# Chapter 173-424 WAC CLEAN FUELS PROGRAM RULE

#### PART 1 - OVERVIEW

#### NEW SECTION

WAC 173-424-100 Purpose. This rule establishes requirements for suppliers and consumers of certain transportation fuels in Washington in order to reduce the lifecycle greenhouse gas emissions per unit energy (carbon intensity) of transportation fuels used in the state.

#### NEW SECTION

- WAC 173-424-110 Definitions. Except as provided elsewhere in this chapter, the definitions in this section apply throughout the chapter:
- (1) "Above the rack" means sales of transportation fuel at pipeline origin points, pipeline batches in transit, barge loads in transit, and at terminal tanks before the transportation fuel has been loaded into trucks.
- (2) "Advance credits" refers to credits advanced under WAC 173-424-550 for actions that will result in reductions of the carbon intensity of Washington's transportation fuels.
- (3) "Aggregation indicator" means an identifier for reported transactions that are a result of an aggregation or summing of more than one transaction in Washington fuels reporting system (WFRS). An entry of "true" indicates that multiple transactions have been aggregated and are reported with a single transaction number. An entry of "false" indicates that the transaction record represent a single fuel transaction.
- (4) "Aggregator" or "credit aggregator" means a person who registers to participate in the clean fuels program, described in WAC 173-424-140(3), on behalf of one or more credit generators to facilitate credit generation and to trade credits.
- (5) "Aggregator designation form" means an ecology-approved document that specifies that a credit generator has designated an aggregator to act on its behalf.
- (6) "Alternative fuel" means any transportation fuel that is not gasoline or a diesel fuel, including those fuels specified in WAC 173-424-120(2).
- (7) "Alternative fuel portal" or "AFP" means the portion of the WFRS where fuel producers can register their production facilities and

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submit fuel pathway code applications and physical pathway demonstrations.

- (8) "Alternative jet fuel" means a fuel made from petroleum or nonpetroleum sources that can be blended and used with conventional petroleum jet fuels without the need to modify aircraft engines and existing fuel distribution infrastructure. To generate credits under this CFP, such fuel must have a lower carbon intensity than the applicable annual carbon intensity standard in Table 2 of WAC 173-424-900. Alternative jet fuel includes those jet fuels derived from co-processed feedstocks at a conventional petroleum refinery.
- (9) "Animal fat" means the inedible fat that originates from a rendering facility as a product of rendering the by-products from meat processing facilities including animal parts, fat, and bone. "Yellow grease" must be reported under an applicable animal fat pathway if evidence is not provided to the verifier or ecology to confirm the quantity that is animal fat and the quantity that is used cooking oil.
- (10) "Application" means the type of vehicle where the fuel is consumed in terms of LDV/MDV for light-duty vehicle/medium-duty vehicle or HDV for heavy-duty vehicle.
- (11) "Backstop aggregator" means a qualified entity approved by ecology under WAC 173-424-140(3) to aggregate credits for electricity used as a transportation fuel, when those credits would not otherwise be generated.
- (12) "Base credits" refers to electricity credits that are generated by the carbon reduction between the gasoline or diesel standard and the carbon intensity of utility electricity.
- (13) "Battery electric vehicle" or "BEV" means any vehicle that operates solely by use of a battery or battery pack, or that is powered primarily through the use of an electric battery or battery pack but uses a flywheel or capacitor that stores energy produced by the electric motor or through regenerative braking to assist in vehicle operation.
- (14) "Below the rack" means sales of clear or blended gasoline or diesel fuel where the fuel is being sold as a finished fuel for use in a motor vehicle.
- (15) "Bill of lading" means a document issued that lists goods being shipped and specifies the terms of their transport.
- (16) "Bio-CNG" means biomethane which has been compressed to CNG. Bio-CNG has equivalent performance characteristics when compared to fossil CNG.
- (17) "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.
- (18) "Biodiesel blend" means a fuel comprised of a blend of biodiesel with petroleum-based diesel fuel, designated BXX. In the abbreviation BXX, the XX represents the volume percentage of biodiesel fuel in the blend.
- (19) "Bio-L-CNG" means biomethane which has been compressed, liquefied, regasified, and recompressed into L-CNG, and has performance characteristics at least equivalent to fossil L-CNG.
- (20) "Bio-LNG" means biomethane which has been compressed and liquefied into LNG. Bio-LNG has equivalent performance characteristics when compared to fossil LNG.
- (21) "Biogas" means gas comprised primarily of methane and carbon dioxide, produced by the anaerobic decomposition of organic matter in a landfill, lagoon, or constructed reactor (digester). Biogas often

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contains a number of other impurities, such as hydrogen sulfide, and it cannot be directly injected into natural gas pipelines or combusted in most natural-gas-fueled vehicles unless first upgraded to biomethane. It can be used as a fuel in boilers and engines to produce electrical power.

- (22) "Biomass" means nonfossilized and biodegradable organic material originating from plants, animals, or microorganisms, including: Products, by-products, residues and waste from agriculture, forestry, and related industries; the nonfossilized and biodegradable organic fractions of industrial and municipal wastes; and gases and liquids recovered from the decomposition of nonfossilized and biodegradable organic material.
- (23) "Biomass-based diesel" means a biodiesel or a renewable diesel.
- (24) "Biomethane" means methane derived from biogas, or synthetic natural gas derived from renewable resources, including the organic portion of municipal solid waste, which has been upgraded to meet standards for injection to a natural gas common carrier pipeline, or for use in natural gas vehicles, natural gas equipment, or production of renewable hydrogen. Biomethane contains all of the environmental attributes associated with biogas and can also be referred to as renewable natural gas.
- (25) "Blendstock" means a fuel component that is either used alone or is blended with one or more other components to produce a finished fuel used in a motor vehicle. Each blendstock corresponds to a fuel pathway in the Washington Greenhouse Gases, Regulated Emissions, and Energy use in Transportation version 3.0 (WA-GREET 3.0) model, (November 28, 2022), which is incorporated herein by reference. A blendstock that is used directly as a transportation fuel in a vehicle is considered a finished fuel.
- (26) "Bulk system" means a fuel distribution system consisting of refineries, pipelines, vessels, and terminals. Fuel storage and blending facilities that are not fed by pipeline or vessel are considered outside the bulk transfer system.
- (27) "Business partner" refers to the second party that participates in a specific transaction involving the regulated party. This can either be the buyer or seller of fuel, whichever applies to the specific transaction.
- (28) "Buy/sell board" means a section of the WFRS where registered parties can post that they are interested in buying or selling credits.
- (29) "Carbon intensity" or "CI" means the amount of lifecycle greenhouse gas emissions per unit of energy of fuel expressed in grams of carbon dioxide equivalent per megajoule (gCO $_2$ e/MJ).
- (30) "Cargo handling equipment" or "CHE" means any off-road, self-propelled vehicle or equipment, other than yard trucks, used at a port or intermodal rail yard to lift or move container, bulk, or liquid cargo carried by ship, train, or another vehicle, or used to perform maintenance and repair activities that are routinely scheduled or that are due to predictable process upsets. Equipment includes, but is not limited to, rubber-tired gantry cranes, top handlers, side handlers, reach stackers, loaders, aerial lifts, excavators, tractors, and dozers.
- (31) "Carryback credit" means a credit that was generated during or before the prior compliance period that a regulated party acquires

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between January 1st and April 30th of the current compliance period to meet its compliance obligation for the prior compliance period.

- (32) "Clean fuel standard" or "low carbon fuel standard" means the annual average carbon intensity a regulated party must comply with, as listed in Table 1 under WAC 173-424-900 for gasoline and gasoline substitutes and in Table 2 under WAC 173-424-900 for diesel fuel and diesel substitutes.
- (33) "Clear diesel" means a light middle or middle distillate grade diesel fuel derived from crude oil that has not been blended with a renewable fuel.
- (34) "Clear gasoline" means gasoline derived from crude oil that has not been blended with a renewable fuel.
- (35) "Compliance period" means each calendar year(s) during which regulated parties must demonstrate compliance under WAC 173-424-140.
- (36) "Compressed natural gas" or "CNG" means natural gas stored inside a pressure vessel at a pressure greater than the ambient atmospheric pressure.
- (37) "Conventional jet fuel" means aviation turbine fuel including commercial and military jet fuel. Commercial jet fuel includes products known as Jet A, Jet A-1, and Jet B. Military jet fuel includes products known as JP-5 and JP-8.
- (38) "Co-processing" means the processing and refining of renewable or alternative low-carbon feedstocks intermingled with crude oil and its derivatives at petroleum refineries.
- (39) "Credit facilitator" means a person in the WFRS that a regulated party designates to initiate and complete credit transfers on behalf of the regulated party.
- (40) "Credit generator" means a person eligible to generate credits by providing clean fuels for use in Washington and who voluntarily registers to participate in the clean fuels program.
- (41) "Credits" and "deficits" mean the units of measure used for determining a regulated entity's compliance with the average carbon intensity requirements in WAC 173-424-900. Credits and deficits are denominated in units of metric tons of carbon dioxide equivalent (CO<sub>2</sub>e), and are calculated pursuant to WAC 173-424-540 and 173-424-560.
- (42) "Crude oil" means any naturally occurring flammable mixture of hydrocarbons found in geologic formations.
- (43) "Day" means a calendar day unless otherwise specified as a business day.
- (44) "Deferral" means a delay or change in the applicability of a scheduled applicable clean fuel standard for a period of time, accomplished pursuant to an order issued under WAC 173-424-720 or 173-424-730 as directed under RCW 70A.535.110 and 70A.535.120.
- (45) "Deficit generator" means a fuel reporting entity who generates deficits in the CFP program.
- (46) "Denatured fuel ethanol" or "ethanol" means nominally anhydrous ethyl alcohol meeting ASTM D4806 standards. It is intended to be blended with gasoline for use as a fuel in a spark-ignition internal combustion engine. Before it is blended with gasoline, the denatured fuel ethanol is first made unfit for drinking by the addition of substances approved by the Alcohol and Tobacco Tax and Trade Bureau.
  - (47) "Diesel fuel" or "diesel" means either:
- (a) A light middle distillate or middle distillate fuel suitable for compression ignition engines blended with not more than five vol-

