for transfers if the recipient is a small Oregon importer or is not an importer and is not an Oregon producer.** If the initial regulated party transfers fuel to a small Oregon importer or a person who is not an importer and not an Oregon producer, then the transferor and the recipient have the options and responsibilities under this section.

(a) The transferor remains the regulated party unless the transferor and the recipient agree that the recipient is the regulated or opt-in party under (b), who:

(A) Must comply with the registration, recordkeeping and reporting requirements under OAR 340-253-0100 for the fuel; and

(B) Is responsible for surplus and shortfall calculations under OAR 340-253-1020.

(b) The transferor and recipient may agree in writing for the recipient to become the regulated party for the fuel, by the time fuel ownership is transferred. If the recipient elects to become the regulated party:

(A) The transferor must:

(i) Provide the recipient a product transfer document at the time of transfer that prominently indicates that the recipient elects to become the regulated party for the fuel; and

(ii) Maintain the product transfer documentation under OAR 340-253-0600.

(B) The recipient:

(i) Must comply with the recordkeeping and reporting requirements under OAR 340-253-0100 for the fuel;

(ii) Must maintain the product transfer documentation under OAR 340-253-0600; and

(iii) Is responsible for surplus and shortfall calculations under OAR 340-253-1020.

340-253-0320

Regulated Parties and Opt-in Parties for Compressed Natural Gas, Biogas, Liquefied Natural Gas and Liquefied Petroleum Gas

(1) **Fossil compressed natural gas.** For fossil compressed natural gas, the opt-in party is the owner of the fueling equipment at the facility where the fossil compressed natural gas is dispensed for use in motor vehicles.

(2) **Biogas compressed natural gas**. For biogas compressed natural gas that is dispensed directly into motor vehicles in Oregon without first being blended with fossil compressed natural gas, the initial opt-in party is the Oregon producer or importer of the biogas.

(3) **Fossil liquefied natural gas.** For fossil liquefied natural gas:

(a) For fuel that is a regulated fuel under OAR 340-253-0200(2)(c), the initial regulated party is the owner of the liquefied natural gas when it is transferred to the facility where the liquefied natural gas is dispensed for use into motor vehicles; or

(b) For fuel that is an opt-in fuel under OAR 340-253-0200(3)(e), the initial opt-in party is the owner of the liquefied natural gas when it is transferred to the facility where the liquefied natural gas is dispensed for use into motor vehicles.

(4) **Biogas liquefied natural gas**. For biogas liquefied natural gas that is dispensed directly into motor vehicles in Oregon without first being blended with fossil liquefied natural gas, the initial opt-in party is the Oregon producer or importer of the biogas liquefied natural gas.

(5) **Biogas compressed natural gas added to fossil compressed natural gas**. For blends of these fuels, the opt-in parties for each of the component fuel types of the blended fuel remains the same as provide in sections (1) through (4).

(6) **Biogas liquefied natural gas added to fossil liquefied natural gas.** For blends of these fuels, the regulated and opt-in parties for each of the component fuel types of the blended

fuel remains the same as provide in sections (1) through (4).

(7) **Liquefied petroleum gas.** For liquefied petroleum gas, the opt-in party is the owner of the fueling equipment at the facility where the liquefied petroleum gas is dispensed for use into motor vehicles.

(8) **Regulated and opt-in party options and responsibilities for transfers of compressed natural gas, biogas, liquefied natural gas and liquefied petroleum gas.** The transferor and the recipient have the following options and responsibilities under this section whenever the initial regulated or opt-in party transfers ownership of the fuel.

(a) The transferor remains the regulated or opt-in party unless the transferor and the recipient agree that the recipient is the regulated or opt-in party under (b), who:

(A) Must comply with the registration, recordkeeping and reporting requirements under OAR 340-253-0100 for the fuel;

(B) Is responsible for surplus and shortfall calculations under OAR 340-253-1020; and

(C) May generate surpluses under OAR 340-253-1000(4).

(b) The transferor and recipient may agree in writing for the recipient to become the regulated or opt-in party for the fuel, by the time fuel ownership is transferred.

(A) The product transfer document must clearly indicate that the recipient is now the regulated or opt-in party who must comply with the registration, recordkeeping and reporting requirements under OAR 340-253-0100 for the fuel;

(B) The recipient:

(i) Is responsible for surplus and shortfall calculations under OAR 340-253-1020; and

(ii) May generate surpluses under OAR 340-253-1000(4).

(C) The transferor is no longer required to comply with the recordkeeping and reporting requirements under OAR 340-253-0100 for the fuel, except for maintaining the product transfer documentation under OAR 340-253-0600.

340-253-0330

Opt-in Parties for Electricity

(1) **Opt-in party priority and deadlines.** Sections (2) through (4) determine the opt-in party who may generate surpluses under OAR 340-253-1000(4) for electricity used as a

transportation fuel.

(2) **Electricity bundled services supplier.** The electricity bundled services supplier must opt in by submitting a complete application to register with DEQ under OAR 340-253-0500 by September 1 of the year prior to the calendar year in which the surpluses will be generated if the electricity bundled services supplier elects to generate surpluses. Upon submitting a complete application, the electricity bundled services supplier becomes the opt-in party until it opts out under OAR 340-253-0500.

(3) **Electric Utility.** The electric utility may opt in by submitting a complete application to register with DEQ under OAR 340-253-0500 by November 1 of the year prior to the calendar year in which the surpluses will be generated, if the electricity bundled services supplier under section (2) does not opt-in. Upon submitting a complete application, the electric utility becomes the opt-in party for the following calendar year.

(4) **Owner or operator of electric-charging equipment.** The owner or operator of electric-charging equipment, including residential charging equipment, may opt in by submitting a complete application to register with DEQ under OAR 340-253-0500 by December 1 of the year prior to the calendar year in which the surpluses will be generated, if the electricity bundled services supplier under section (2) and the electric utility under section (3) do not opt-in. Upon submitting a complete application, the owner or operator of electric-charging equipment becomes the opt-in party for the following calendar year.

340-253-0340

Opt-in Parties for Hydrogen Fuel or Hydrogen Blends

(1) **Initial opt-in party.** The initial opt-in party for a volume of finished hydrogen fuel is the Oregon producer or Oregon importer of the finished hydrogen fuel.

(2) **Opt-in party options and responsibilities for transfers.** The transferor and the recipient have the following options and responsibilities whenever the initial opt-in party transfers ownership of the finished hydrogen fuel:

(a) The transferor remains the opt-in party unless the transferor and the recipient agree that the recipient is the opt-in party under (b), who:

(A) Must comply with the registration, recordkeeping and reporting requirements under OAR 340-253-0100 for the fuel;

(B) Is responsible for surplus and shortfall calculations under OAR 340-253-1020; and

(C) May generate surpluses under OAR 340-253-1000(4).

(b) The transferor and recipient may agree in writing for the recipient to be the opt-in party for the fuel, by the time fuel ownership is transferred.

(A) The product transfer document must clearly indicate that the recipient is now the opt-in party who must comply with the registration, recordkeeping and reporting requirements under OAR 340-253-0100 for the fuel.

(B) The recipient:

(i) Must comply with the registration, recordkeeping and reporting requirements under OAR 340-253-0100 for the fuel;

(ii) Is responsible for surplus and shortfall calculations under OAR 340-253-1020; and

(iii) May generate surpluses under OAR 340-253-1000(4).

(C) The transferor is no longer required to comply with the registration, recordkeeping and reporting requirements under OAR 340-253-0100 for the fuel, except for maintaining the product transfer documentation under OAR 340-253-0600.

340-253-0400

Fuel Carbon Intensity Values

(1) **Statewide carbon intensity values.**

(a) A regulated or opt-in party must use the statewide average carbon intensity value in Table 1 or 2 under OAR 340-253-3010 or -3020, as applicable, for the following fuels:

(A) Gasoline;

(B) Diesel fuel;

(C) Compressed fossil natural gas derived from natural gas not imported to North America in liquefied form;

(D) Liquefied petroleum gas; and

(E) Electricity, unless an electricity provider meets the conditions under subsection (1)(b) and proposes a different carbon intensity value.

(b) The opt-in party for electricity may propose a carbon intensity value different from the statewide average carbon intensity value if the electricity provider:

(A) Only provides electricity for transportation; and

(B) Is exempt from the definition of public utility under ORS 757.005 (1)(b)(G), and is not regulated by the Oregon Public Utility Commission.

(c) Every three years, DEQ must review the statewide average carbon intensity values in Table 1 or 2 under OAR 340-253-3010 or -3020 and must:

(A) Consider the crude oil and other energy sources, production processes and flaring rates and other considerations that might affect the lifecycle carbon intensity of fuel used in Oregon; and

(B) Propose the EQC revise and update statewide average carbon intensity values in Table 1 or 2 under OAR 340-253-3010 or -3020 if DEQ determines that values should be changed by more than 5 gCO2e per MJ or 10 percent.

(2) **Carbon intensity values for established pathways.** Except as provided in section (3), regulated and opt-in parties must use the carbon intensity values for ethanol, biodiesel, biomass-based diesel, liquefied natural gas, biogas compressed natural gas, biogas liquefied natural gas, hydrogen, liquefied petroleum gas and any fossil compressed natural gas produced from natural gas that arrives in North America in liquefied form that best matches each fuel's carbon intensity, as listed in Table 1 or 2 under OAR 340-253-3010 or -3020, as applicable.

(3) **Individual carbon intensity values.**

(a) **Directed by DEQ.** A regulated or opt-in party must obtain 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 1 or 2 under OAR 340-253-3010 or -3020; and

(B) Directs the regulated or opt-in party to obtain an individual carbon intensity value under OAR 340-253-0450.

(b) **Election of the party.** A regulated or opt-in party may propose an individual carbon intensity value for a fuel if:

(A) The fuel's carbon intensity, when compared to the carbon intensity value for the most similar fuel type in Table 1 or 2 under OAR 340-253-3010 or -3020, as applicable, changes by at least 5.0 gCO2e per MJ or 10 percent;

(B) The party has the capacity and intent to provide more than one million gge per year of the fuel in Oregon unless all providers of that fuel type supply less than one million gge per year in total; and

(C) The party applies for and obtains DEQ approval under OAR 340-253-0450.

(c) **New fuel or feedstock.** A regulated or opt-in party must obtain approval for an individual carbon intensity value under OAR 340-253-0450 for any fuel not included in Table 1 or 2 under OAR 340-253-3010 or -3020 and for any fuel made from a feedstock not represented in a carbon intensity value in Table 1 or 2 under OAR 340-253-3010 or -3020. The party must submit a modification to the original registration under OAR 340-253-0500(5) within 30 days,

(d) **Process change notification**. The regulated or opt-in party must notify DEQ and obtain approval for an individual carbon intensity value under OAR 340-253-0450 for any changes to the fuel production process, if the fuel's carbon intensity value changes by more than 5.0 gCO2e per MJ or 10 percent. The party must submit a modification to the original registration under OAR 340-253-0500(5) within 30 days.

(4) **OR-GREET.** The regulated or opt-in party 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.

(5) **Calculation requirements**. When a regulated or opt-in party calculates a carbon intensity

value of:

(a) Fuels made from biomass feedstock, the party may assume that the combustion and growing components of the fuel's lifecycle greenhouse gas emissions have net zero lifecycle carbon dioxide emissions.

(b) Fuels made from petroleum feedstock, including waste petroleum feedstock, the party may not assume that the combustion of the fuel has net zero carbon dioxide emissions.

(c) Fuels made from waste feedstock, the party may assume that the lifecycle greenhouse gas emissions analysis of the carbon intensity value begins when the original product becomes waste.

340-253-0450

Approval for Individual Carbon Intensity Values

(1) **Individual carbon intensity value approval**. The regulated or opt-in party may not use an individual carbon intensity value without written DEQ approval under this rule. Individual carbon intensity values are not available for the fuels listed under OAR 340-253-0400(1)(a).

(a) **OR-GREET input modifications.** The regulated or opt-in party may propose a modification to inputs into the OR-GREET model that more accurately reflect the specific carbon intensity of the fuel.

(b) **OR-GREET model modifications.** The regulated or opt-in party may propose modifications to the OR-GREET model. 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.

(c) **Non-OR-GREET modifications**. The regulated or opt-in party may propose modifications based on any lifecycle assessment model other than OR-GREET. 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 or opt-in party must supply documentation necessary for DEQ to determine that the method used to calculate the individual carbon intensity value under section (1) is reliable and at least comparable to the approved version of OR-GREET.

(3) **Modification submittal.** The regulated or opt-in party must submit all documentation for the proposed modifications under this rule including all:

(a) Supporting data;

(b) Calculations;

(c) Flow diagrams;

(d) Equipment description;

(e) Maps; and

(f) Any other information DEQ may need to verify the fuel type and the method for calculating the proposed individual carbon intensity value.

(4) **Review process**. DEQ must determine whether the proposal is complete within 15 workdays after receipt of any modification submitted under section (3):

(a) If DEQ determines the proposal is incomplete, DEQ must notify the regulated or opt-in party and identify the deficiencies. DEQ has 15 workdays to determine if the supplemental submittal is complete, or to notify the party and identify the continued deficiencies.

(b) If DEQ determines the proposal is complete, DEQ must:

(A) Publish the application on the Oregon Clean Fuels Program website; and

(B) Approve or deny an individual carbon intensity value under section (5) or (6).

(5) **DEQ approval**. A regulated or opt-in party 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 1 or 2 under OAR 340-253-3010 or -3020, as applicable, in a future rulemaking.

(6) **DEQ denial**. If DEQ determines the proposal for an individual carbon intensity value is not complete or adequately documented to establish its reliability, DEQ must deny the modification proposal, notify the party which carbon intensity value to use and identify the basis for the denial.

340-253-0500

Registration

(1) **Registration information**. To register, a regulated or opt-in party must submit the following to DEQ:

(a) Company identification, including a physical and mailing address, phone number, e-mail address and a contact name.

(b) The fuel type(s) that will be sold, supplied or offered for sale in Oregon.

(c) The producer of the fuel, including its physical address and a contact name, for each fuel type.

(d) The regulated or opt-in party's proposed carbon intensity value for each fuel type. The proposed carbon intensity value must be:

(A) A statewide carbon intensity value for any fuel listed under OAR 340-253-0400(1);

(B) An individual carbon intensity value listed in Table 1 or 2 under OAR 340-253-3010 or -3020; or

(C) A proposal to obtain a new individual carbon intensity value under OAR 340-253-0450.

(e) Other information requested by DEQ related to registration.

(2) **Completeness of submittal.** DEQ must review the information submitted under section (1) to determine if the submission is complete.

(a) If DEQ determines the submission is incomplete, DEQ must notify the party of the information needed to complete the submission. The party must provide the requested information within 30 calendar days from the date on the request.

(b) If DEQ determines the submission is complete, DEQ must 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 automatically deemed complete.

(3) **Determination of carbon intensity values.** DEQ must review the proposed carbon intensity values to determine if they are accurate. DEQ must review proposed carbon intensity values as follows:

(a) For a proposed carbon intensity value listed in Table 1 or 2 under OAR 340-253-3010 or -3020, DEQ must review whether the fuel type accurately matches the fuel and fuel production process of the proposed carbon intensity value listed.

(b) For a proposed individual carbon intensity value, DEQ must approve the carbon intensity value or notify the party which carbon intensity value to use under OAR 340-253-0450.

(4) **Registration approval**. DEQ must notify the party in writing of its registration approval. The notification must include confirmation of the carbon intensity value for each fuel type to be used in calculating surpluses and shortfalls under OAR 340-253-1020.

(5) **Modifications to registration**.

(a) The party must submit an amended registration to DEQ within 30 days of any change occurring to information described in section (1), including any change that would result in a different carbon intensity value.

(b) DEQ may require a party to submit an amended registration based on new information that DEQ obtains from any source.

(6) **Opting out**. To opt-out, an opt-in party must notify DEQ in writing. Regulated parties may not opt-out.

340-253-0600

Records

(1) **Records.** Each regulated and opt-in party must retain the following records for at least five years:

(a) Copies of all data and reports submitted to DEQ;

(b) Records of each fuel transaction made including:

(A) Volume of fuel;

(i) In gallons for liquid fuels including gasoline, diesel fuel, ethanol, biomass-based diesel, liquefied natural gas and liquefied petroleum gas;

(ii) In standard cubic feet for compressed natural gas;

(iii) In kilowatt-hours for electricity; and

(iv) In kilograms for hydrogen fuel.

(B) Names of the transferor and recipient;

(C) Whether the compliance obligation was transferred from the transferor to the recipient or retained;

(D) Carbon intensity of the fuel;

(E) Producer of the fuel;

(F) Invoice date;

(G) Unique transaction identification such as a bill of lading number;

(H) Product transfer documents;

(I) Exempt status documentation under OAR 340-253-0250, if fuel is excluded from surplus and shortfall calculations under OAR 340-253-1010; and

(J) For fuel that is exported outside Oregon, where the party is the exporter of record.

(c) Records used to document how a fuel is transported or conveyed to Oregon, if not produced in Oregon;

(d) Records used to calculate the carbon intensity of the fuel;

(e) Records used to calculate surpluses and shortfalls; and

(f) Other records used to determine compliance with the Oregon Clean Fuels Program.

(2) **Review**. All data, records and calculations used by a regulated or opt-in party to comply with the Oregon Clean Fuels Program are subject to verification by DEQ. The party must provide records retained under section (1) within 60 calendar days after the date DEQ requests a review of the records, unless otherwise specified.

340-253-0630

Quarterly Reports. Quarterly reports must include the following information, in a format provided or approved by DEQ:

(1) For each fuel type sold, supplied or offered for sale in Oregon:

(a) The total volume; and

(b) Carbon intensity.

(2) Surpluses and shortfalls as calculated under OAR 340-253-1020, including the;

(a) Amount of surpluses and shortfalls generated during the quarter; and

(b) Quarterly and year-to-date net balance calculations under OAR 340-253-1030 for gasoline and gasoline substitutes and diesel and diesel substitutes.

(3) The volumes of any exempt fuels or fuels transferred to exempt users under OAR 340-253-0250; and

(4) Volumes exported outside Oregon.

340-253-0650

Annual Reports. Annual reports must include the following information, in a format provided or approved by DEQ:

(1) Company name of the regulated or opt-in party;

(2) Signature of a responsible official representing the regulated or opt-in party and certifying that the report is accurate to the best of the official's knowledge;

(3) For each fuel type sold, supplied or offered for sale during the calendar year:

(a) The total volume; and

(b) Carbon intensity.

(4) Surpluses or shortfalls as calculated under OAR 340-253-1020, including the;

(a) Amount of surpluses and shortfalls carried over from the previous year; and

(b) Amount of surpluses and shortfalls generated during the year.

(5) Net balance calculations under OAR 340-253-1030 for gasoline and gasoline substitutes and diesel and diesel substitutes;

(6) The volumes of any exempt fuels or fuels transferred to exempt users under OAR 340-253-0250; and

(7) Volumes exported outside Oregon.

340-253-1000

Surplus and Shortfall Basics

(1) **Carbon intensity values.**

(a) Except as provided in subsection (b), when calculating carbon intensity values, the regulated or opt-in party must use the DEQ carbon intensity value approved under OAR 340-253-0500.

(b) If the regulated or opt-in party 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 party must use the carbon intensity value proposed in its registration.

(2) **Fuel quantities.** When calculating and reporting fuel quantities, the regulated or opt-in party must:

(a) Use energy units in MJ. To convert other energy units to MJ, the party must multiply the unit by the corresponding energy density under Table 3 under OAR 340-253-3030, and use the BTU-to-MJ conversion factor of 1,055 J per BTU.

(b) Express quantities to the nearest whole unit applicable for that quantity such as gallons, standard cubic feet, kilowatt-hours or pounds.

(3) **Metric tons of CO2 equivalent.** When reporting surpluses and shortfalls, the regulated or opt-in party must express quantities to the nearest whole metric ton of carbon dioxide equivalent.

(4) **Surplus generation.** A party generates a clean fuel surplus when:

(a) The carbon intensity of a fuel identified under OAR 340-253-1010 is lower than the corresponding baseline carbon intensity value for gasoline and gasoline substitutes or diesel fuel and diesel substitutes;

(b) The party has a DEQ-approved carbon intensity value; and

(c) The party demonstrates that the fuel is:

(A) Biodiesel, ethanol, or any other liquid fuel other than liquefied natural gas delivered to a public or private access fueling facility in Oregon;

(B) Electricity used in Oregon to charge a motor vehicle; or

(C) Compressed or liquefied natural gas, hydrogen fuel or liquefied petroleum gas dispensed in Oregon for use in a motor vehicle.

(5) **Shortfall generation.** A party generates a clean fuel shortfall when:

(a) The carbon intensity of a fuel identified under OAR 340-253-1010 is higher than the corresponding baseline carbon intensity value for gasoline and gasoline substitutes or diesel fuel and diesel substitutes; and

(b) The fuel is imported to Oregon or produced by an Oregon producer for use in Oregon for use in a motor vehicle.

(6) **Nature of surpluses**. Clean fuel surpluses are a regulatory instrument and do not constitute personal property, instruments, securities or any other form of property. Surpluses are not credits and may not be used to meet any compliance obligations other than as specified in this division.

340-253-1010

Fuels to include in surplus and shortfall calculation

(1) **Fuels included.** A regulated or opt-in party must calculate surpluses and shortfalls for all regulated and opt-in fuels under OAR 340-253-0200 that are not otherwise exempt under OAR 340-253-0250, excluding fuels that are exported outside Oregon.

(2) **Fuels excluded**. Except as provided in section (3), the regulated or opt-in party may not include fuels excluded under OAR 340-253-0250 in surplus and shortfall calculations.

(3) **Fuels sold to exempt users**. The regulated or opt-in party may include or exclude fuel sold to an exempt user under OAR 340-253-0250 from the surpluses and shortfalls calculations.

(a) If the party includes the fuel, the party must include all fuel volumes listed on an invoice or all fuels included in a single or simultaneous delivery of fuel, regardless of how many invoices are used.

(b) If the party excludes the fuel, the party must document and report all excluded fuels under OAR 340-253-0600 through OAR 340-253-0650.

340-253-1020

Calculating Surpluses or Shortfalls

(1) The regulated or opt-in party must calculate surpluses and shortfalls for each fuel type included under 340-253-1010 using the surplus and shortfall basics under OAR 340-253-1020 to calculate the following:

(a) Energy in MJs by multiplying the amount of fuel by the energy density of the fuel in Table 3 under OAR 340-253-3030;

(b) Adjusted energy in MJs by multiplying the energy in MJs from (1)(a) by the energy economy ratio of the fuel using Table 4 or 5 under OAR 340-253-3040 or -3050 for gasoline and gasoline substitutes or diesel fuel and diesel substitutes;

(c) Carbon intensity difference by subtracting the fuel's carbon intensity value from the corresponding baseline carbon intensity value for gasoline and gasoline substitutes or diesel fuel and diesel substitutes;

(d) Grams of carbon dioxide equivalent by multiplying the adjusted energy in MJs in (1)(b) by the carbon intensity difference in (1)(c); and

(e) Metric tons of carbon dioxide equivalent by dividing the grams of carbon dioxide equivalent in (1)(c) by 1,000,000.

(2) If the fuel has a carbon intensity:

(a) Higher than the corresponding baseline carbon intensity value for gasoline and gasoline substitutes or diesel fuel and diesel substitutes, the absolute value of the metric tons of carbon dioxide equivalent under subsection (1)(e) is a shortfall.

(b) Lower than the corresponding baseline carbon intensity value for gasoline and gasoline substitutes or diesel fuel and diesel substitutes, the absolute value of the metric tons of carbon dioxide equivalent under subsection (1)(e) is a surplus.

340-253-1030

Net Balance Calculation. A regulated or opt-in party must calculate the net balance at the end of the reporting period using the following formula: Net balance = $Surpluses_{Generated}$ + $Surpluses_{Forward}$ − $Shortfalls_{Generated}$ − $Shortfalls_{Forward}$ where:

(1) $Surpluses_{Generated}$ is the total surpluses generated using calculations under OAR 340-253-1020;

(2) $Surpluses_{Forward}$ is the surpluses carried forward from the previous reporting period;

(3) $Shortfalls_{Generated}$ is the total shortfalls generated using calculations under OAR 340-253-1020; and

(4) $Shortfalls_{Forward}$ is the shortfall carried forward from the previous reporting period.