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ume percent biodiesel and conforming to the specifications of ASTM D975; or

- (b) A light middle distillate or middle distillate fuel blended with at least five and not more than 20 volume percent biodiesel suitable for compression ignition engines conforming to the specifications of ASTM D7467.
- (48) "Direct current fast charging" means charging an electric vehicle at  $50~\mathrm{kW}$  and higher using direct current.
- (49) "Disproportionately impacted communities" means communities that are identified by the department of health pursuant to chapters 70A.02 and 19.405 RCW.
- (50) "Distiller's corn oil" has the same meaning as "technical corn oil."
- (51) "Distiller's sorghum oil" has the same meaning as "technical sorghum oil."
- (52) "Duty-cycle testing" means a test procedure used for emissions and vehicle efficiency testing.
- (53) "E10" means gasoline containing 10 volume percent fuel ethanol.
- (54) "E100" also known as "denatured fuel ethanol," means nominally anhydrous ethyl alcohol.
  - (55) "Ecology" means the Washington state department of ecology.
- (56) "Electric cargo handling equipment (eCHE)" means cargo handling equipment using electricity as the fuel.
- (57) "Electric ground support equipment (eGSE)" means self-propelled vehicles used off-road at airports to support general aviation activities that use electric batteries for propulsion and functional energy and only has electric motors. For the purpose of this rule that includes, but is not limited to, pushbacks, belt loaders, and baggage tractors.
- (58) "Electric power for ocean-going vessel (eOGV)" means shore power provided to an ocean going vessel at-berth.
- (59) "Electric transport refrigeration units (eTRU)" means refrigeration systems powered by electricity designed to refrigerate or heat perishable products that are transported in various containers, including semi-trailers, truck vans, shipping containers, and rail cars.
- (60) "Electric vehicle (EV)," for purposes of this regulation, refers to battery electric vehicles (BEVs) and plug-in hybrid electric vehicles (PHEVs).
- (61) "Emergency period" is the period of time in which an emergency action under WAC 173-424-720 is in effect.
- (62) "Energy economy ratio (EER)" means the dimensionless value that represents the efficiency of a fuel as used in a powertrain as compared to a reference fuel used in the same powertrain.
- (a) EERs are often a comparison of miles per gasoline gallon equivalent (mpge) between two fuels.
- (b) EERs for fixed guideway systems are based on MJ/number of passenger-miles.
- (63) "Environmental attribute" means greenhouse gas emission reduction recognition in any form, including verified emission reductions, voluntary emission reductions, offsets, allowances, credits, avoided compliance costs, emission rights and authorizations under any law or regulation, or any emission reduction registry, trading system, or reporting or reduction program for greenhouse gas emissions that is established, certified, maintained, or recognized by any international, governmental, or nongovernmental agency.

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- (64) "Export" means transportation fuel reported in the WFRS that is delivered to locations outside of Washington state by any means of transport, other than in the fuel tank of a motor vehicle for the purpose of propelling the motor vehicle.
- (65) "Feedstock transfer document" means a document, or combination of documents, that demonstrates the delivery of specified source feedstocks from the point of origin to the fuel production facility as required under WAC 173-424-600(6).
- (66) "Finished fuel" means a transportation fuel that is used directly in a vehicle for transportation purposes without requiring additional chemical or physical processing.
- (67) "First fuel reporting entity" means the first entity responsible for reporting in the WFRS for a given amount of fuel. This entity initially holds the status as the fuel reporting entity and the credit or deficit generator for this fuel amount, but may transfer either status pursuant to WAC 173-424-200 or 173-424-210.
- (68) "Fixed guideway" means a public transportation facility using and occupying a separate right of way for the exclusive use of public transportation using rail, a fixed catenary system, an aerial tramway, or for a bus rapid transit system.
- (69) "Fossil" means any naturally occurring flammable mixture of hydrocarbons found in geologic formations such as rock or strata. When used as an adjective preceding a type of fuel (e.g., "fossil gasoline," or "fossil LNG"), it means the subset of that type of fuel that is derived from a fossil source.
- (70) "Fuel pathway" means a detailed description of all stages of fuel production and use for any particular transportation fuel, including feedstock generation or extraction, production, distribution, and combustion of the fuel by the consumer. The fuel pathway is used to calculate the carbon intensity of each transportation fuel through a complete well-to-wheel analysis of that fuel's life cycle greenhouse gas emissions.
- (71) "Fuel pathway applicant" refers to an entity that has registered in the alternative fuel portal pursuant to WAC 173-424-300 and has submitted an application including all required documents and attestations in support of the application requesting a certified fuel pathway.
- (72) "Fuel pathway code" or "FPC" means the identifier used in the WFRS that applies to a specific fuel pathway as approved or issued under WAC 173-424-600 through 173-424-630.
- (73) "Fuel pathway holder" means a fuel pathway applicant that has received a certified fuel pathway carbon intensity based on site-specific data, including a provisional fuel pathway from ecology, or who has a certified fuel pathway code from the California air resources board or Oregon department of environmental quality that has been approved for use in Washington by ecology.
- (74) "Fuel production facility" means the facility at which a regulated or opt-in fuel is produced. With respect to biomethane, a fuel production facility means the facility at which the fuel is upgraded, purified, or processed to meet the standards for injection to a natural gas common carrier pipeline or for use in natural gas vehicles.
- (75) "Fuel reporting entity" means an entity that is required to report fuel transactions in the WFRS pursuant to WAC 173-424-200 through 173-424-220. Fuel reporting entity refers to the first fuel reporting entity and to any entity to whom the reporting entity status is passed for a given quantity of fuel.

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- (76) "Fuel supply equipment" refers to equipment registered in the WFRS that dispenses alternative fuel into vehicles including, but not limited to, electric vehicle chargers, hydrogen fueling stations, and natural gas fueling equipment.
- (77) "Gasoline" means a fuel suitable for spark ignition engines and conforming to the specifications of ASTM D4814.
- (78) "Heavy-duty vehicle" or "HDV" means a vehicle that is rated at or greater than 14,001 pounds gross vehicle weight rating (GVWR).
- (79) "Home fueling" means the dispensing of fuel by use of a fueling appliance that is located on or within a residential property with access limited to a single household.
- (80) "Hybrid electric vehicle (HEV)" means any vehicle that can draw propulsion energy from both of the following on-vehicle sources of stored energy:
  - (a) A consumable fuel; and
- (b) An energy storage device, such as a battery, capacitor, or flywheel.
- (81) "Hydrogen station capacity evaluator" or "HySCapE" means a tool developed by the National Renewable Energy Laboratory to determine the dispensing capacity of a hydrogen station, HySCapE Version 1.0 (August 13, 2018).
- (82) "Illegitimate credits" means credits that were not generated in compliance with (either say "the CFS" or cite to the WAC provision on credit generation. I believe "division" is specific to the Oregon program).
- (83) "Import" means to have ownership title to transportation fuel at the time it is brought from outside Washington into Washington by any means of transport other than in the fuel tank of a motor vehicle for the purpose of propelling that motor vehicle.
  - (84) "Importer" means:
- (a) With respect to any liquid fuel, the person who imports the fuel; or
- (b) With respect to any biomethane, the person who owns the biomethane when it is either physically transported into Washington or injected into a pipeline located outside of Washington and delivered for use in Washington.
- (85) "Incremental credit" means a credit that is generated by an action to further lower the carbon intensity of electricity. Incremental credits are calculated from the difference between the carbon intensity of statewide grid or utility-specific electricity and the carbon intensity of renewable electricity.
- (86) "Indirect land use change" means the average lifecycle greenhouse gas emissions caused by an increase in land area used to grow crops that is caused by increased use of crop-based transportation fuels, and expressed as grams of carbon dioxide equivalent per megajoule of energy provided (gCO $_2$ e/MJ). Indirect land use change values for biofuels are listed in Table 5 under WAC 173-424-900. Indirect land use change for fuel made from sugarcane, corn, sorghum, soybean, canola, and palm feedstocks is calculated using the protocol developed by the California air resources board.
- (87) "Ineligible specified source feedstock" means a feedstock specified in WAC 173-424-600 (6)(a) through (c) that does not meet the chain-of-custody documentation requirements specified in WAC 173-424-600 (6)(d).