340-253-3000

Tables used for the Oregon Clean Fuels Program

340-253-3010
Table 1 - Oregon Carbon Intensity Lookup Table for Gasoline and Gasoline Substitutes

Table 1

Oregon Carbon Intensity Lookup Table for Gasoline and Gasoline Substitutes

Fuel	Feedstock/Fuel Production Process	Carbon Intensity Values (gCO2e per MJ)			
		Direct Emissions	Land Use Change or Other Indirect Effect	Energy Economy Ratio Applied	Final
Gasoline	Based on a weighted average of gasoline supplied to Oregon	92.34	-	1	92.34
Ethanol from Corn	GREET default adjusted for transport to Oregon	64.80	-	1	64.80
	Wet Mill, Natural Gas	64.52	-	1	64.52
	Wet Mill, Coal	90.99	-	1	90.99
	Dry Mill, Wet DGS, Natural Gas	57.00	-	1	57.00
Ethanol from Sugarcane	GREET defaults adjusted for transport to Oregon	26.44	-	1	26.44
Cellulosic Ethanol	Farmed trees	15.54	-	1	15.54
	Wheat straw	20.90	-	1	20.90
	Forest residue	20.49	-	1	20.49
	Mill waste	12.31	-	1	12.31
Compressed Natural Gas	North American natural gas delivered via pipeline; compressed in Oregon	71.41	-	1	71.41
	Landfill gas cleaned to pipeline quality	11.26	-	1	11.26
Liquefied Natural Gas	North American natural gas delivered via pipeline; liquefied in Oregon w/ 80% efficiency	83.13	-	1	83.13
	Overseas liquefied natural gas delivered to Oregon; re-gasified then re-liquefied w/ 80% efficiency	93.37	-	1	93.37
	Overseas liquefied natural gas delivered to Oregon; no re-gasification or re-liquefaction	77.50	-	1	77.50
Electricity	Oregon average electricity mix 2015	154.98	-	4.1	37.81
	Oregon average electricity mix 2016	154.98	-	4.0	38.75
	Oregon average electricity mix 2017	154.98	-	3.9	39.74
	Oregon average electricity mix 2018	154.98	-	3.8	40.78
	Oregon average electricity mix 2019	154.98	-	3.7	41.89
	Oregon average electricity mix 2020	154.98	-	3.6	43.05
	Oregon average electricity mix 2021	154.98	-	3.5	44.28
	Oregon average electricity mix 2022	154.98	-	3.4	45.58
	Oregon average electricity mix 2023	154.98	-	3.3	46.96
	Oregon average electricity mix 2024	154.98	-	3.2	48.43

	Oregon average electricity mix 2025	154.98	-	3.1	49.99
Liquefied Petroleum Gas	Liquefied Petroleum Gas, Crude and NG Mix	83.05	-	1	83.05

340-253-3020
Table 2 - Oregon Carbon Intensity Lookup Table for Diesel Fuel and Diesel Substitutes

Table 2

Oregon Carbon Intensity Lookup Table for Diesel Fuel and Diesel Substitutes

Fuel	Feedstock/Fuel Production Process	Carbon Intensity Values (gCO2e per MJ)			
		Direct Emissions	Indirect Land Use Change or Other Indirect Effect	Energy Economy Ratio Applied	Final
Ultra Low Sulfur Diesel	Based on a weighted average of diesel fuel supplied to Oregon	91.53	-	1	91.53
Renewable Diesel	Soybeans to renewable diesel	21.70	-	1	21.70
Biodiesel	Soybean GREET default adjusted for transport to Oregon	20.00	-	1	20.00
	Canola	27.31	-	1	27.31
	Used cooking oil to fatty acid methyl esters – FAME	10.3	-	1	10.3
	Tallow	16.85	-	1	16.85
Compressed Natural Gas	North American natural gas delivered via pipeline; compressed in Oregon	71.41	-	0.94	75.97
	Landfill gas cleaned to pipeline quality	11.26		0.94	11.98
Liquefied Natural Gas	North American natural gas delivered via pipeline; liquefied in Oregon w/ 80% efficiency	83.13	-	0.94	88.44
	Overseas liquefied natural gas delivered to Oregon; re-gasified then re-liquefied w/ 80% efficiency	93.37	-	0.94	99.33
	Overseas liquefied natural gas delivered to Oregon; no re-gasification or re-liquefaction	77.50	-	0.94	82.45
Electricity	Oregon average electricity mix	154.98	-	2.70	57.4
Liquefied Petroleum Gas	Liquefied Petroleum Gas, Crude and NG Mix	83.05	-	1	83.05

340-253-3030
Table 3 - Oregon Energy Densities of Fuels

Table 3

Oregon Energy Densities of Fuels

Fuel (units)	MJ/unit
Gasoline (gallon)	116.09 (MJ/gallon)
Diesel fuel (gallon)	129.49 (MJ/gallon)
Compressed natural gas (standard cubic feet)	0.98 (MJ/standard cubic feet)
Electricity (kilowatt hour)	3.60 (MJ/kilowatt hour)
Denatured Ethanol (gallon)	80.53 (MJ/gallon)
Neat Biomass-based Diesel (gallon)	119.55 (MJ/gallon)
Liquefied natural gas (gallons)	100.00 (MJ/gallon)
Hydrogen (kilograms)	123.00 (MJ/kilogram)
Liquefied petroleum gas (gallons)	96.5 (MJ/gallon)

340-253-3040
Table 4 - Oregon Energy Economy Ratios for Fuel used in Light-Duty Applications

Table 4

Oregon Energy Economy Ratios for Fuel Used in Light-Duty Applications

Year	Fuel/Vehicle Combination Energy Economy Ratio			
	Gasoline or any ethanol blend	Compressed natural gas / liquefied petroleum gas/ Internal combustion engine vehicle	Hydrogen or fuel cell vehicle	Electricity / battery electric vehicle, or plug-in hybrid electric vehicle
2015	1.0	1.0 (needs to be adjusted: not reformulated gasoline)	3.0 (needs to be adjusted: not reformulated gasoline)	4.1
2016	1.0	To be announced[1]	3.0	4.0
2017	1.0	To be announced[1]	2.9	3.9
2018	1.0	To be announced[1]	2.8	3.8
2019	1.0	To be announced[1]	2.8	3.7
2020	1.0	To be announced[1]	2.7	3.6
2021	1.0	To be announced[1]	2.6	3.5
2022	1.0	To be announced[1]	2.5	3.4
2023	1.0	To be announced[1]	2.5	3.3
2024	1.0	To be announced[1]	2.4	3.2
2025	1.0	To be announced[1]	2.3	3.1

[1] A future Clean Fuels Program review will include analysis of the energy economy ratios for light-duty applications to determine the values for 2015 through 2025.

340-253-3050
Table 5 - Oregon Energy Economy Ratios for Fuel Used in Heavy-Duty Applications

Table 5 Oregon Energy Economy Ratios for Fuel Used in Heavy-Duty Applications			
Fuel/Vehicle Combination Energy Economy Ratio			
Diesel fuel or Biomass-based diesel blends	**CNG or LNG**	**Hydrogen or fuel cell vehicle**	**Electricity / battery electric vehicle, or plug-in hybrid electric vehicle**
1.0	0.94	1.9	2.7

Summary of public comment and agency responses

Title of Rulemaking: Oregon Clean Fuels Program
Prepared by: Cory-Ann Wind
Date: November 2, 2012

Comment period

DEQ opened the public comment period July 20, 2012, and closed it at 5 p.m. on Aug. 31, 2012. DEQ held a public hearing hosted by the Environmental Quality Commission Aug. 24, 2012, at 9 a.m. at the DEQ headquarters office, 811 SW 6th Avenue, Portland, Oregon. DEQ regional offices in Eugene, Medford, Bend and Pendleton were also open to citizens to participate in the hearing via conference phone. 15 individuals in Portland and one in Medford testified. 102 people submitted comments; 16 oral and 87 written.

Organization of comments and responses

Summaries of individual comments and DEQ's responses are provided below. Comments are summarized in categories. Those who provided each comment are referenced by number. A list of commenters and reference numbers follows the summary of comments and responses.

Summary of comments and agency responses			
Comment #	**Comment**	**DEQ's response**	**Reference #**
1	Adopt standard and move forward with the Clean Fuels Program. Support removing sunset.	Thank you for your comment.	5, 6, 7, 12, 14, 17, 18, 19, 21, 22, 26, 27, 32, 35, 40, 42, 48, 49, 50, 51, 52, 54, 55, 56, 61, 63, 64, 66, 72, 79, 80, 84, 87, 89, 92, 94, 97, 102
2	Support Clean Fuels Program as a key element to achieving a clean, low-carbon energy future. Improve environmental performance of the transportation system. Program to provide strong incentive for sustainable fuel companies to set up operations in Oregon.	Thank you for your comment.	1, 20, 23, 28, 31, 58, 62, 67
3	Adopt Clean Fuels Program. Concerned about the air pollution	Thank you for your comment.	2, 8, 10, 47, 53, 60, 77,

	and greenhouse gas emissions associated with burning fossil fuels.		86, 98
4	Opposes Clean Fuels Program. Suspend further action. Do not adopt the Program.	In response to comments, DEQ proposes to remove the deferred Phase 2 requirements from this rulemaking. As originally intended, DEQ will use the information collected in this administrative phase of program, along with continued discussions with stakeholders and legislators, to inform our recommendations for the next phase of the program.	3, 11, 13, 15, 25, 43, 65, 69, 71, 95, 96, 99, 100
5	The program will put Oregon at a competitive disadvantage to other states.	In response to comments, DEQ proposes to implement only the Phase 1 requirements at this time. As a result, businesses in Oregon will not be at a competitive disadvantage to those in other states. If Phase 2 is adopted, DEQ will to evaluate and refine the program design to ensure that this does not occur.	4, 69, 71
6	The Oregon program is modeled after an unconstitutional California program.	Several stakeholder groups are challenging California's program in court and Oregon is following those proceedings. The issues under litigation in California do not apply to Phase 1 of Oregon's program. When a final ruling is made on the California lawsuit, we will analyze the outcome to see what, if any, changes are needed to the Oregon program.	3, 4, 11, 25, 69, 71, 88, 95, 99, 100
7	The new CAFE standards negate the need for this program.	Cleaner car technology (more miles per gallon) is only part of the solution to reducing greenhouse gas emissions from transportation sources. Providing cleaner fuels (fewer emissions per gallon) and driving less (fewer miles travelled) must also be part of the solution.	4
8	This program is effectively a cap and trade program.	The Clean Fuels Program does not set a cap on emissions. It establishes a performance standard that is an average amount of carbon emitted per unit of energy. Regulated parties must meet the standards and can choose how to comply with that standard by supplying lower carbon fuels or purchasing credits.	4
9	There is concern about the effects of	During this first phase of the program,	3, 71, 100

	higher blends of biofuels.	there is no requirement to change from the current supply of fuels so there should not be any added concern from the blends that are currently available. If adopted at a later date, the second phase of the program would not change any of the state or federal requirements on the amount of biofuels that can be blended with gasoline or diesel.	
10	The lower carbon fuels needed for this program do not exist in commercial quantities. This will lead to higher fuel costs.	House Bill 2186 specifically required safeguards to protect against increased fuels costs due to the program. During Phase 1, the proposed rule will not require any new fuels. Even so, many lower carbon fuels exist today at commercial quantities and at lower costs than petroleum fuel. Natural gas, propane, electricity, biodiesel made from soy beans, canola and recycled cooking oil and ethanol made from corn and sugar cane are all current options. If Phase 2 is adopted later, it will be gradually phased in to ensure time for additional low carbon fuels to be available in necessary quantities.	3, 4, 25, 69, 71, 95, 96, 100
11	The program almost immediately relies on the availability of cellulosic ethanol.	The economic analysis conducted determined that Oregon fuel distributors will be able to meet the standards for at least the first five years if Oregon receives its proportional share of renewable fuels already required by the federal Renewable Fuels Standard. Expanded use of cellulosic ethanol is one of many potential compliance options that fuel distributors may use when and if Phase 2 of the program is adopted. During this first phase of the program, there is no requirement to change from the current supply of fuels.	4, 11
12	The economic analysis incorrectly assumes that there are no Oregon cellulosic ethanol facilities to offset the negative economic impacts of the program.	Cellulosic feedstocks can be agricultural wastes, forest residue, recovered construction materials and dedicated energy crops; all of which can be grown or gathered in Oregon. Currently, there is a cellulosic ethanol facility being constructed in Boardman that will	4

		produce ethanol from farmed hybrid poplar trees and wheat straw.	
13	Special blending formulations, requiring special equipment, logistics and compliance costs, will be necessary and passed on to the consumer. Fuel distributors that provide fuel to exempt parties may need additional capacity in order to provide different blends to multiple customers.	The Clean Fuels Program provides great flexibility in approaches regulated parties may use to comply with the standards. Because of this, DEQ expects that fuel distributors will select the least-cost option for meeting the standards when and if Phase 2 applies. During this first phase of the program, there is no requirement to change from the current supply of fuels.	4, 15, 25, 65, 71, 100
14	The release mechanisms for suspending the program due to price increase or supply shortage is inadequate.	This comment is not applicable to the Phase 1 requirements proposed in this rulemaking. House Bill 2186 directed EQC to provide safeguards in the form of exemptions and deferrals to prevent fuel supply or price issues that could put Oregon at a competitive disadvantage. DEQ has proposed a mechanism the agency believes will be effective if adequately funded. DEQ will evaluate, refine and test the deferral mechanisms during the implementation of Phase 1.	4, 11, 25, 65, 69, 71, 99, 100
15	Include propane, liquefied petroleum gas, as an opt-in fuel in the program.	DEQ agrees to add propane into the program as an opt-in fuel and has made the appropriate changes throughout the rules.	9, 74
16	The federal Renewable Fuel Standard negates the need for this program.	The federal renewable fuel standard does not necessarily guarantee lower carbon fuels. The standard also does not apply to all lower carbon fuels such as electricity, propane or natural gas. The renewable fuel standard is a national production mandate, but it does not create demand for renewable fuel to be consumed in Oregon. Since Oregon is committed to reaching its greenhouse gas reduction goals, the Clean Fuels Program is needed to ensure that greenhouse gas reduction from transportation sector fuels occurs in Oregon.	11, 71
17	We support the market-based, technology-neutral policy to cut petroleum dependence, reduce carbon emissions and create a	Thank you for your comment.	16, 24, 29, 30, 39, 59, 93, 97

	market for new clean fuels.		
18	Deferring the actual reductions of lifecycle carbon emissions delays the economic and health benefits of the program and extends the volatility of the petroleum market.	DEQ agrees that delaying Phase 2 delays the benefits of the program. DEQ is committed to working with the elected officials, stakeholders and the EQC to develop and implement the next phase of the program as directed by the Legislature. Delayed benefits will be considered alongside costs and other implementation issues as part of DEQ's recommendation for Phase 2.	18, 38
19	Amend language for the party generating credits with liquefied natural gas.	OAR 340-253-0320(3) and (4) have been changed to "the owner of the liquefied natural gas when it is transferred to the facility at which the liquefied natural gas is dispensed to motor vehicles."	19
20	Incorporate indirect land use change into program. Defer inclusions of indirect land use change into program.	Acting on the recommendation of its low carbon fuel standards advisory committee, DEQ chose not to include factors for indirect effects at this time. While acknowledging its existence, DEQ is choosing to wait until the scientific in this area becomes clearer. DEQ will evaluate this issue in its recommendation for Phase 2.	33, 71, 88, 100
21	Expand the credit market beyond the regulated and opt-in parties.	The prohibition against non-regulated and non-opt-in parties participating is intended to ensure that outside speculation does not alter the credit market. The low carbon fuel standards advisory committee discussion of this issue can be found on page 89 of DEQ's final report. Since this recommendation is not needed until Phase 2, DEQ will continue to evaluate options for expanding the credit market.	33
22	Develop an electronic trading platform to facilitate a real-time market for clean fuels credits.	Since this recommendation is not needed until Phase 2, DEQ will continue to evaluate options for an electronic trading platform.	33
23	Incorporate a flexible compliance mechanism to provide certainty to a regulated party if they are unable to meet the standard.	Since this is a Phase 2 issue, DEQ will evaluate options for creating a flexible compliance mechanism in the next phase of the program.	33
24	Support this bipartisan initiative. As people involved in the low carbon	Thank you for your comment.	34, 36, 37, 44, 45, 46,

	fuel industry, we depend on the market certainty that the program can provide. Adopt program and support removal of the sunset.		68, 73, 83, 90, 91, 103
25	Supporting "good" not just punishing "bad". Not overly prescriptive, leaves freedom to innovate. Catalyst to other Oregon industries. Reporting costs are not a major concern.	Thank you for your comment.	38
26	Decisions about low carbon fuels should be made at the federal level.	Thank you for your comment. At this time, a low carbon fuel standard is not being considered at the federal level. It is possible that development of innovative approaches to address the carbon intensity of fuel at the state level will eventually lead to a federal program.	41
27	Include all applicable tax credits and incentives as well as federal RIN values when establishing the average price of fuels.	Since this is a Phase 2 issue, refinement of these provisions can continue to be developed pending a future rulemaking. DEQ will consider these factors when assessing the price and availability of low carbon fuels that would be needed when and if Phase 2 of the program is adopted.	57
28	A description of credit transactions is not included.	Since this is a Phase 2 issue, DEQ can continue to refine these provisions pending a future rulemaking. Phase 1 of the program does not include the generation, banking or transfer of credits. DEQ will evaluate the need for further description of credit transactions in developing its recommendation for Phase 2.	71
29	The fiscal analysis should include fee on regulated parties.	While the potential for a fee on regulated parties was identified in the public notice for the Clean Fuels Program, it was not included in the fiscal and economic impact because it is only a legislative concept at this time. If the Legislature approves fee authority, DEQ will conduct a separate rulemaking to establish a fee schedule and will work with stakeholders to assess its fiscal and economic impact.	71, 100
30	The fiscal and economic impact statement should include implementation of the full (both	The fiscal and economic impact analysis includes both parts of the program; because the requirements of Phase 2 were	71, 100

	Phase 1 and 2) program.	deferred in the proposal, the cost to comply with Phase 2 was determined to be zero. The revised proposal only includes Phase 1, so the cost of Phase 2 remains zero. If DEQ initiates rulemaking to adopt Phase 2, the fiscal and economic impact will be analyzed to incorporate the cost of complying with the Phase 2 requirements.	
31	The program should recognize that different fuels have different sources and different impacts and should consider a multimedia evaluation.	With regards to greenhouse gas emissions, the lifecycle analysis used in this program accounts for these differences. However, the non-GHG impacts are not currently addressed in the program and will be considered in a future program review if Phase 2 of the program is adopted.	72, 100
32	Recommend energy density and carbon intensity for propane.	DEQ has updated OAR 340-253-3010, -3020 and -3030 (the tables for carbon intensity and energy density) for propane.	75
33	Registration requirements in multiple locations are confusing.	OAR 340-253-0100(2), (4) and OAR 340-253-0500 have all been modified to be consistent.	76
34	The amount of information required for registration is unwarranted.	The language in OAR 340-253-0500(1) has been modified to be more focused.	76, 100
35	Include process to update fuel registration.	OAR 340-253-0500(5) includes a process to modify a registration within 30 days of changing any information contained in the original registration.	76
36	Quarterly reporting in Phase 1 is unnecessary.	During the initial phase of the program, one of the objectives of the quarterly report is to gain experience with calculating surpluses and shortfalls relative to the baseline carbon intensity values. This exercise is largely the same as that of calculating credits and deficits if the next phase of the program is implemented. Implementing just Phase 1 at this time will allow both regulated parties and DEQ time to refine recordkeeping and reporting tools to minimize the cost of complying with the next phase of the program. In partial response to the comment, however, DEQ proposes to delay the initial quarterly report from 2013 until 2014.	76, 100

37	Change definition of importer to "the person who owns the fuel when it enters into Oregon."	If the definition of importer were changed as suggested, there is the potential that truckers, railroads, barges and other transporters could become regulated. In an attempt to minimize the number of small businesses being regulated (in response to comments received during the fiscal advisory committee process), the clarification language of "in the stationary storage tank into which the product was first transferred after it was imported" was inserted.	76
38	There should be separate treatment of rack sales and bulk sales.	One of the objectives of the initial phase of this program is to collect enough information to inform the development of the next phase. For this phase, DEQ has determined that inclusion of all sales, both rack and bulk, are necessary to recommend whether to include both rack and bulk sales into the requirements for implementation of the next phase of the program.	76
39	Records for export volumes should be required only for volumes for which the party is the exporter of record.	DEQ amended OAR 340-253-0600(1)(J) to add the phrase "where the party is the exporter of record."	76, 100
40	The product transfer documents should identify the fuel and CI value and who the fuel was received from.	DEQ modified OAR 340-253-0600(1)(b) to include this information.	76
41	Request 60 days to respond to a records request instead of 15.	DEQ changed OAR 340-253-0600(2) 15 to 60 days.	76
42	Numbering in OAR 340-253-0310(5) is incorrect.	OAR 340-253-0310 has been renumbered.	76
43	Provide an opportunity for out-of-state producers and marketers to voluntarily opt-in to the program.	DEQ is very interested in incorporating this provision into the Oregon program. We will work with California and stakeholders to develop provisions that can be included in a future rulemaking.	78, 88
44	Agree with definition and requirements of "small importer".	Thank you for your comment.	78
45	Develop web-based registration form.	DEQ intends to modify California's electronic registration form for use in Oregon.	78
46	Please clarify what needs to be included in quarterly versus annual	OAR 340-253-0650 outlines the annual reporting requirements while OAR 340-	78

	reports.	253-0630 outlines the quarterly reporting requirements. For 2013, DEQ expects the annual report to cover the July 1 – December 31 period. For 2014 and beyond, DEQ expects the regulated party to submit information for each quarter including the calculation of surpluses and shortfalls and the net balance calculation as compared to the baseline carbon intensity values for that quarter and year-to-date.	
47	Request on-line listing of registered buyers and sellers.	DEQ intends to provide an on-line list of all parties registered with the program, for both regulated and opt-in parties.	78
48	Please clarify the documentation required for product transfers.	DEQ understands that the bill of lading for a specific volume of fuel transfers from the seller to the buyer upon transfer of the fuel and that the seller no longer has possession of that document once the fuel is transferred. The proposed rules require that there be another legal document that can serve the same purpose for the seller so that it is possible to pair up a seller's and a buyer's documents for the same volume of fuel in order to verify the transfer.	78
49	Additional information is needed to identify individual volumes of fuels transferred.	DEQ has amended OAR 340-253-0600 to include additional requirements.	78
50	Amend requirements for rounding.	DEQ has amended OAR 340-253-1000 to remove specific rounding requirements.	78
51	Credits should not have an expiration date.	This comment is consistent with DEQ's final report of the low carbon fuel standards advisory committee. DEQ concluded that allowing credit banking with no expiration date will encourage early reductions, allow for compliance flexibility and improve the stability of the credit market. However, because credits may not be generated during Phase 1 of the program, the revised proposal does not include provisions for credit generation, banking or transfer. These provisions will be added when and if the next phase of the program is adopted.	78

52	Baseline year should be 2010.	The proposed rules retain the 2010 baseline year for purposes of calculating surpluses and shortfalls during Phase 1. DEQ will explore options for an appropriate program baseline as we continue design work for the next phase of the program.	80
53	Include expertise in fuel pricing and/or supply to implement deferrals.	During Phase 1, DEQ intends to work with the Oregon Department of Energy to test and develop implementation plans for the deferrals. DEQ also plans to recommend hiring or contracting with fuel experts to implement the deferrals when and if the next phase of the program is adopted.	80
54	Do not include all the states in the PADD 5 to compare fuel costs.	DEQ agrees that not all PADD 5 states should be included for the best comparison to Oregon's fuel prices when and if Phase 2 of the program is adopted. The Actual PADD 5 includes Oregon, Washington, Arizona, Nevada, California, Alaska and Hawaii. However, House Bill 2186 defined PADD 5 for purposes of fuel price comparisons as just Oregon, Washington, Arizona and Nevada. The Statutory PADD 5 excludes California since it has a low carbon fuel standard, as well as Alaska and Hawaii since their fuel supplies and costs are significantly different than Oregon's. For gasoline, Oregon's prices would be compared to the other members of the Statutory PADD 5, including Washington, Arizona and Nevada. For diesel, information is not available for the Statutory PADD 5, so DEQ may need to compare Oregon's prices to the average prices for the Actual PADD 5. However, it is DEQ's intent to work with fuel providers to gather diesel price information specific to the Statutory PADD 5 if possible.	80
55	We support the use of exemptions to consider safety, performance and supply issues.	Thank you for your comment.	80