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- (88) "Invoice" means the receipt or other record of a sale transaction, specifying the price and terms of sale, that describes an itemized list of goods shipped.
  - (89) "Lifecycle greenhouse gas emissions" are:
- (a) The aggregated quantity of greenhouse gas emissions, including direct emissions and significant indirect emissions, such as significant emissions from changes in land use associated with the fuels, as approved by ecology;
- (b) Measured over the full fuel lifecycle, including all stages of fuel production, from feedstock generation or extraction, production, distribution, and combustion of the fuel by the consumer; and
- (c) Stated in terms of mass values for all greenhouse gases as adjusted to  $\text{CO}_2\text{e}$  to account for the relative global warming potential of each gas.
- (90) "Light-duty vehicle" and "medium-duty vehicle" mean a vehicle category that includes both light-duty (LDV) and medium-duty vehicles (MDV).
- (a) "LDV" means a vehicle that is rated at 8,500 pounds or less GVWR.
- (b) "MDV" means a vehicle that is rated between 8,501 and 14,000 pounds GVWR.
- (91) "Liquefied compressed natural gas" or "L-CNG" means natural gas that has been liquefied and transported to a dispensing station where it was then regasified and compressed to a pressure greater than ambient pressure.
- (92) "Liquefied natural gas" or "LNG" means natural gas that has been liquefied.
- (93) "Liquefied petroleum gas" or "propane" or "LPG" means a petroleum product composed predominantly of any of the hydrocarbons, or mixture thereof; propane, propylene, butanes, and butylenes maintained in the liquid state.
- (94) "Low-carbon intensity (Low-CI) electricity" means any electricity that is determined to have a carbon intensity that is less than the average grid or utility specific, as applicable including, but not limited to, a renewable resource as defined in RCW 19.405.020(34).
- (95) "Motor vehicle" means any vehicle, vessel, watercraft, engine, machine, or mechanical contrivance that is self-propelled.
- (96) "M-RETS renewable thermal" means the electronic tracking and trading system for North American biomethane and other renewable thermal attributes run by the M-RETS organization. For the purposes of this division, only the biomethane or renewable natural gas certificates generated by this system are recognized.
- (97) "Multifamily housing" means a structure or facility established primarily to provide housing that provides four or more living units in which each unit shares a floor or ceiling on at least one side.
- (98) "Multifuel vehicle" means a vehicle that uses two or more distinct fuels for its operation. A multifuel vehicle (also called a vehicle operating in blended-mode) includes a bi-fuel vehicle and can have two or more fueling ports onboard the vehicle. A fueling port can be an electrical plug or a receptacle for liquid or gaseous fuel. For example, most plug-in hybrid electric vehicles use both electricity and gasoline as the fuel source and can be "refueled" using two separately distinct fueling ports.

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- (99) "Natural gas" means a mixture of gaseous hydrocarbons and other compounds with at least 80 percent methane by volume.
- (100) "Ocean-going vessel" means a commercial, government, or military vessel meeting any one of the following criteria:
  - (a) A vessel greater than or equal to 400 feet in length overall;
- (b) A vessel greater than or equal to 10,000 gross tons pursuant to the convention measurement (international system);
- (c) A vessel propelled by a marine compression ignition engine with a per-cylinder displacement of greater than or equal to 30 liters.
- (101) "OPGEE" or "OPGEE model" means the oil production greenhouse gas emissions estimator version 2.0 (June 20, 2018) posted at http://www.arb.ca.gov/fuels/lcfs/lcfs.htm, which is incorporated herein by reference.
- (102) "Opt-in fuel reporting entity" means an entity that meets the requirements of WAC 173-424-120 and voluntarily opts in to be a fuel reporting entity and is therefore subject to the requirements set forth in this chapter.
- (103) "Petroleum intermediate" means a petroleum product that can be further processed to produce gasoline, diesel, or other petroleum blendstocks.
- (104) "Petroleum product" means all refined and semi-refined products that are produced at a refinery by processing crude oil and other petroleum-based feedstocks, including petroleum products derived from co-processing biomass and petroleum feedstock together. "Petroleum product" does not include plastics or plastic products.
- (105) "Physical transport mode" means the applicable combination of actual fuel delivery methods, such as truck routes, rail lines, pipelines and any other fuel distribution methods through which the regulated party reasonably expects the fuel to be transported under contract from the entity that generated or produced the fuel, to any intermediate entities and ending in Washington. The fuel pathway holder and any entity reporting the fuel must demonstrate that the actual feedstock transport mode and distance conforms to the stated mode and distance in the certified pathway.
- (106) "Plug-in hybrid electric vehicle" or "PHEV" means a hybrid electric vehicle with the capability to charge a battery from an off-vehicle electric energy source that cannot be connected or coupled to the vehicle in any manner while the vehicle is being driven.
- (107) "Position holder" means any person that has an ownership interest in a specific amount of fuel in the inventory of a terminal operator. This does not include inventory held outside of a terminal, retail establishments, or other fuel suppliers not holding inventory at a fuel terminal.
- (108) "Power purchase agreement" means a written agreement between an electricity service supplier and a customer that specifies the source or sources of electricity that will supply the customer.
- (109) "Private access fueling facility" means a fueling facility with access restricted to privately-distributed electronic cards (cardlock) or is located in a secure area not accessible to the public.
  - (110) "Producer" means:
- (a) With respect to any liquid fuel and renewable propane, the person who makes the fuel; or
- (b) With respect to any biomethane, the person who refines, treats, or otherwise processes biogas into biomethane.

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- (111) "Product transfer document" or "PTD" means a document that authenticates the transfer of ownership of fuel from a fuel reporting entity to the recipient of the fuel. A PTD is created by a fuel reporting entity to contain information collectively supplied by other fuel transaction documents, including bills of lading, invoices, contracts, meter tickets, rail inventory sheets, renewable fuels standard (RFS) product transfer documents, etc.
- (112) "Public access fueling facility" means a fueling facility that is not a private-access fueling dispenser.
- (113) "Public transit agency" means an entity that operates a public transportation system.
- (114) "Public transportation" means regular, continuing shared passenger-transport services along set routes which are available for use by the general public.
- (115) "Rack" means a mechanism for delivering motor vehicle fuel or diesel from a refinery or terminal into a truck, trailer, railroad car, or other means of nonbulk transfer.
- (116) "Registered party" means a regulated party, credit generator, aggregator, or an out-of-state fuel producer that has an ecology-approved registration under WAC 173-424-300 to participate in the clean fuels program.
- (117) "Regulated fuel" means a transportation fuel identified under WAC 173-424-120 (2).
- (118) "Regulated party" means a person responsible for compliance with requirements listed under WAC 173-424-140(1).
- (119) "Renewable fuel standard" means the program administered by the United States Environmental Protection Agency, under 40 C.F.R. Part 80: Regulation of fuels and fuel additives, Subparts K and M.
- (120) "Renewable gasoline" means a spark ignition engine fuel that substitutes for fossil gasoline and that is produced from renewable resources.
- (121) "Renewable hydrocarbon diesel" or "renewable diesel" means a diesel fuel that is produced from nonpetroleum renewable resources but is not a monoalkylester and which is registered as a motor vehicle fuel or fuel additive under 40 C.F.R. Part 79. This includes the renewable portion of a diesel fuel derived from co-processing biomass with a petroleum feedstock.
- (122) "Renewable hydrocarbon diesel blend" or "renewable diesel blend" means a fuel comprised of a blend of renewable hydrocarbon diesel with petroleum-based diesel fuel, designated RXX. In the abbreviation RXX, the XX represents the volume percentage of renewable hydrocarbon diesel fuel in the blend.
- (123) "Renewable hydrogen" means hydrogen produced using renewable resources both as the source for the hydrogen and the source for the energy input into the production process, as defined in RCW 19.405.020(32). It includes hydrogen derived from:
- (a) Electrolysis of water or aqueous solutions using renewable electricity;
- (b) Catalytic cracking or steam methane reforming of biomethane; or
- (c) Thermochemical conversion of biomass, including the organic portion of municipal solid waste (MSW).

Renewable electricity, for the purpose of renewable hydrogen production by electrolysis, means electricity derived from sources that qualify as renewable energy resources as defined in RCW 19.405.020(34).

- (124) "Renewable naphtha" means naphtha that is produced from nonpetroleum renewable resources.
- (125) "Renewable propane" means liquefied petroleum gas (LPG or propane) that is produced from nonpetroleum renewable resources.
- (126) "Shore power" means electrical power being provided either by the local utility or by distributed generation to ocean-going vessels at-berth.
- (127) "Single-family residence" means a building designed to house a family in a single residential unit. A single-family residence is either detached or attached including duplex or townhouse units.
- (128) "Site-specific data" and "site-specific input" means an input value used in determination of fuel pathway carbon intensity value, or the raw operational data used to calculate an input value, which is required to be unique to the facility, pathway, and feed-stock. All site-specific inputs must be measured, metered or otherwise documented, and verifiable, e.g., consumption of natural gas or grid electricity at a fuel production facility must be documented by invoices from the utility.
- (129) "Small importer of finished fuels" means any person who imports into Washington 500,000 gallons or less of finished fuels in a given calendar year. Any fuel imported by persons that are related, or share common ownership or control, shall be aggregated together to determine whether a person meets this definition.
- (130) "Specified source feedstocks" are feedstocks for fuel pathways that require chain of custody evidence to be eligible for a reduced CI associated with the use of a waste, residue, by-product, or similar material under the pathway certification process under WAC 173-424-600.
- (131) "Station operational status system (SOSS)" means a software database tool developed and maintained by California fuel cell partnership to publicly monitor the operational status of hydrogen stations.
- (132) "Substitute fuel pathway code" means a fuel pathway code that is used to report transactions that are sales or purchases without obligation, exports, loss of inventory, not for transportation use, and exempt fuel use when the seller of a fuel does not pass along the credits or deficits to the buyer and the buyer does not have accurate information on the carbon intensity of the fuel or its blend-stocks.
- (133) "Technical corn oil" means inedible oil recovered from thin stillage or the distiller's grains and solubles produced by a dry mill corn ethanol plant, termed distiller's corn oil (DCO), or other non-food grade corn oil from food processing operations.
- (134) "Technical sorghum oil" means inedible oil recovered from thin stillage or the distiller's grains and solubles produced by a dry mill sorghum ethanol plant, termed distiller's sorghum oil (DSO), or other nonfood grade sorghum oil from food processing operations.
- (135) "Tier 1 calculator," "simplified calculator," or "WA-GREET 3.0 Tier 1 calculator" means the tools used to calculate lifecycle emissions for commonly produced fuels, including the instruction manuals on how to use the calculators. Ecology will make available copies of these simplified calculators on its website (https://www.ecology.wa.gov). The simplified calculators used in the program are:
- (a) Tier 1 simplified calculator for starch and corn fiber ethanol;

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- (b) Tier 1 simplified CI calculator for sugarcane-derived ethanol;
- (c) Tier 1 simplified CI calculator for biodiesel and renewable diesel;
- (d) Tier 1 simplified CI calculator for LNG and L-CNG from North American Natural Gas;
- (e) Tier 1 simplified CI calculator for biomethane from North American landfills;
- (f) Tier 1 simplified CI calculator for biomethane from anaerobic digestion of wastewater sludge;
- (g) Tier 1 simplified CI calculator for biomethane from food, green, and other organic wastes; and
- (h) Tier 1 simplified CI calculator for biomethane from AD of dairy and swine manure.
- (136) "Tier 2 calculator" or "WA-GREET 3.0 model" means the tool used to calculate lifecycle emissions for next generation fuels, including the instruction manual on how to use the calculator. Next generation fuels include, but are not limited to, cellulosic alcohols, hydrogen, drop-in fuels, or first generation fuels produced using innovative production processes. Ecology will make available a copy of the Tier 2 calculator on its website (https://www.ecology.wa.gov).
- (137) "Total amount (TA)" means the total quantity of fuel reported by a fuel reporting entity irrespective of whether the entity retained status as the credit or deficit generator for that specific fuel volume. TA is calculated as the difference between the fuel reported using transaction types that increase the net fuel quantity reported in the WFRS and fuel reported using transaction type that decrease the net fuel quantity reported in the WFRS. Transaction types that increase the TA include: Production in Washington, production for import, import, purchased with obligation, purchased without obligation, gain of inventory. Transaction types that decrease the TA include: Sold with obligation, sold without obligation, loss of inventory, export, not used for transportation.
- (138) "Transaction date" means the title transfer date as shown on the product transfer document.
- (139) "Transaction quantity" means the amount of fuel reported in a transaction. A transaction quantity must be reported in units, provided in Table 3 in WAC 173-424-900 and in the WFRS.
- (140) "Transaction type" means the nature of the fuel transaction as defined below:
- (a) "Produced in Washington" means the transportation fuel was produced at a facility in Washington;
- (b) "Import within the bulk system" means the transportation fuel was produced outside of Washington and later imported into Washington and placed into the bulk system;
- (c) "Import outside the bulk system" means the transportation fuel was imported into Washington and delivered outside the bulk system;
- (d) "Purchased with obligation" means the transportation fuel was purchased with the compliance obligation passing to the purchaser;
- (e) "Purchased without obligation" means the transportation fuel was purchased with the compliance obligation retained by the seller;
- (f) "Sold with obligation" means the transportation fuel was sold with the compliance obligation passing to the purchaser;
- (g) "Sold without obligation" means the transportation fuel was sold with the compliance obligation retained by the seller;

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- (h) "Position holder sale" means the transportation fuel was sold below the rack without a transfer of the compliance obligation;
- (i) "Position holder sale for export" means the transportation fuel was sold below the rack to an entity who exported the fuel;
- (j) "Purchase below the rack for export" means the transportation fuel was purchased below the rack and exported;
- (k) "Export" means a transportation fuel that was reported under the clean fuels program but was later moved from a location inside of Washington to a location outside of Washington, and is not used for transportation in Washington;
- (1) "Loss of inventory" means the fuel exited the Washington fuel pool due to volume loss, such as through evaporation or due to different temperatures or pressurization;
- (m) "Gain of inventory" means the fuel entered the Washington fuel pool due to a volume gain, such as through different temperatures or pressurization;
- (n) "Not used for transportation" means a transportation fuel was reported with compliance obligation under the CFP but was later used in an application unrelated to the movement of goods or people in Washington, such as process heat at an industrial facility, home or commercial building heating, or electric power generation;
- (o) "EV charging" means providing electricity to recharge EVs including BEVs and PHEVs;
- (p) "LPGV fueling" means the dispensing of liquefied petroleum gas at a fueling station designed for fueling liquefied petroleum gas vehicles;
- (q) "NGV fueling" means the dispensing of natural gas at a fueling station designed for fueling natural gas vehicles;
- (r) "Exempt fuel use aircraft," "exempt fuel use racing activity vehicles," "exempt fuel use military tactical and support vehicle and equipment," "exempt fuel use - locomotives," "exempt fuel use - watercraft," "exempt fuel use - farm vehicles, tractors, implements of husbandry," "exempt fuel use - motor trucks primary used to transport logs," "exempt fuel use - off-highway construction vehicles, all of which must meet WAC 173-424-130" means that the fuel was delivered or sold into the category of vehicles or fuel users that are exempt under WAC 173-424-130; or
- (s) "Production for import into Washington" means the transportation fuel was produced outside of Washington and imported into Washington for use in transportation.
- (141) "Transportation fuel" means gasoline, diesel, any other flammable or combustible gas or liquid and electricity that can be used as a fuel for the operation of a motor vehicle. Transportation fuel does not mean unrefined petroleum products.
- (142) "Unbundled renewable energy credit" means a renewable energy credit that is sold, delivered, or purchased separately from electricity.
- (143) "Unit of fuel" means fuel quantities expressed to the largest whole unit of measure, with any remainder expressed in decimal fractions of the largest whole unit.
- (144) "Unit of measure" means either:(a) The International System of Units defined in NIST Special Publication 811 (2008) commonly called the metric system;
- (b) U.S. customer units defined in terms of their metric conversion factors in NIST Special Publications 811 (2008); or
  - (c) Commodity specific units defined in either:
  - (i) The NIST Handbook 130 (2015), Method of Sale Regulation; or

- (ii) Chapter 16-662 WAC.
- (145) "Unspecified source of electricity" or "unspecified source" means a source of electricity that is not a specified source at the time of entry into the transaction to procure the electricity. The generation of such electricity will be assigned an emissions factor of 0.437 metric tons per megawatt-hour of electricity as measured by the utility at the first point of receipt in Washington, unless ecology assigns another number as directed by RCW 19.405.070(2). This includes the GHG emission factor 0.428 metric tons per megawatt-hour for electricity generation, and the two percent GHG emissions due to transmission losses between the point of generation and the first point of receipt in Washington.
- (146) "Used cooking oil" or "UCO" means fats and oils originating from commercial or industrial food processing operations, including restaurants that have been used for cooking or frying. Feedstock characterized as UCO must contain only fats, oils, or greases that were previously used for cooking or frying operations. UCO must be characterized as "processed UCO" if it is known that processing has occurred prior to receipt by the fuel production facility or if evidence is not provided to the verifier or ecology to confirm that it is "unprocessed UCO."
- (147) "Utility renewable electricity product" means a product where a utility customer has elected to purchase renewable electricity through a product that retires RECs or represents a bundled purchase of renewable electricity and its RECs.
- (148) "Validation" means verification of a fuel pathway application.
- (149) "Verification" means a systematic, independent, and documented process for evaluation of reported data against the requirements specified in this chapter.
- (150) "Washington fuels reporting system" or "WFRS" means the interactive, secured, web-based, electronic data tracking, reporting, and compliance system that ecology develops, manages, and operates to support the clean fuels program.
- (151) "WFRS reporting deadlines" means the quarterly and annual reporting dates in WAC 173-424-410 and 173-424-430.
- (152) "WA-GREET" means the greenhouse gases, regulated emissions, and energy in transportation (GREET) model developed by Argonne National Laboratory that ecology modifies and maintains for use in the Washington clean fuels program. The most current version is WA-GREET 3.0. Ecology will make available a copy of WA-GREET 3.0 on its website (www.ecology.wa.gov). As used in this rule, WA-GREET refers to both the full model and the fuel-specific simplified calculators that the program has adopted.
- (153) "Yellow grease" means a commodity produced from a mixture of:
  - (a) Used cooking oil; and
  - (b) Rendered animal fats that were not used for cooking.