56	We support provision to include new fuels in the future.	Thank you for your comment.	80
57	Extend out-of-state clean fuel supply penalty to the entire northwest.	The program does not have a clean fuel source no-penalty zone or any other similar concept. If the next phase of the program is adopted, all transportation fuel produced or imported to Oregon will need to meet the average carbon intensity standards. Fuel suppliers will compete equally, based on the lifecycle greenhouse gas emissions per unit of energy for their fuels, regardless of where the fuels were produced.	80
58	Extend exempt status of short-line railroads to be a permanent exemption.	DEQ agrees that the short-line railroads face the same fuel supply and distribution issues that justified the exemption for Class 1 railroads. Therefore, DEQ has revised the proposal to exempt the fuel used in short-line railroads from the Clean Fuels Program.	81
59	Opt-in parties should not have the compliance obligation.	Opting in to the program is entirely voluntary. DEQ assumes that an opt-in party is in a position to generate surpluses (credits). The only compliance obligation for an opt-in party is to keep records to document the generation of surpluses (credits) and submit reports. These minimal requirements are an integral part of the credit market to ensure the validity of credits being transferred.	82
60	Credits for electricity should flow to those making the investment.	OAR 340-253-0330 is intended to provide certainty to those involved in providing electricity for use as a transportation fuel. The proposed hierarchy was a way to offer the value of the credits to those most likely to invest, and not preclude any individuals' participation. DEQ recognizes the importance of harmonizing the Clean Fuel Program's rules with those of the Oregon Public Utility Commission and we will continue to work with the PUC and stakeholders to eliminate any unnecessary barriers to participation in the program.	82

61	Rules lack specificity regarding enforcement.	DEQ did not propose any enforcement rules specific to the Clean Fuels Program at this time. Existing rules in OAR 340 Division 12 specify penalties for violations of requirements to register, keep records and report and are adequate for Phase 1 of the program. DEQ intends to rely primarily on technical assistance during the initial phase of the program unless violations are egregious. DEQ will include specific enforcement rules and guidance for Phase 2 when and if DEQ proposes rules for that phase of the program.	82
62	Fundamental weaknesses of the low carbon standard: quantitative regulations are inherently inefficient and ineffective; the off-ramps offer uncertainty and are too complex; no realistic prospect of influencing technological developments, production or pricing of fuels in Oregon; the economic analysis conducted is too simplistic.	DEQ disagrees and has determined, based on its work with its low carbon fuel standards advisory committee, that an Oregon Clean Fuels Program is both achievable and cost-effective. However, the commenter's concerns will be further evaluated as part of DEQ's exploration of the feasibility of Phase 2.	85, 100
63	Support two-phased approach.	Thank you for your comment.	88
64	Use most recent version of GREET available or CA-GREET.	DEQ intends to maintain OR-GREET so that it is current with improvements in carbon intensity modeling science. If a regulated party wishes to propose a carbon intensity based on a model other than the currently approved version of OR-GREET, the party must document the differences between the two versions of GREET so DEQ can assess the accuracy and reliability of the calculations.	88, 100
65	Amend the energy density value for ethanol to represent denatured ethanol.	DEQ has changed Table 3 under OAR 340-253-3030.	88
66	Improper to focus on small businesses based on number of employees.	ORS183.310(10) defines small business for the purposes of conducting its Statement of Need and Fiscal and Economic Impact. Broader discussions about how the proposed regulations could impact businesses outside of this definition can be found in other parts of	100

		the document, including how volume or the number of fuel types affect the resources that are needed to comply. DEQ has also proposed to define a Small Oregon Importer based on the volume of fuel imported.	
67	In investigating an emergency supply shortage, the previous year's credit generation should not be relevant.	Because deferrals are not needed during Phase 1, the revised proposal does not include the deferral rules originally proposed. However, DEQ believes that banked credits are relevant to determining whether or not a deferral should be issued due to an unexpected disruption of low carbon fuel supplies. DEQ's intent is to work with the parties involved in the supply shortage to estimate the volume, carbon intensity and potential impact of the shortage. If the affected parties have an adequate supply of banked credits or alternate suppliers of low carbon fuels, a deferral may not be necessary.	100
68	Oregon shouldn't be included in the statutory PADD 5 average. If information is unavailable, the actual PADD 5 should not be the default.	For gasoline, Oregon's fuel prices will be compared to the other members of the Statutory PADD 5, including Washington, Arizona and Nevada. However, since state-by-state diesel price information is not published by the US Energy Information Administration, it may be necessary to use the Actual PADD 5 for the diesel price comparison. In further evaluating options for Phase 2 of the program, DEQ will work with fuel providers to determine if it is possible to generate average diesel prices for the Statutory PADD 5, given data confidentiality considerations.	100
69	There should be a single standard, not separate standards for gasoline and diesel.	DEQ disagrees. When and if Phase 2 is adopted, separate low carbon fuel standards will be needed for gasoline and diesel fuel to promote carbon reduction in each category. The low carbon fuel standards advisory committee discussion of this issue can be found on page 72 of DEQ's final report. To increase flexibility in the program, credits	100

		generated can be used to comply with either standard.	
70	Should not have to demonstrate that the program is causing the price increase to trigger the deferral process.	DEQ disagrees. When and if Phase 2 is adopted, a price deferral should be granted only if the Clean Fuels Program causes an increase in fuel prices. Historically, the ratio of Oregon's fuel price to those of neighboring states has varied for a variety of reasons, and this variation will continue in the future whether or not Oregon fully implements the Clean Fuels Program. Because a price deferral would reduce the effectiveness of the program at reducing greenhouse gas emissions, it should only be granted if the price difference is caused by the program.	
71	The rules about the designation of regulated parties are too convoluted.	Clarity about who is regulated under the program and how the compliance obligation transfers between an initial regulated party and a recipient of fuel is a critical element of the program. In most cases, this is straightforward and follows the normal business practices for fuel suppliers. However, the rules need to allow for all possible scenarios to provide clarity to both the transferor and recipient of fuels, even though some of the scenarios described will not occur often. DEQ will provide technical assistance to help regulated parties understand the applicable rules.	100
72	Why are the baseline carbon intensities different than California's?	The baseline carbon intensity estimates for Oregon's Clean Fuels Program are based on Oregon's unique transportation fuel mix, not California's. The low carbon fuel standards advisory committee discussion of this issue can be found on pages 70 - 71 in DEQ's final report.	100
73	There are no provisions for individual carbon intensities for conventional fuels as there are for alternative fuels.	In the proposed rules, all conventional fuels must use the statewide average carbon intensities found in Tables 1 and 2. DEQ plans to update the values in these tables at least every 3 years to reflect changes in crude oil, refining techniques and other factors that affect	100

		the carbon intensities of gasoline and diesel distributed in Oregon. The advisory committee discussed several options for treating the carbon intensities of conventional fuels, and DEQ's proposed approach has been informed by the committee deliberations. A summary of this discussion can be found on pages 77 - 82 of the final committee report. DEQ is open to discuss further refinement of these provisions as part of the evaluation of the next phase of the program.	
74	Provide a simple reporting/recordkeeping alternative to the California-like reporting tool.	DEQ plans to develop a reporting tool that works for both small and large-sized parties. Our goal is for the tool to be simple to use while capturing the necessary information.	100
75	Carbon intensity information should only be required to be recorded when the compliance obligation is transferred.	DEQ has modified OAR 340-253-0600(1)(b) reflect this change.	100
76	DEQ should not be able to determine a specific pathway for a fuel.	OAR 340-253-0400 and -0450 outline a process whereby a registrant proposes a carbon intensity value that DEQ must approve. Only if DEQ disagrees with the initial proposal does the agency suggest a more appropriate value. The registrant will be able to work with DEQ to reach agreement about the carbon intensity for the pathway.	100
77	The treatment of crude oil is unclear.	All petroleum fuels receive the same carbon intensity based on a statewide average of fuels entering the state. DEQ will update this average periodically. The low carbon fuel standards advisory committee discussion of the issue can be found on page 80 in the final DEQ report. DEQ is open to discussing the refinement of provisions for treating changes in crude oil carbon intensity as part of DEQ's further evaluation of the next phase of the program.	100
78	The processes to update carbon intensities are without basis or unjustified.	DEQ must ensure the proper documentation of actual greenhouse gas reductions by using accurate and current	100

		information when calculating carbon intensity values. The low carbon fuel standards advisory committee discussion of this issue can be found on pages 79 – 82 in DEQ's final report.	
79	The difference in energy densities and energy efficiency ratios in Oregon and California need to be clarified.	Regarding energy densities, the differences between Oregon and California are due to differences in the fuel formulations required in the two states. Regarding energy efficiency ratios for electric vehicles, the difference is primarily due to the use of a declining ratio in Oregon to account for increasing fuel economy in conventional vehicles from now until the end of the program as opposed to a set value used in California. The low carbon fuel standards advisory committee discussion of the issue can be found on pages 139 - 145 of DEQ's final report.	100
80	Include additional pathways for renewable natural gas into the pipeline, renewable electricity into the grid, and renewable LPG-substitute such as di-methyl ether.	Upon receiving this comment, DEQ asked the commenter for additional information to justify the addition of these fuel pathways along with supporting documentation as to what the carbon intensities should be. Because the commenter did not respond, DEQ was not able to propose adding these pathways in this rulemaking. However, requests to include new pathways for these or any other new fuels used in Oregon can be made at any time through the new fuels pathway process in the proposed rules.	101
81	Support exemption for research, development and demonstration facilities.	Thank you for your comment. The purpose of this exemption is to avoid any regulatory barriers to innovation that may lead to cleaner fuels for Oregon.	102
82	Modify definition of "Oregon production facility" to refer to finished fuel rather than blendstock.	DEQ has modified the definition of "Oregon production facility" to refer to blendstocks and finished fuel. This clarifies that an Oregon producer of a blendstock is only required to provide documentation of the carbon intensity of the blendstock it produces, not that of the finished fuel. As the commenter correctly	102

		points out, the supplier of the finished fuel is then obligated to document the multiple blendstocks, and their carbon intensities to be able to calculate surpluses and shortfalls.	
83	Concern that rural parts of Oregon like Ontario will face higher fuel costs since the Boise terminals will not likely provide the fuels needed to comply with the program and therefore force fuel suppliers to go farther and pay a premium.	DEQ recognizes that some regional fluctuations in the price of fuels may occur due to the way fuels are distributed in Oregon. Since this is a Phase 2 issue, DEQ intends to work with the regulated parties throughout the state to collect the data needed to further refine the deferral mechanisms in Phase 2 program.	13

Reference #	Date submitted	Organization or affiliation	Contact person	City	State
1	8/30/2012	1000 Friends of Oregon	Jason Miner		
2	8/30/2012	Andy Harris, MD		Portland	OR
3	8/29/2012	Associated General Contractors	Mike Salsgiver		
4	8/30/2012	Associated Oregon Industries	John Ledger	Salem	OR
5	8/22/2012	Basey Klopp			
6	8/24/2012	Beaver Biodiesel, LLC	Daniel Shafer	Portland	OR
7	8/24/2012	Beaver Biodiesel, LLC	Daniel Shafer	Portland	OR
8	8/30/2012	Beyond Toxics	Lisa Arkin	Eugene	OR
9	8/24/2012	Blue Star Gas	Jeff Stewart		
10	8/30/2012	Bonnie Nedrow, ND		Ashland	OR
11	8/30/2012	BP America Inc.	Michael Abendhoff	Blaine	WA
12	8/23/2012	Brian Brandt		Portland	OR
13	8/24/2012	Campbell & Poole Distributing	Ken Poole	Ontario	OR
14	8/22/2012	Caroline Zaworski			
15	8/24/2012	Carson Oil Company	Lance Woodbury		
16	8/31/2012	Ceres	Carol Lee Rawn		
17	8/29/2012	Christopher Pond		Glide	OR
18	8/31/2012	City of Portland	Susan Anderson	Portland	OR
19	8/27/2012	Clean Energy	Todd Campbell	Seal Beach	CA

20	8/30/2012	Climate Solutions	Ann Gravatt		
21	8/24/2012	Climate Solutions	Ann Gravatt		
22	8/30/2012	Clipper Creek Inc.	Barry Woods	Auburn	CA
23	8/30/2012	Coalition for a Livable Future	Ron Carley		
24	8/31/2012	Conservation Law Foundation	N. Jonathan Peress		
25	8/31/2012	Consumer Energy Alliance	Michael Whatley	Houston	TX
26	8/27/2012	Craig Markham		Dundee	OR
27	8/23/2012	Darcy Cronin		Portland	OR
28	8/30/2012	Douglas County Global Warming Coalition	Stuart Liebowitz		
29	8/31/2012	Energy Independence Now	Remy Garderet		
30	8/31/2012	Environment Northeast	Jeremy McDiarmid		
31	8/30/2012	Environment Oregon	Sarah Higginbotham		
32	8/24/2012	Environment Oregon	Megan Jones		
33	8/30/2021	Environmental Entrepreneurs	Mary Solecki	San Francisco	CA
34	8/31/2012	Environmental Entrepreneurs	Chris Dennett, Alex Wall, Trevor Winnie		
35	8/24/2012	Environmental Entrepreneurs	Mary Solecki	San Francisco	CA
36	8/31/2012	General Biodiesel Seattle, LLC	Jeff Haas		
37	8/28/2012	General Biodiesel Seattle, LLC	Jeff Haas	Seattle	WA
38	8/31/2012	Good Company	Joshua Skov	Eugene	OR
39	8/31/2012	Green for All	Kimberly Freeman Brown		
40	8/28/2012	GreenWood Resources	Don Rice	Portland	OR
41	8/30/2012	Growth Energy	Tom Buis	Washington	DC
42	8/24/2012	Hans Van Der Meer	EV4Oregon		
43	8/24/2012	IBEW Local 48	Joseph Esmonde		
44	8/31/2012	Imperium Renewables, Inc.	John Plaza	Seattle	WA
45	8/30/2012	Imperium Renewables,	John Plaza	Seattle	WA

		Inc.			
46	8/31/2012	Inland Empire Oilseeds	Joel Edmonds		
47	8/30/2012	Jenny Pompilio, MD, MPH		Portland	OR
48	8/24/2012	Jim Edelson			
49	8/22/2012	Jim Hajek			
50	8/22/2012	Krista Reynolds		Portland	OR
51	8/22/2012	Marjorie Kundiger			
52	8/22/2012	Mary Lehman		Florence	OR
53	8/30/2012	Maye Thompson, RN PhD		Portland	OR
54	8/17/2012	Metro	Martha Bennett	Portland	OR
55	8/22/2012	Nancy Merrick			
56	8/22/2012	Nathan Boddie, MD, MS		Bend	OR
57	8/24/2012	National Biodiesel Board	Shelby Neal	Jefferson City	MO
58	8/30/2012	National Wildlife Federation	Nicholas Callero		
59	8/31/2012	Natural Resources Defense Council	Simon Mui		
60	8/30/2012	Northwest District Association Air Quality Committee	Sharon Genasci	Portland	OR
61	8/22/2012	Oregon Business Association	Ryan Deckert	Tigard	OR
62	8/30/2012	Oregon Environmental Council	Andrea Durbin	Portland	OR
63	8/30/2012	Oregon Environmental Council	Chris Hagerbaumer	Portland	OR
64	8/24/2012	Oregon Environmental Council	Mark Kendall	Portland	OR
65	8/22/2012	Oregon Farm Bureau	Katie Fast	Salem	OR
66	8/22/2012	Oregon Global Warming Commission	Angus Duncan	Salem	OR
67	8/30/2012	Oregon League of Conservation Voters	Doug Moore		
68	8/31/2012	Oregon Oils, Inc.	David and Matt Burns		
69	8/24/2012	Oregon Petroleum Association	Paul Romain		
70	8/30/2012	Oregon Public Health Association	Josie Henderson	Portland	OR
71	8/30/2012	Oregon Trucking	Debra Dunn	Portland	OR

		Associations, Inc.			
72	8/30/2012	Oregon Wild	Doug Heiken	Eugene	OR
73	8/31/2012	Pacific Ethanol	Neil Koehler		
74	8/2/2012	Pacific Propane Gas Association	Lana Butterfield	Wilsonville	OR
75	8/31/2012	Pacific Propane Gas Association	Lana Butterfield	Wilsonville	OR
76	8/31/2012	Phillips 66	H. Daniel Sinks	Long Beach	CA
77	8/30/2012	Physicians for Social Responsibility, Oregon Chapter	Susan Katz	Portland	OR
78	8/28/2012	POET Ethanol Products, LLC	Heather Gullic	Wichita	KS
79	8/23/2012	Port of Morrow	Gary Neal	Boardman	OR
80	8/31/2012	Port of Portland	David Breen	Portland	OR
81	8/31/2012	Portland & Western Railroad	James Irvin	Salem	OR
82	8/31/2012	Portland General Electric	Brendan McCarthy		
83	8/31/2012	PowerStock	Bill Levy		
84	8/24/2012	PowerStock	Harrison Pettit		
85	8/29/2012	QuantEcon, Inc.	Randall Pozdena	Manzanita	OR
86	8/30/2012	Rachel's Friends Breast Cancer Coalition	Alice Shapiro	Florence	OR
87	8/22/2012	Raymond Dukes			
88	8/31/2012	Renewable Fuels Association	Bob Dinneen		
89	8/22/2012	Roni Jensen			
90	8/31/2012	SeQuential Biofuels	Ian Hill		
91	8/31/2012	SeQuential-Pacific Biodiesel	Tyson Keever, Kevin Kuper, Gavin Carpeter		
92	8/24/2012	SeQuential-Pacific Biodiesel	Gavin Carpenter		
93	8/31/2012	Sierra Club	Kathryn Phillips		
94	8/31/2012	Sierra Club Oregon Chapter	Ivan Maluski	Portland	OR
95	8/30/2012	Smooth Water Construction Company	Lenn and Denise Ball	Arlington	OR

96	8/24/2012	Tyree Oil	Ron Tyree		
97	8/30/2012	Union of Concerned Scientists	Jeremy Martin	Cambridge	MA
98	8/30/2012	Upstream Public Health	Mel Rader	Portland	OR
99	8/24/2012	Western States Petroleum Association	Frank Holmes	Sacramento	CA
100	8/30/2012	Western States Petroleum Association	Catherine H. Reheis-Boyd	Sacramento	CA
101	8/7/2012	Whole Energy	Atul Deshmane		WA
102	8/27/2012	ZeaChem Inc.	Jim Imbler	Lakewood	CO
103	8/31/2012	ZeaChem, Inc.	Jim Imbler	Lakewood	CO

State of Oregon
Department of Environmental Quality **Memorandum**

Presiding Officer's Report

Date: Nov. 2, 2012

To: Environmental Quality Commission

From: Cory-Ann Wind, Air Quality planner

Subject: Presiding Officer's Report for Rulemaking Hearing
Title of proposal: Oregon Clean Fuels Program
Hearing date and time: Aug. 24, 2012, 9 a.m.
Hearing location: DEQ headquarters, 811 SW 6th Avenue, Portland, OR 97204

Cory-Ann Wind explained the rulemaking proposal and took questions from commissioners before the hearing commenced.

The following is a summary of written and oral comments received at the hearing. All written comments and the audio file from the commission meeting are posted on DEQ's website. DEQ will include these comments in the summary of comments and agency responses document for this rulemaking.

Chair Blosser opened the hearing on the proposed Oregon Clean Fuels Program rules at approximately 10 a.m. People wishing to present comments could attend in-person or by phone at the Bend, Eugene, Medford and Pendleton DEQ offices. The Pendleton office could not connect to the meeting due to a phone malfunction, but confirmed that no one was there to testify.

Fifteen people in Portland and one person in Medford presented comments.

1. Daniel Shafer, Beaver Biodiesel, presented comment in support of the proposed Clean Fuels Program. Shafer explained that biofuels made in Oregon are beneficial to Oregon.

2. Gavin Carpenter, SeQuential Biofuels, presented comment in support of the proposed Clean Fuels Program. He explained that the Clean Fuel Program is beneficial to Oregon, and that SeQuential Biofuels does plan to expand its production with new fuel feedstocks.

3. Darren Engle, Blue Star Gas, presented comment by phone in Medford and read a statement on behalf of the company's president, Jeff Stewart. The statement supported Oregon Clean Fuels Program and encouraged the inclusion of propane as an opt-in fuel for the proposed program.

4. Paul Romain, Oregon Petroleum Association, presented comment in opposition to the Oregon Clean Fuels Program. Romain presented his concerns about the program and encouraged the commission to not approve the program.

5. Lance Woodbury, Carson Oil Company, presented comment in opposition to the Oregon Clean Fuels Program. He stated that the proposed program's requirement to document fuel types will be an educational and technological barrier for fuel distributors, and may cause them to incur additional staffing, IT and equipment costs. He stated that the economic analysis DEQ presented is incomplete.

6. Ken Poole, Oregon Petroleum Association and Campbell & Poole Distributing, explained that he lives in Ontario, which is a very rural area that is frequently overlooked by Oregonians. Poole presented comment in opposition to the proposed Oregon Clean Fuels Program and provided specific fuel distribution issues for eastern Oregon.

7. Ron Tyree, Oregon Petroleum Association and Tyree Oil, presented comment in opposition to the proposed Oregon Clean Fuels Program. He noted that his company supports alternative fuels, but he does not support the program or a low carbon fuel standard. He stated that all program options will increase the price of fuel in Oregon.

8. Joseph Esmonde, International Brotherhood of Electrical Workers local 48, presented comments in opposition of the proposed Oregon Clean Fuels Program, and stated that the economic impacts shown in the proposed program will negatively affect working Oregonians.

9. Ann Gravatt, Climate Solutions, presented comments in support of the proposed Oregon Clean Fuels Program and DEQ's phase-one rules for the program. She noted that the costs associated with the program should include the costs associated with environmental and health impacts of business-as-usual fuel rules.

10. Mark Kendall, Oregon Environmental Council, presented comments in support of the proposed Oregon Clean Fuels Program, and urged the commission to adopt phases one and two of the proposed rules and program. He submitted a copy of his testimony to the commission.

11. Megan Jones, Environment Oregon, presented comments in support of the proposed Oregon Clean Fuels Program. She encouraged the commission to adopt the program rules as presented and noted Environment Oregon's involvement in the advisory committee that developed the proposed program rules. She submitted a copy of her testimony to the commission.

12. Frank Holmes, Western States Petroleum Association, presented comment in opposition to the proposed program rules and asked the commission to deny the rules. He stated that his association supports emission reductions, but that the program rules would cause economic disruptions and would not benefit Oregonians.

13. Jim Edelson, resident, presented comment in support of the Oregon Clean Fuels Program. He encouraged the commission to adopt the proposed program rules, and stated that the program is beneficial to Oregon due to the locally-derived fuels that are important to the program.

14. Hans van der Meer, EV4Oregon, presented comment in support of the Oregon Clean Fuels Program. He stated that the proposed rules would keep Oregon as a leader for non-petroleum-related vehicles and fueling.

15. Mary Solecki, Environmental Entrepreneurs, presented comment in support of the proposed Oregon Clean Fuels Program. She noted that the advanced biofuels industry can capitalize on clean fuel market opportunities to provide fuels for Oregon and the nation.

16. Harrison Pettit, Powerstock, presented comment in support of the proposed Oregon Clean Fuels Program. He noted that he was a member of the advisory committee that developed the proposed program rules. He explained that his company provides biomass-based fuel stock to the biofuel industry, and stated that rural Oregon has opportunities for major economic benefit under the proposed program.

The commissioners asked clarifying and informational questions about the comments presented. Chair Blosser closed the hearing at approximately 11:30 a.m. Director Pedersen noted that the comment period closes at 5 p.m. on Aug. 31, 2012, and DEQ must receive all comments by that date and time.

Oregon Department of Environmental Quality
Chapter 340 Rulemaking

Relationship to Federal Requirements

Rule Caption:
Oregon Clean Fuels Program for fuel suppliers and producers of transportation fuels

Answers to the following questions identify how the proposed rulemaking relates to federal requirements and the justification for differing from, or adding to, federal requirements. This statement is required by OAR 340-011-0029(1).

1. Is the proposed rulemaking different from, or in addition to, applicable federal requirements? If so, what are the differences or additions?

There is no applicable federal requirement equivalent to the proposed rulemaking. The closest federal requirements, in comparing the goal of reducing greenhouse gas emissions from transportation fuels, would be the federal Renewable Fuel Standards. The Renewable Fuel Standards mandate the production of specific volumes of renewable fuels in transportation fuel, and require portions of the renewable fuels to have various levels of reduced lifecycle greenhouse gas emissions. In contrast, the Oregon Clean Fuels Program would require fuel producers and importers to reduce the lifecycle greenhouse gas emissions from transportation fuel by a specified amount, whether by blending renewable fuels, substituting other low carbon fuels, or using credits from low carbon fuel producers. In addition, the federal Renewable Fuel Standards do not specify where in the United States the renewable fuel volumes are to be consumed – meaning that Oregon is never assured of receiving low carbon fuels under the federal requirement.