This mixture often is combined from multiple points of origin. Yellow grease must be characterized as "animal fat" if evidence is not provided to the verifier or ecology to confirm the quantity that is animal fat and the quantity that is used cooking oil.

Abbreviations. For the purposes of this chapter, the following acronyms apply.

"AEZ-EF" means agro-ecological zone emissions factor model.

"AFP" means alternative fuel portal.

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"AJF" means alternative jet fuel.

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

"BEV" means battery electric vehicles.

"WA-GREET" means Washington-modified greenhouse gases, regulated emissions, and energy use in transportation model.

"CARB" means California air resources board.

"CA-GREET" means the California air resources board adopted version of GREET model.
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"CCM" means credit clearance market.

"CEC" means California energy commission.

"CFP" means clean fuels program established under this chapter to implement chapter 70A.535 RCW.

"CFR" means Code of Federal Regulations.

"CFS" means clean fuel standard or carbon intensity standard.

"CHAdeMO" means charge de move, a DC fast charging protocol.

"CI" means carbon intensity.

"CNG" means compressed natural gas.

"DC" means direct current.

"DCO" means distiller's corn oil or technical corn oil.

"DSO" means distiller's sorghum oil or technical sorghum oil.

"eCHE" means electric cargo handling equipment.

"EDU" means electrical distribution utility.

"EER" means energy economy ratio.

"eTRU" means electric transport refrigeration unit.

"eOGV" means electric power for ocean-going vessel.

"EV" means electric vehicle.

"FCV" means fuel cell vehicle.

"FCI" means direct current fast charging infrastructure.

"FEIN" means federal employer identification number.

"FPC" means fuel pathway code.

"FSE" means fueling supply equipment.

"(gCO $_2$ e/MJ)" means grams of carbon dioxide equivalent per megatioule.

"GTAP" means the global trade analysis project model.

"GVWR" means gross vehicle weight rating.

"HySCapE" means hydrogen station capacity evaluator.

"H<sub>2</sub>" means hydrogen.

"HDV" means heavy-duty vehicles.

"HDV-CIE" means a heavy-duty vehicle compression-ignition engine.

"HDV-SIE" means a heavy-duty vehicle spark-ignition engine.

"HEV" means hybrid electric vehicle.

"HRI" means hydrogen refueling infrastructure.

"ICEV" means internal combustion engine vehicle.

"LUC" means land use change.

"LCA" means life cycle analysis.

"L-CNG" means liquefied compressed natural gas.

"LDV" means light-duty vehicles.

"LNG" means liquefied natural gas.

"LPG" means liquefied petroleum gas.

"LPGV" means liquefied petroleum gas vehicle.

"MCON" means marketable crude oil name.

"MDV" means medium-duty vehicles.

"MMBtu" means million British thermal units.

"MT" means metric tons (of carbon dioxide equivalent).

"NG" means natural gas.

- "NGV" means a natural gas vehicle.
- "OPGEE" means oil production greenhouse gas emissions estimator model.
  - "OR-DEQ" means Oregon department of environmental quality.
  - "PHEV" means plug-in hybrid vehicles.
  - "PTD" means product transfer document.
  - "RFS" means the renewable fuel standard.
  - "REC" means renewable energy certificate.
  - "RTC" means renewable thermal certificate.
  - "RNG" means renewable natural gas or biomethane.
- "RFS" means the renewable fuel standard implemented by the U.S. Environmental Protection Agency.
- "SAE CCS" means Society of Automotive Engineers combined charging system, a DC fast charging protocol.
  - "SMR" means steam methane reformation.
  - "SOSS" means station operational status system.
  - "UCO" means used cooking oil.
- "U.S. EPA" means the United States Environmental Protection Agency.
- "WFRS" means Washington fuels reporting system, the electronic reporting, trading, and compliance platform for the clean fuels program.
- "WREGIS" means the western renewable energy generation information system run by the western electricity coordinating council.

- WAC 173-424-120 Applicability. (1) Except as exempted in WAC 173-424-130, this rule applies to:
- (a) Any transportation fuel, as defined in WAC 173-424-110, that is sold, supplied, or offered for sale in Washington; and
- (b) Any fuel reporting entity, as defined in WAC 173-424-110 and specified in WAC 173-424-200 through 173-424-220 is responsible for reporting a transportation fuel in a calendar year.
- (2) Regulated fuels. This rule applies to the following types of transportation fuels including, but not limited to:
  - (a) Gasoline;
  - (b) Diesel or diesel fuel;
- (c) Fossil compressed natural gas (fossil CNG), fossil liquefied natural gas (fossil LNG), or fossil liquefied compressed natural gas (fossil L-CNG);
  - (d) Compressed or liquefied hydrogen (hydrogen);
- (e) A fuel blend containing greater than 10 percent ethanol by volume;
  - (f) A fuel blend containing biomass-based diesel;
  - (g) Denatured fuel ethanol (E100);
  - (h) Neat biomass-based diesel (B100 or R100);
  - (i) Fossil LPG/propane; and
- (j) Other liquid or nonliquid transportation fuels as determined by ecology.
  - (3) Opt-in fuel.
- (a) Each fuel in (b) of this subsection is presumed to meet the carbon intensity standards (benchmarks) in WAC 173-424-900 Table 1 and 2 through December 31, 2038.

- (b) A fuel provider for the following alternative fuels may generate CFP credits for such fuels by electing to opt into the CFP as an opt-in fuel reporting entity under WAC 173-424-140(2) and meeting all applicable requirements of the CFP:
  - (i) Electricity;
  - (ii) Bio-CNG;
  - (iii) Bio-LNG;
  - (iv) Bio-L-CNG;
  - (v) Alternative jet fuel; and
  - (vi) Renewable propane or renewable LPG.
- (4) Annual carbon intensity benchmarks for an alternative fuel intended for use in a single-fuel vehicle.
- (a) Gasoline and gasoline substitutes. A regulated party or credit generator must comply with the benchmarks for gasoline and gasoline substitutes in WAC 173-424-900 Table 1 for alternative fuel intended to be used in a single-fuel light-duty or medium-duty vehicle.
- (b) Diesel and diesel substitute. A regulated party or credit generator must comply with the benchmarks for diesel fuel and diesel fuel substitutes in WAC 173-424-900 Table 2 for alternative fuel intended to be used in a single-fuel application other than a single-fuel light-duty or medium-duty vehicle.
- (c) Carbon intensity benchmarks for transportation fuels intended for use in multifuel vehicles. Credit and deficit calculations for alternative fuel provided for use in a multifueled vehicle shall be established via:
- (i) The benchmarks for gasoline set forth in WAC 173-424-900 Table 1 if one of the fuels used in the multifuel vehicle is gasoline; or
- (ii) The benchmarks for diesel fuel set forth in WAC 173-424-900 Table 2 if one of the fuels used in the multifuel vehicle is diesel fuel.

- WAC 173-424-130 Exemptions. (1) Exempt fuels. The CFP rule does not apply to transportation fuel supplied in Washington at an aggregated quantity of less than 360,000 gallons per year as measured by all providers of such fuel.
  - (2) Exempt fuel uses.
- (a) Transportation fuels supplied for use in any of the following motor vehicles are exempt from regulated fuels definition:
- (i) Aircrafts. This includes conventional jet fuel or aviation gasoline, and alternative jet fuel;
  - (ii) Marine vessels;
  - (iii) Railroad locomotive applications; and
  - (iv) Military tactical vehicles and tactical support equipment.
- (b) The following transportation fuels are exempt from carbon intensity reduction requirements until January 1, 2028:
- (i) Special fuel used in off-road vehicles used primarily to transport logs;
- (ii) Dyed special fuel used in vehicles that are not designed primarily to transport persons or property, that are not designed to be primarily operated on highways, and that are used primarily for

construction work including, but not limited to, mining and timber harvest operations; and

- (iii) Dyed special fuel used for agricultural purposes exempt from chapter 82.38 RCW.
- (c) Fuels listed under (a) and (b) of this subsection are eligible to generate credits.
- (3) To be exempt under subsection (2) of this section, the regulated party must document that the fuel was supplied for use in motor vehicles listed in subsection (2) of this section. The method of documentation is subject to approval by ecology and must, at a minimum:
- (a) Establish that the fuel was sold through a dedicated source or single supplier to use in one of the specified motor vehicles listed in subsection (2) of this section; or
- (b) For each fuel transaction if the fuel is not sold through a dedicated source.