2. If the proposal differs from, or is in addition to, applicable federal requirements, explain the reasons for the difference or addition (including as appropriate, the public health, environmental, scientific, economic, technological, administrative or other reasons).

Reducing the lifecycle greenhouse gas emissions from transportation fuel, together with other measures to reduce vehicle tailpipe greenhouse gas emissions and to reduce the number of miles driven in Oregon, is necessary to meet Oregon's greenhouse gas reduction goals as specified in ORS 468A.205. In a 2011 report[1], the Oregon Departments of Transportation, Environmental Quality and Energy, estimated that reduced tailpipe emissions and low carbon fuels could supply 90 percent of the greenhouse gas reductions needed from light duty vehicles by 2035, with the remainder to be made up by reduced miles driven.

[1] *Agencies' Technical Report Responding to Jobs and Transportation Act (2009) Section 37, Part (7) and Chapter 85 Oregon Laws (2010), Section 5*, Oregon Department of Transportation, Oregon Department of Environmental Quality and Oregon Department of Energy, March 1, 2011

Because the Oregon Clean Fuels Program is a performance standard, as opposed to a production mandate like the federal Renewable Fuel Standards, it is designed to encourage innovation. Fuel producers and importers would have an incentive to develop fuels with lower lifecycle emissions and cost. By creating demand for low-carbon fuels, the Oregon Clean Fuels Program would provide the assurance that lower-carbon fuels would be supplied to and consumed in Oregon, along with the commensurate greenhouse gas reductions.

The Oregon Clean Fuels Program is also a key element of Oregon's ten-year energy action plan. The goals of that plan are to:

- Reduce Oregon's dependence on carbon-intensive fuels and foreign oil
- Develop home-grown renewable energy resources
- Mitigate greenhouse gas emissions
- Improve energy efficiency and create rewarding local jobs and
- Boost Oregon's and the nation's economy through investment and innovation

By creating demand for low-carbon fuels and allowing all fuels and all in-state and out-of-state fuel suppliers to compete on an equal lifecycle carbon basis, the Clean Fuels Program supports these goals and will be important to the success of this plan.

3. If the proposal differs from, or is in addition to, applicable federal requirements, did DEQ consider alternatives to the difference or addition? If so, describe the alternatives and the reason(s) they were not pursued.

DEQ considered not moving forward with the Clean Fuels Program and relying instead on the federal Renewable Fuels Standards to reduce greenhouse gas emissions from transportation. This option was rejected because the federal Renewable Fuels Standard would not generate enough emission reductions to meet Oregon's goals.

DEQ also considered not moving forward with the Clean Fuels program and relying instead on Oregon's Low Emission Vehicle Program along with measures to reduce vehicle miles traveled. This option was rejected because lower emitting fuels along with improved vehicle technology and reduced travel are all needed to meet Oregon's greenhouse gas reduction goals.

DEQ considered other options to achieve reductions in lifecycle greenhouse gas emissions from transportation fuel, such as a cap and trade program or a carbon tax. These options were rejected because House Bill 2186, the authorizing statute for this program, only provided authority for the Environmental Quality Commission to "adopt by rule low carbon fuel standards for gasoline, diesel and fuels used as substitutes for gasoline or diesel."

Finally, DEQ considered many options for the design of the Oregon Clean Fuels Program as detailed in the Low Carbon Fuel Standards Advisory Committee Process and Program Design Final Report, Jan. 25, 2011. The report summarizes the options considered and the rationale for the selected options for a number of program design features, including:

- Fuels covered

- Regulated parties
- Exemptions
- Baseline standards for gasoline and diesel
- Compliance schedule
- Emission calculation methodology
- Indirect land use change
- Vehicle drive train efficiency
- Establishing carbon intensity values for fuels
- Use and banking of credits and deficits
- Program deferrals based on fuel supply and price
- Record-keeping and reporting
- Enforcement and
- Program review

DEPARTMENT OF ENVIRONMENTAL QUALITY
Chapter 340

STATEMENT OF NEED AND FISCAL AND ECONOMIC IMPACT

Rule caption:
Oregon Clean Fuels Program for fuel suppliers and producers of transportation fuels

Title of proposed rulemaking	Oregon Clean Fuels Program, Division 253
Statutory authority or other legal authority	Oregon Laws 2009, chapter 754, also referred to as House Bill 2186 (2009)
Statutes implemented	Oregon Laws 2009, chapter 754, also referred to as House Bill 2186 (2009)
Need for the rule(s)	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 that lead to climate change. The 2009 Oregon Legislature passed HB 2186 that authorized the Oregon Environmental Quality Commission to adopt rules that would reduce lifecycle emissions of greenhouse gases from Oregon's transportation fuels by 10 percent over a 10-year period. These proposed rules provide the regulatory framework to implement HB 2186, and are now referred to as the Oregon Clean Fuels Program. The Oregon Clean Fuels Program would be implemented in two phases – Phase 1 would be a reporting phase beginning in 2013, and Phase 2 would be a later greenhouse gas emissions reduction phase. Phase 1 would require Oregon fuel producers and importers to register, keep records and report the volumes and carbon intensities of the fuels they provide in Oregon. Phase 2 would require regulated parties to reduce the average carbon intensity of gasoline and diesel fuel they provide in Oregon each year to meet the clean fuel standard for that year. Regulated parties could select the strategy that works best for them to meet the requirement, such as providing more biofuels, natural gas or electricity, or by purchasing clean fuel credits from suppliers of lower-carbon fuels. It would also allow DEQ to gather data about Oregon's transportation fuels that will help inform DEQ and decision makers about the feasibility of moving ahead with the next phase of the program. If DEQ recommends moving forward to propose Phase 2 of the program, DEQ would initiate a new rulemaking process, including new advisory committees to gather new input on the design of the Phase 2 rules and its fiscal and economic impact. Phase 2 can only be implemented if: • The Oregon Legislature adopts a bill to remove the statutory 2015 sunset that currently applies to the Oregon Clean Fuels Program; and • The Oregon Environmental Quality Commission adopts rules to remove the regulatory deferral of Phase 2 of the Oregon Clean Fuels Program. This multi-phase approach allows DEQ to use the data collected during Phase 1 and additional information to: • Assess the availability of clean fuels needed to comply with the clean fuel standards in

	Phase 2 • Track the progress of fuel and vehicle technology innovation, the adoption rates of cleaner fuels and alternative fuel vehicles, and changes in driving habits • Incorporate into the program the latest information on the science, policies and legal issues relating to low carbon fuels. The proposed rules cover both phases of the program, with Phase 2 deferred until the aforementioned actions occur. The rule package is intended to illustrate for the public, stakeholders and elected officials what the Oregon Clean Fuels Program would look like in its entirety to provide the basis for future informed discussions. The proposed rule is based on the best information currently available to DEQ and reflects a program design that DEQ believes could be implemented and achieve its intended greenhouse gas emission reductions goal. DEQ also recognizes that this is an emerging field of regulation, economics and science and that important new information will likely emerge in the next few years that could influence the future design of the program.
Documents relied upon for rulemaking	• House Bill 2186 (2009) • Oregon Low Carbon Fuel Standards Advisory Committee Process and Program Design Final Report (including the economic analysis) • Fiscal Advisory Committee Meeting Summary
Requests for other options	Under ORS 183.335(2)(b)(G), DEQ requests public comment on whether other options should be considered for achieving the rule's substantive goals while reducing negative economic impact of the rule on business.
Fiscal and economic impact, statement of cost compliance	
Overview	DEQ's proposed rule includes provisions for both the reporting (Phase 1) and greenhouse gas reduction (Phase 2) phases of the program, with Phase 2 requirements deferred indefinitely, pending future Environmental Quality Commission and legislative action. Regulated parties, a mixture of large and small businesses, would incur both initial start-up and ongoing maintenance costs to comply with Phase 1 requirements. Most of these direct costs will be for additional labor to perform the administrative tasks of keeping records and submitting reports to DEQ in addition to some costs to upgrade existing or develop new electronic data management systems. These direct costs may be passed on to fuel consumers and become an indirect cost of the program. The carbon reduction phase, of the rule (Phase 2) is indefinitely deferred pending future EQC and legislative action and does not impose any requirements at this time; therefore, its fiscal and economic impact is zero. If DEQ proposes to commence Phase 2 in a future rulemaking, a statement of need and fiscal and economic impact for Phase 2 will be prepared at that time. However, to provide economic context for this rulemaking, DEQ is including with this rulemaking proposal, an economic analysis of Phase 2 that assesses the costs and benefits of the entire program on Oregon's economy. The Phase 2 economic analysis was prepared by Jack Faucett Associates during the advisory committee phase of program development. This study incorporated the costs of developing lower carbon fuels production and distribution infrastructure, the fuels themselves and the vehicles to use them. Overall, JFA found that, on a statewide scale, implementing a low carbon fuel policy would provide a net benefit to Oregon's economy in the form of increased job creation, gross

	state product, and personal income and decreased fuel expenditures. Results are presented for 70 economic sectors considering eight potential compliance scenarios. This study is Appendix D of DEQ's final report.	
Impacts on the general public	DEQ does not anticipate any direct fiscal and economic impacts on the general public from the proposed Phase 1 reporting rules. Indirect fiscal and economic impacts could occur if regulated parties choose to pass their compliance costs on to fuel consumers. In DEQ's estimation, up to 69 regulated parties could incur an aggregate of $2,277,000 in 2013 and $466,440 annually in subsequent years to comply with the Phase 1 requirements. Please see the description of the equipment, supplies, labor and increased administration required by small businesses for compliance with the proposed rules in the "Impacts to small business" section, below. If those costs were spread across the roughly two billion gallons of gasoline and diesel fuel sold per year in Oregon, the cost to the consumer would be $1/10^{th}$ of one penny per gallon in 2013 and $2/100^{th}$ of one penny per gallon in subsequent years. In addition, climate change contributes to public health problems that can have negative economic impacts. The proposed rules could create positive economic benefit to the extent they help reduce the impacts of climate change, and to the extent the proposed rules create new markets and employment opportunities in Oregon and nationally for the production and distribution of alternative fuels. DEQ lacks the information needed to estimate these positive impacts at this time, and any such estimates would be speculative.	
Impacts on small business (50 or fewer employees – ORS183.310(10))	The direct fiscal and economic impacts of the proposed rulemaking that DEQ anticipates for small businesses are discussed below in a) through d). The estimated indirect fiscal and economic impacts to small businesses are identical to those estimated for the general public and are discussed in the section above (Impacts on the General Public). In addition, there might be benefits to businesses regulated under the proposed rules. Some biofuels producers in Oregon that are registered in California's low carbon fuel standards program acknowledge an increase in their number of customers. It is reasonable to assume that registering under Oregon's program might also lead to more customers, but DEQ lacks the information needed to estimate these positive impacts at this time, and as a result any such estimates would be speculative.	
Cost of compliance on small business (50 or fewer employees – ORS183.310(10))	a) Estimated number of small businesses subject to the proposed rule	DEQ estimated the number of businesses that would be subject to the proposed Oregon Clean Fuels Program by surveying fuel distributors potentially subject to DEQ's greenhouse gas reporting requirements. Specifically, DEQ asked fuel distributors the following two questions: 1) Does the company have ownership of any quantity of fuel when it is first delivered from a location outside of Oregon into a stationary storage tank in Oregon by any means of transport (e.g. barge, pipeline, truck, or railcar), other than fuel brought into this state in the fuel tank of a vehicle used for the propulsion of the vehicle? 2) Does the company sell any quantity of fuel directly to a (public or private) dispensing facility that was not first stored in a stationary storage tank in Oregon? (e.g. delivered directly from a truck that was filled at an out-of-state facility?)

		Based on the survey responses, information about Oregon producers of biofuels and additional input from the fiscal advisory committee, DEQ estimates that about 69 businesses would be subject to Phase 1 of the proposed rules. The fiscal advisory committee also helped DEQ estimate that about 32 of the businesses subject to the proposed rules may be small businesses. Specifically, DEQ estimates that one of the terminal facilities and approximately 29 fuel distributors, bulk plants and dispensing facilities subject to the proposed rules might be small businesses. DEQ has also indentified one ethanol and one biodiesel producer located in Oregon that might be small businesses.
	b) Types of businesses and industries with small businesses subject to the proposed rule	The Phase 1 requirements of the proposed rules primarily affect businesses that produce or import gasoline, diesel fuel, ethanol and biodiesel. For liquid fuels such as gasoline, diesel fuel, ethanol and biodiesel, importers are defined as "the person who owns the fuel in the stationary storage tank into which the product was first transferred after it was imported into Oregon." Thus, importers include some terminal facilities, fuel distributors, bulk plants and dispensing facilities. For liquid fuels such as gasoline, diesel fuel, ethanol and biodiesel, an Oregon producer is the person who produces the liquid blendstock or finished fuel in Oregon.
	c) Projected reporting, recordkeeping and other administrative activities required by small businesses for compliance with the proposed rule, including costs of professional services	The proposed rules would require regulated parties to register, keep records and report information about the fuels they supply in Oregon to DEQ. This would result in costs to comply with these requirements including but not limited to: • Initial training on the requirements of the rule; • Submitting an application for registration; • Setting up internal administrative systems to incorporate the carbon intensity of the fuel in databases, product transfer forms and other data systems; • Working with vendors and suppliers to ensure that the documentation for carbon intensity is included in all product transactions; • Keeping records; • Learning how to use the reporting tool being developed by DEQ; • Submitting quarterly reports to DEQ; and • Submitting an annual report to DEQ. DEQ will provide assistance to regulated parties and a web-based reporting tool to submit reports. DEQ assumes that these businesses already track fuel information for a variety of reasons, including greenhouse gas emissions reporting and tax collection. However, DEQ understands that carbon intensity is not

		included in any current reporting requirements. The carbon intensity of a fuel is a critical piece of information that DEQ needs to be able to analyze the effectiveness and feasibility of the Oregon Clean Fuels Program.
	d) The equipment, supplies, labor and increased administration required by small businesses for compliance with the proposed rule	For importers, DEQ estimates that Phase 1 activities would include both initial start-up and ongoing maintenance costs. Several comments from the fiscal advisory committee suggested that there may be a wide range of actual costs among individual businesses – this is described in more detail below. DEQ has made several assumptions to estimate an average cost to a business. Businesses may incur one-time costs to prepare for compliance with the requirements. Fiscal advisory committee members thought that DEQ's original estimates for one-time costs were too low and did not adequately include IT costs. DEQ has increased its estimate from 10 business days to 20 business days (160 hours) of labor to gather and submit information related to the registration requirements and develop the systems needed to begin keeping records. Assuming an hourly wage of $65 per hour, the result is a one-time labor cost of $10,400 per business. In addition, many small businesses do not have the in-house capacity to make the necessary IT adjustments and will need to contract out the work. DEQ estimates that on average, a business may incur $20,000 in one-time IT costs. Businesses may also incur ongoing costs to comply with the recordkeeping and reporting requirements. For 2013, recordkeeping begins on July 1 and businesses would be required to submit an annual report containing third- and fourth-quarter information to DEQ. There are no quarterly reporting requirements in 2013. In 2014 and beyond, businesses would be required to submit quarterly and annual reports to DEQ. To estimate annual costs, DEQ assumes that it will take up to five business days of labor for the annual report and two business days of work for each of the quarterly reports (104 hours) to prepare them for submission. Assuming an hourly wage of $65 per hour, the result is an estimated $2,600 per business in 2013 and an annual labor cost of $6,760 per business in subsequent years. If approved by the Oregon Legislature and the EQC, regulated businesses may also be subject to a fee as described below under Impacts on DEQ. Because it is unknown at this time whether or not a fee will be approved and how the fee table may be structured, this cost is not included in the fiscal impact calculations. As previously stated, there are many variables that might affect the cost to comply for an individual business. A few are included below: • Businesses that currently report fuel information to DEQ or another agency should have lesser needs for additional equipment and labor. • Businesses that supply multiple fuel types or to multiple customers might have somewhat higher costs in managing their data than a business that has fewer fuel types or customers. • Businesses that do not have good, established relationships with their

		suppliers might spend more time and effort to obtain all of the required information compared to those that do. • Businesses that have existing electronic data management systems would be able to easily transition to the required updating system, while others that still use manual methods will need to develop a new electronic data management system. • Businesses that have already registered and submitted reports under California's low carbon fuel standard will encounter minimal additional costs to comply since DEQ intends to use a modified version of California's fuels reporting system in Oregon. Advisory committee members also noted that, for Oregon producers of ethanol and biodiesel, costs will be minimal if they already track the same information for use in the federal Renewable Fuel Standard program. Otherwise, their costs will be comparable to those estimated above.
	e) A description of the manner in which DEQ involved small businesses in the development of this rulemaking	From November 2009 through November 2010, DEQ worked with a 29-member advisory committee, which included small businesses, to discuss the design of a clean fuels program. Members of the Low Carbon Fuel Standards Advisory Committee and meeting summaries can be found at: http://www.deq.state.or.us/aq/committees/advcomLowCarbonFuel.htm In May 2012, DEQ convened an advisory committee to focus on the fiscal and economic impact of implementing Phase 1 of the Oregon Clean Fuels Program. Members of the Oregon Clean Fuels Program Fiscal Advisory Committee and a meeting summary can be found at: http://www.deq.state.or.us/aq/cleanFuel/meetings.htm.
Impacts on large business (all businesses that are not "small businesses" under ORS183.310(10))	The estimated direct fiscal and economic impacts of the proposed rulemaking to large businesses are identical to those estimated for small businesses and are discussed in the section above (Impacts on Small Business). Based on the best information available at this time, DEQ estimates that about 37 large businesses would be subject to Phase 1 of the proposed rules. DEQ estimates that about five terminal facilities that would be subject to the Phase 1 requirements are large businesses. In addition, DEQ estimates that about 29 fuel distributors, bulk plants or dispensing facilities may be large businesses subject to the Phase 1 requirements. DEQ has identified two ethanol producers and one biodiesel producer in Oregon as large businesses that might be subject to the Phase 1 requirements. The estimated indirect fiscal and economic impacts of the proposed rulemaking to other large businesses across the state are identical to those estimated for the general public and are discussed in the section above. The estimated benefits for large businesses are the same as those estimated for small businesses and are discussed in the section above (Impacts on Small Business).	

Impacts on local government	Local government would not be directly impacted by the Phase 1 requirements. However, as a fuel consumer, a local government could be indirectly impacted if compliance costs are passed on to them by their fuel supplier. Those estimated indirect fiscal and economic impacts are identical to those estimated for the general public and are discussed in the section above.
Impacts on state agencies other than DEQ	State agencies would not be directly impacted by the Phase 1 requirements. However, as a fuel consumer, state agencies could be indirectly impacted if compliance costs are passed on to them by their fuel supplier. Those estimated indirect fiscal and economic impacts are identical to those estimated for the general public and are discussed in the section above (Impacts on the General Public).
Impacts on DEQ	The development of the Oregon Clean Fuels Program to date has been covered by existing DEQ staff and funding. DEQ plans to work with the Oregon Legislature to request new staff and funding to implement Phase 1 and to study whether or not to move forward with Phase 2 of the Oregon Clean Fuels Program. Phase 1 implementation resources will focus on providing technical assistance to regulated parties on how to register, keep records and submit reports to DEQ. Staff and funding are needed to audit information submitted to ensure its accuracy and to produce an annual report on fuels being supplied in Oregon. California's web-based reporting tool will be adapted and customized for Oregon's program at minimal cost. Preparation for Phase 2 would focus on analyzing whether there is enough fuel available to meet a possible future clean fuel standard and a fiscal analysis of implementing Phase 2. The latest science, policy and legal developments will be discussed by DEQ's Phase 2 advisory committee and any changes in program design will be incorporated into the Phase 2 program rules. DEQ estimates that it will take 1.3 FTE of additional staff to perform these tasks. DEQ also anticipates the need for outside expertise to update the fiscal analysis for Phase 2, to conduct the fuels assessment, and to modify an existing data system to accept on-line reporting and store and analyze carbon intensity data. At this time, DEQ intends to submit a legislative concept to the 2013 Oregon Legislature to request fee authority and a policy package to spend up to $475,000 for the 2013-2015 biennium. This amount, averaged over a potential of 69 regulated parties, results in an average annual fee of $3,442. The actual fee table structure and amount of the fees, however, would be established in a future EQC rulemaking that would include a formal process to solicit stakeholder input.
Assumptions	Key assumptions for DEQ include: • Many, if not all, regulated parties already gather and report fuels data to DEQ and other agencies for other purposes. • Many regulated parties are already registered with the California low carbon fuel standards program, and this will minimize their costs to comply with the Phase 1 requirements. • DEQ will provide training and technical assistance to regulated parties. DEQ will provide a web-based reporting tool for regulated parties to submit reports.
Housing costs	DEQ has determined that this proposed rulemaking will have no effect on the cost of development of a 6,000 square foot parcel and the construction of a 1,200 square foot detached single family dwelling on that parcel.
Administrative rule advisory committee	DEQ convened the Low Carbon Fuel Standards Advisory Committee that met 13 times from November 2009 to November 2010. The committee included Chair Mark Reeve and 29 members

	representing various stakeholder interests. The committee was asked to discuss and give input on key program policy and technical issues influencing the design and implementation of a low carbon fuel standard in Oregon. The committee's discussions were used by DEQ in forming its draft rule.

_____	_____	_____
Prepared by	Printed name	Date
_____	_____	_____
Approved by DEQ Budget Office	Printed name	Date

Oregon Department of Environmental Quality
Chapter 340 Rulemaking

Land Use Evaluation Statement

Rule Caption:
Oregon Clean Fuels Program for Fuel Suppliers and Producers of Transportation Fuels

1. Explain the purpose of the proposed rules.

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 that lead to climate change. The 2009 Oregon Legislature passed House Bill 2186 that authorized the Oregon Environmental Quality Commission to adopt rules that would reduce lifecycle emissions of greenhouse gases from Oregon's transportation fuels by 10 percent over a 10-year period. The proposed rules provide the regulatory framework to implement House Bill 2186, and are now referred to as the Oregon Clean Fuels Program.

The Oregon Clean Fuels Program would be implemented in two phases – Phase 1 would be a reporting phase beginning in 2013, and Phase 2 would be a later greenhouse gas emissions reduction phase. Phase 1 would require Oregon fuel producers and importers to register, keep records and report the volumes and carbon intensities of the fuels they provide in Oregon. Phase 2 would require regulated parties to reduce the average carbon intensity of gasoline and diesel fuel they provide in Oregon each year to meet the clean fuel standard for that year. Regulated parties could select the strategy that works best for them to meet the requirement, such as providing more biofuels, natural gas or electricity, or by purchasing clean fuel credits from suppliers of lower-carbon fuels.

Phase 1 is intended to provide DEQ and regulated parties time to fully develop record-keeping and reporting protocols and systems. It would also allow DEQ to gather data about Oregon's transportation fuels that will help inform DEQ and decision makers about the feasibility of moving ahead with the next phase of the program. If DEQ recommends moving forward to propose Phase 2 of the program, DEQ would initiate a new rulemaking process, including new advisory committees to gather new input on the design of the Phase 2 rules and it's fiscal and economic impact. Phase 2 can only be implemented if:

- The Oregon Legislature adopts a bill to remove the statutory 2015 sunset that currently applies to the Oregon Clean Fuels Program; and
- The Oregon Environmental Quality Commission adopts rules to remove a regulatory

deferral of Phase 2 of the Oregon Clean Fuels Program.

2. Do the proposed rules affect existing rules, programs or activities that are considered land use programs in the DEQ State Agency Coordination Program?

Yes___ No__X_

a. If yes, identify existing program/rule/activity:
Not applicable.

b. If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules?
Not applicable.

c. If no, state if the proposed rules are considered programs affecting land use. State the criteria and reasons for the determination.

The proposed rules for the Oregon Clean Fuels Program are not expected to have significant effects on resources, objectives or areas identified in the statewide planning goals, nor present or future land uses identified in acknowledged comprehensive plans.

However, while the proposed rules do not directly affect land use, they further the objective of Goal 6 to protect air quality by reducing the emissions of greenhouse gases. They also further the objective of Goal 13 to conserve energy by requiring greater use of lower carbon, or less energy-intense, fuels.

3. If the proposed rules have been determined a land use program under question two above, but are not subject to existing land use compliance and compatibility procedures, explain the new procedures DEQ will use to ensure compliance and compatibility.

Not applicable.