### NEW SECTION

# WAC 173-424-140 General requirements. (1) Regulated party.

- (a) Regulated fuels producers in Washington, or importers into Washington, must comply with the requirements of this rule.
- (b) The regulated parties for regulated fuels are designated under WAC 173-424-200.
  - (c) The regulated parties for regulated fuels must comply with:
  - (i) Register under WAC 173-424-300;
  - (ii) Keep records under WAC 173-424-400;
- (iii) Report quarterly under WAC 173-424-410 and annually under WAC 173-424-430; and
  - (iv) Comply with the clean fuel standard for:
- (A) Gasoline and gasoline substitutes in WAC 173-424-900 Table 1; or
- (B) Diesel fuel and diesel fuel substitutes in WAC 173-424-900 Table 2.
  - (2) Opt-in fuel reporting entity.
- (a) An out-of-state producer of ethanol, biodiesel, renewable diesel, alternative jet fuel, renewable natural gas, or renewable propane that is not an importer is not required to participate in the program. Any out-of-state producer that is not an importer who chooses voluntarily to participate in the program may retain the ability to generate credits or deficits for the specific volumes of their fuel that is imported into Washington, only if it opts in as a first fuel reporting entity and meets the requirements of WAC 173-424-200 and 173-424-210.
- (b) Opting in procedure: Opting into the CFP becomes effective when the opt-in entity establishes an account in the WFRS, pursuant to the voluntary participation under subsection (4) of this section. The opt-in entity may not report and generate credits and deficits based on transactions that precede the quarter in which the entity opted in.
- (c) A fuel supplier choosing to opt-in to the CFP under WAC  $173-424-120~\mathrm{must:}$ 
  - (i) Register as required by WAC 173-424-300;
  - (ii) Keep records as required under WAC 173-424-400;
- (iii) Report quarterly and annually under WAC 173-424-410 and 173-424-430.

- (d) Opting out procedure. In order to opt-out of the CFP, an opt-in entity must complete the following:
- (i) Provide ecology a 90-day notice of intent to opt-out and a proposed effective opt-out date;
- (ii) Submit in the WFRS any outstanding quarterly fuel transactions up to the quarter in which the effective opt-out date falls and a final annual compliance report that covers the year through the opt-out date; and
- (iii) Identify in the 90-day notice any actions to be taken to eliminate any remaining deficits by the effective opt-out date.
  - (3) Credit aggregator requirements.
  - (a) Aggregators must:
  - (i) Register according to WAC 173-424-300;
  - (ii) Keep records as required under WAC 173-424-400;
  - (iii) Report quarterly as required under WAC 173-424-410; and
  - (iv) Report annually as required under WAC 173-424-430.
  - (b) Designation of aggregator.
- (i) Aggregators may facilitate credit generation and trade credits only if a regulated party or an eligible credit generator has authorized an aggregator to act on its behalf by submitting an aggregator designation form to ecology.
- (ii) Aggregator designations may only take effect at the start of the next full calendar quarter after ecology receives such notice.
- (iii) A regulated party or credit generator already registered with the program may also serve as an aggregator for others;
- (iv) An aggregator must notify ecology when a credit generator or regulated party has withdrawn designation of the aggregator. Aggregator withdrawals may only take effect at the end of the current full calendar quarter when ecology receives such notice.
- (4) **Voluntary participation.** Voluntary participation in the CFP shall conclusively establish consent to be subject to the jurisdiction of the state of Washington, its courts, and the administrative authority of ecology to implement the CFP. Failure to consent to such jurisdiction excludes participation in the CFP.

#### PART 2 - DESIGNATION OF REGULATED PARTIES AND CREDIT GENERATORS

#### NEW SECTION

WAC 173-424-200 Designation of fuel reporting entities for liquid fuels. (1) Applicability. The purpose of this section is to identify the first fuel reporting entities, any subsequent fuel reporting entities, and the credit or deficit generator for liquid fuels. The first reporting entity is responsible for initiating reporting for a given amount of fuel within the online reporting system according to WAC 173-424-400 and, by default, holds the status as the initial credit or deficit generator. This section so prescribes the transfer of fuel reporting, and credit and deficit generating status.

- (2) Designation of first fuel reporting entities for liquid fuels. Liquid fuels refer to fossil fuels (including gasoline, diesel, and conventional jet fuels), liquid alternative fuels (including ethanol, biomass-based fuels, and alternative jet fuels), and blend of liquid fossil and alternative fuels.
- (a) Designation of first fuel reporting entities for liquid fuels.
- (i) The first fuel reporting entity for liquid fossil fuels is the producer or importer of the liquid fossil fuel.
- (ii) For liquid fuels that are a blend of liquid alternative fuel components and a fossil fuel component, the first fuel reporting entity is the following:
- (A) The producer or importer of alternative fuels for the alternative fuel component; and
- (B) The producer or importer of liquid fossil fuels for the fossil fuel component.
- (iii) Conventional jet fuel is not subject to the CFP and need not be reported.
- (b) Designation of fuel reporting entities for in case of transfer of liquid fuel ownership. An entity transferring ownership of fuel is the "transferor," and an entity acquiring ownership of fuel is the "recipient."
  - (i) Transferring status as credit or deficit generator.
- (A) An entity can voluntarily transfer its status as a credit or deficit generator for a given amount of liquid fuel simultaneously with the ownership of such fuel if the following conditions are met:
- (I) The two entities agree by written contract that specifies the recipient accepts all the responsibilities of a fuel reporting entity and credit and/or deficit generator;
- (II) In case of a deficit generating fuel, the two entities agree by written contract that specifies which party is responsible for accounting for the base deficit and incremental deficit in the annual credits and deficits balance calculation;
- (III) The transferor provides the recipient a product transfer document that specifies the recipient is the credit or deficit generator; and
- (IV) Transfer of credit or deficit generator status is not the result of a downstream entity acquiring ownership of liquid fuel below the rack.
- (B) Upon transfer, the recipient also becomes the fuel reporting entity for the fuel while the transferor remains still subject to reporting requirements.
  - (ii) Retaining status as credit or deficit generator.
- (A) An entity can retain its status as a credit or deficit generator for a given amount of liquid fuel, while transferring ownership of that fuel, if the following conditions are met:
- (I) The two entities agree by written contract that specifies the recipient accepts all the responsibilities of a fuel reporting entity, and credit or deficit generator;
- (II) In case of a deficit generating fuel, the two entities agree by written contract that specifies which party is responsible for accounting for the base deficit and incremental deficit in the annual credits and deficits balance calculation; and
- (III) The transferor must provide the recipient a product transfer document that specifies the recipient is the credit or deficit generator according to WAC 173-424-400.

- (B) An entity can voluntarily transfer its status as a credit or deficit generator for a given amount of liquid fuel, while transferring ownership of that fuel, if the following conditions are met:
- (I) The two entities agree by written contract that specifies the recipient accepts all the responsibilities of a fuel reporting entity and the transferor retains the responsibilities as a reporting entity, and credit or deficit generator;
- (II) In case of a deficit generating fuel, the two entities agree by written contract that specifies which party is responsible for accounting for the base deficit and incremental deficit in the annual credits and deficits balance calculation; and
- (III) The transferor must provide the recipient a product transfer document that specifies the recipient is the credit or deficit generator according to WAC 173-424-400.
  - (iii) Transfer period.
- (A) For all liquid fuels, the maximum period in which credit or deficit generator status can be transferred to another entity, for a given amount of fuel, is limited to three calendar quarters starting from and including the quarter in which the entity received the title. After this period is over, the credit and deficit generator status for that amount of fuel cannot be transferred.
- (B) After this period is over, the credit and deficit generator status for that amount of fuel cannot be transferred.
- (iv) Designation of fuel exporter. Entities responsible for reporting exports of fuel that has been previously reported in the WFRS are identified below:
- (A) When the fuel is sold or delivered above the rack for export, the entity holding the ownership title to the fuel as it crosses the Washington border on its way toward the first point of sale/delivery out-of-state is responsible for reporting the export.
- (B) When the fuel is sold across the rack for export, the entity holding title to the fuel as the fuel crosses the rack is responsible for reporting.
- (C) When the fuel is diverted out-of-state below the rack, the entity holding title to the fuel, as it crosses the Washington border, is responsible for reporting the export.

- WAC 173-424-210 Fuel reporting entities for gaseous fuels. (1) Applicability. This section applies to providers of both fossil and bio-based compressed natural gas, liquefied natural gas, liquefied compressed natural gas, and liquefied petroleum gas (or propane), and hydrogen used as transportation fuels in Washington.
- (2) Designation of first fuel reporting entities for gaseous fuels. The first fuel reporting entity for different gaseous fuels is identified below:
- (a) Bio-CNG. For bio-CNG, including the bio-CNG portion of a blend with fossil CNG, the first fuel reporting entity is the producer or importer of the biomethane.
- (b) Bio-LNG and bio-L-CNG. For bio-LNG and bio-L-CNG, including the biomethane portion of any blend with fossil LNG and L-CNG, the first fuel reporting entity is the producer or importer of the biomethane.

- (c) Renewable propane. For renewable propane, including the renewable propane portion of a blend with fossil propane, the first fuel reporting entity is the producer or importer of the renewable propane.
  - (d) Fossil CNG, LNG, L-CNG and propane.
- (i) For fossil CNG, LNG, L-CNG, and propane, including the fossil portion of any blend with a renewable fuel component, the first fuel reporting entity is the entity that owns the fueling equipment through which the fossil fuel is dispensed to motor vehicles for transportation use.
- (ii) Forklift: The first fuel reporting entity for fossil propane used in forklifts is the forklift fleet owner.
  - (e) Hydrogen.
- (i) Motor vehicles. The first fuel reporting entity for hydrogen is the entity that owns the fueling supply equipment through which hydrogen fuel is dispensed to motor vehicles for transportation use.
- (ii) Forklift. The first fuel reporting entity for hydrogen used in fuel cell forklifts is the forklift fleet owner.
- (3) Designating another entity as fuel reporting entity. An entity may elect not to be the first fuel reporting entity for a given gaseous fuel, provided that another entity has contractually agreed to be the fuel reporting entity for the fuel on its behalf. In such cases, the two entities must agree by written contract that:
- (a) The original first fuel reporting entity will not generate credits or deficits in the CFP under subsection (2)(a) through (e) of this section. Instead, the original first reporting entity will provide the amount of fuel dispensed, and other required information, to the contractually designated entity for the purpose of CFP reporting, and credit or deficit generation.
- (b) The contractually designated entity accepts all CFP responsibilities as the first fuel reporting entity, and as a credit or deficit generator, as applicable.

- WAC 173-424-220 Designation of fuel reporting entity for electricity. (1) Applicability. This section prescribes how credits are generated for electricity when used as a transportation fuel.
- (2) Responsibilities to generate credits. To receive credits for electricity supplied as a transportation fuel, an entity subject to this section must:
  - (a) Establish an account in the online system;
- (b) Comply with registration, recordkeeping, and reporting requirements.
- (3) Nonresidential electric vehicle charging. For electricity used to charge an electric vehicle at nonresidential locations, such as in public for a fleet, at a workplace, or at multifamily housing sites, the eligible entities that generate credits are:
- (a) The owner of the electric-charging equipment may generate credits from each piece of equipment.
- (b) If the owner or service provider of the electric-charging equipment does not generate the credits, then an electric utility or its designated aggregator may generate the credit, if the two entities agree by written contract that:

- (i) The owner of the charging equipment will provide the electricity data to the designated aggregator.
- (ii) The designated entity accepts all CFP responsibilities as the fueling reporting entity and credit generator.
- (4) Fixed guideway systems. For electricity used to power to fixed guideway vehicles such as light rail systems, streetcars, aerial tram, or transit buses, the transit agency operating the system is eligible to generate the credits for the electricity used to propel the system.
  - (5) Electric forklifts.
- (a) For electricity used as transportation fuel supplied to electric forklifts, the fleet owner is the fuel reporting entity and the credit generator. The forklift owner must annually notify in writing to the forklift operator that:
- (i) The owner is generating credit for the amount of electricity the operator uses for the electric forklifts.
- (ii) The estimated or actual annual credit revenue the owner gets for the use of electricity in the forklift.
- (b) The electric forklift owner may elect to designate another entity to be the credit generator, if the two entities agree by a written contract that:
- (i) The electric forklift fleet owner will not generate credits and will instead provide the electricity data to the designated entity.
- (ii) The designated entity accepts all the CFP responsibilities as the fuel reporting entity and credit generator.
  - (6) Electric transport refrigeration units (eTRU).
- (a) For electricity supplied to the eTRU, the owner of the eTRU fleet owner is the fuel reporting entity and the credit generator.
- (b) The owner of the eTRU may elect to designate another entity to be the credit generator, if the two entities agree by a written contract that:
- (i) The owner of the eTRU fleet owner will not generate credits and will instead provide the electricity data to the designated entity.
- (ii) The designated entity accepts all the CFP responsibilities as the fuel reporting entity and credit generator.
  - (7) Electric cargo handling equipment (eCHE).
- (a) For electricity supplied to eCHE, the electric handling equipment owner is the fuel reporting entity and the credit generator.
- (b) The eCHE owner must annually notify in writing to the eCHE operator that:
- (i) The owner is generating credit for the amount of electricity the operator uses for the cargo handling equipment owner.
- (ii) The estimated or actual annual credit revenue the owner gets for the use of electricity in the cargo handling equipment owner.
- (c) The electric cargo handling equipment owner may elect to designate another entity to be the credit generator, if the two entities agree by a written contract that:
- (i) The eCHE owner will not generate credits and will instead provide the electricity data to the designated entity.
- (ii) The designated entity accepts all the CFP responsibilities as the fuel reporting entity and credit generator.
  - (8) Electric power for ocean-going vessel (eOGV).
- (a) For electricity supplied to the eOGV, the owner of the electric power supplying equipment is the fuel reporting entity and the credit generator.

- (b) The owner of the electric supplying equipment may elect to designate another entity to be the credit generator, if the two entities agree by a written contract that:
- (i) The owner of the electric charging equipment will not generate credits and will instead provide the electricity data to the designated entity.
- (ii) The designated entity accepts all the CFP responsibilities as the fuel reporting entity and credit generator.
- (9) **Electric ground support equipment.** The owner of the charging equipment for ground support equipment is eligible to generate credits.
  - (10) Residential electric vehicle charging.
- (a) Base credit. For electricity used to charge an electric vehicle in a residence, the following entities are eligible to generate base credits:
- (i) Electric utility. In order to generate residential vehicle charging credits for the following year, an electric utility must notify ecology by October 1st of the current year whether it will generate base credits or designate an aggregator to act on its behalf. The utility or its aggregator must have an active registration approved by ecology under WAC 173-424-300. Once a utility has made an aggregator designation under this section, that designation will remain in effect unless the utility requests a change in writing to ecology.
- (ii) Backstop aggregator. If an electric utility does not register or designate an aggregator under (a)(i) of this subsection, then the backstop aggregator is eligible to claim any base credits that the utility could have generated for the following year, as provided in subsection (11) of this section.
- (iii) Electric vehicle manufacturer. If a backstop aggregator does not register under (b) of this subsection, then the electric vehicle manufacturer is eligible to claim the base credits associated with the electric vehicles that the backstop aggregator could have generated for the following year.
- (b) Incremental credits. Any entity, including an electric utility, is eligible to generate incremental credits for improvements in carbon intensity of electricity used for residential EV charging. An entity that generates incremental credits must meet the requirements set forth in WAC 173-424-420 (3) (b), as applicable.
- (i) For metered residential EV charging, incremental credits for each FSE may be generated for the low-CI electricity.
- (ii) For nonmetered residential EV charging, the electric utility is eligible to generate incremental credits for supplying low-CI electricity to the EVs in its service territory.
- (iii) Multiple claims for incremental credits for metered residential EV charging associated with a single FSE ID will be resolved pursuant to the following order of preference:
- (A) The utility supplying electricity to the EV associated with the FSE ID and metered data has first priority to claim credits;
- (B) The manufacturer of the EV associated with the FSE ID has second priority; and
  - (C) Any other entity has third priority.
- (11) **Backstop aggregator**. The backstop aggregator serves as the credit generator of electricity credits that have not been claimed by an electric utility, an aggregator designated by an electric utility, or an owner or service provider of electric charging equipment under subsections (3) and (10) of this section.

- (a) To qualify to submit an application to be a backstop aggregator, an organization must:
- (i) Be an organization exempt from federal taxation under section 501(c)(3) of the Internal Revenue Code;
  - (ii) Complete annual independent financial audits.
- (b) An entity that wishes to be the backstop aggregator must submit an application to ecology that includes:
- (i) A description of the mission of the organization and how being a backstop aggregator fits into its mission;
- (ii) A description of the experience and expertise of key individuals in the organization who would be assigned to work associated with being a backstop aggregator;
  - (iii) A plan describing:
- (A) How the organization will promote transportation electrification statewide or in specific utility service territories, if applicable, prioritizing projects that directly benefit disproportionately impacted communities;
- (B) Any entities that the organization might partner with to implement its plan;
- (C) How the organization plans to use the revenue from the sale of credits, which may include, without limitation, programs that provide incentives to purchase electric vehicles or install electric vehicle chargers, opportunities to educate the public about electric vehicles, and anticipated costs to administer its plan; and
- (D) The financial controls that are, or will be, put in place to segregate funds from the sale of credits from other moneys controlled by the organization.
- (iv) Its last three years of independent financial audits and I.R.S. form 990s, and proof that the I.R.S. has certified the entity as qualifying as an exempt organization under 501(c)(3);
- (c) Initial applications to be a backstop aggregator are due to ecology no later than March 15, 2023, to be eligible to be the backstop aggregator beginning in 2023. If the ecology does not designate a backstop aggregator out of the applicants under (e) of this subsection, then ecology may set a new deadline for another application if it decides to undertake a new selection process.
- (d) Applications will be evaluated by ecology with the assistance of relevant experts ecology may select. Ecology will evaluate applications based on the likelihood that the applicant will maximize the benefits from the credits it receives to promote transportation electrification and reduce greenhouse gas emissions from the transportation sector in Washington while prioritizing projects that directly benefit disproportionately impacted communities.
- (e) Ecology may designate the initial backstop aggregator out of the applying organizations by May 31, 2023. If ecology does not designate an organization to be the backstop aggregator, then ecology may undertake a new selection process at a later date under the same criteria in (b) and (d) of this subsection.
- (f) Following ecology's designation of an organization to be the backstop aggregator, ecology and the organization may enter into a written agreement regarding its participation in the program. A written agreement must be in place prior to the backstop aggregator registering an account in the WFRS and receiving credits for the first time. The backstop aggregator must:
- (i) By March 31st of each year, submit a report that summarizes the previous year's activity including:
  - (A) How much revenue was generated from the credits it received;

- (B) A description of activities including the status of each activity, where each activity took place, and each activity's budget, including administrative costs, and an estimate of its outcomes including the extent to which it directly benefited disproportionately impacted communities; and
  - (C) The results of its most recent independent financial audit.
- (ii) Maintain records and make them available upon request by ecology, including records required to be maintained under WAC 173-424-400 and, in addition, any records relating to its application, the programs it operates using the proceeds from the sale of credits under this program, and any of the organization's financial records.
- (g) If ecology determines that a backstop aggregator is in violation of this chapter or the agreement that it enters into with ecology to be the backstop aggregator, ecology may rescind its designation and solicit applications to select a new backstop aggregator.
- (h) If backstop aggregator wishes to terminate its agreement with ecology, then ecology may solicit applications to select a new backstop aggregator.
- (i) After a backstop aggregator has been in place for three years, ecology may hold a new selection process to appoint a backstop aggregator for future years. Unless ecology has rescinded an organization as backstop aggregator under (g) of this subsection, the current backstop aggregator may apply to be redesignated as the backstop aggregator for future years.

#### PART 3 - REGISTRATION

# NEW SECTION

# WAC 173-424-300 Registration. (1) Registration in Washington fuels reporting system.

- (a) **Eligibility**. The following entities must apply to register to participate in the Washington clean fuel program:
- (i) Entities required to report under the CFP pursuant to WAC 173-424-200 through 173-424-220;
- (ii) Entities opting into the CFP pursuant to WAC 173-424-140(2); and
  - (iii) Aggregators and credit aggregators.
- (b) **Required information**. To register in WFRS, entities must supply a written registration application to ecology by uploading a complete application to the WFRS. The application must be on the applying entity's letterhead and be signed by the entity's owner, president, managing partner, or other authorized officer. At a minimum, the application must include:
- (i) The identity of the entity submitting the application, including the entity's federal employer identification number (FEIN) and EPA RFS identification number (if available);
  - (ii) Entity's physical and mailing addresses, including county;

- (iii) The basis for qualifying for an account pursuant to (a) of this subsection;
- (iv) The entity's primary account representative and alternative account representative, including their titles, relationship to the organization, phones, and email addresses;
- (v) The category of each transportation fuel that the entity will be producing, importing, or dispensing for use in Washington;
- (vi) Registered entities that are dispensing natural gas, propane, or hydrogen must:
- (A) Provide a written contractual agreement demonstrating it acquired the designation of the first fuel reporting entity status;
- (B) Provide the number of dispensing facilities located in Washington, their locations, the estimated annual fuel throughput per location, and the unique identifier associated with the fuel dispensing equipment in the organization's fuel or financial accounting or utility meter;
- (vii) Registered entities that are charging electric vehicles must:
- (A) Provide ecology with a copy of a written contractual agreement demonstrating the registered entity acquired the designation of the first fuel reporting entity status;
- (B) For nonresidential EV charging for on-road application, must provide the number of chargers located in Washington, their locations, the estimated annual discharge of electricity per location, the owner of the charging equipment, and the serial number assigned to the charging equipment by the original equipment manufacturer (OEM) and the name of the OEM. If there are multiple FSEs at the same location, each unique piece of equipment must be registered separately;
- (C) For residential metered EV charging, must provide the following information about the fuel-supplying equipment, which refers to a piece of equipment or on-vehicle telematics capable of measuring the electricity dispensed for EV charging:
- (I) Fuel reporting entities using off-vehicle meters must provide the serial number assigned to the charging equipment by the OEM, the name of the equipment OEM, and the vehicle identification number (VIN) for the vehicle expected to be charged at the location.
- (II) Fuel reporting entities using vehicle telematics must provide the VIN.
- (III) EV charging equipment registration is optional when reporting metered electricity to generate base credits.
- (IV) Location information and address is not required for residential charging;
- (viii) For registered entities that are also electric utilities, whether they want to:
- (A) Aggregate the residential electric charging credits in their service territory under WAC 173-424-220 (3) or (10); or
- (B) Designate an aggregator to act on their behalf under WAC 173-424-220 (3) or (10); and
- (ix) Any other information requested by ecology related to registration.
  - (c) Establishing an account in WFRS.
- (i) Accounts in the WFRS are only established following ecology's approval of the registration application.
- (ii) Ecology may deny account registration based on, among other reasons, an entity's provision of false, misleading, or incomplete information.
  - (d) Account management roles and duties.

- (i) The account representative is responsible for making any changes to the entity profile within Washington FRS.
- (ii) The account representative in Washington FRS may designate users within the entity who can access and manage the account.
- (iii) The account representative in Washington FRS is responsible for meeting the reporting requirements as set forth in WAC 173-424-420.
  - (e) Modifications to the registration in WFRS.
- (i) Registered entities must submit an amended registration to ecology within 30 days of any change occurring to information described in subsection (2) of this section.
- (ii) Ecology may require a registered entity to submit an amended registration based on the new information ecology receives.
- (iii) If a registered entity amends its registration under this section, the registered entity must also update its account in the WFRS, as appropriate.
  - (f) Cancellation of the registration in WFRS.
- (i) An entity that was registered in Washington FRS must cancel its registration if:
- (A) It no longer meets the applicability of the program under WAC 173-424-120(1); or
- (B) It is a credit generator or aggregator who has voluntarily opted out of the CFP. The credit generator or aggregator must provide to ecology a 90-day notice of intent to opt out of the CFP and a proposed effective date for the completion of the opt-out process.
- (ii) A registered entity that is canceling its registration from Washington FRS under this section must:
  - (A) Submit any outstanding quarterly reports and annual reports;
- (B) Comply with any annual reporting requirements, as applicable; and
  - (C) Not have any outstanding deficits.
- (iii) Any credits that remain in an account of a regulated entity, credit generator, or aggregator that is canceling its registrations under this section shall be forfeited and the account in the Washington FRS shall be closed.
- (iv) Ecology will notify the registrant in writing the cancellation of its registration, once it determines the actions in (f)(ii)(A) through (C) of this subsection are complete.
  - (g) Registration of fueling supply equipment (FSE).
- (i) After establishing an account in the WFRS, fuel reporting entities for natural gas, electricity, propane, and hydrogen must register all fueling supply equipment (FSE) in WFRS via the clean fuels program website. Upon FSE registration, the applicant will receive a unique WACFP FSE ID that must be used for reporting fuel transactions in WFRS pursuant to the CFP reporting requirements.
  - (ii) General requirements: All FSE registration must include:
- (A) Federal employer identification number (FEIN) for the entity registering, name of the facility at which FSE is situated, street address, latitude, and longitude of the FSE location.
- (B) Name and address of the entity that owns the FSE, if different from the entity registering the FSE.
  - (iii) Specific requirements by fuel type:
- (A) For CNG, FSE refers to a fueling station associated with a utility meter. A CNG station with multiple dispensers is considered a single FSE. Fuel reporting entities for CNG must provide the natural gas utility meter number at the FSE location, name of the utility company, and a copy of the most recent utility bill.

- (B) For LNG and propane, FSE refers to a fueling station. An LNG or propane station with multiple dispensers is considered a single FSE. Fuel reporting entities for LNG and propane must provide a unique identifier associated with the FSE used for their own fuel accounting or financial accounting or other purposes and copy of invoice or bill of lading for the most recent fuel delivery.
- (C) For nonresidential EV charging, FSE refers to each piece of equipment capable of measuring the electricity dispensed for EV charging. Fuel reporting entities for nonresidential EV charging for onroad applications must provide the serial number assigned to the FSE by the original equipment manufacturer (OEM) and the name of OEM. If there are multiple FSEs at the same location, each unique piece of equipment must be registered separately.
- (D) For residential metered EV charging, FSE refers to a piece of equipment or on-vehicle telematics capable of measuring the electricity dispensed for EV charging.
- (E) Fuel reporting entities for fixed guideway systems are exempt from the general requirements in (h)(ii) of this subsection. The WA-RFS will assign FSE IDs for reporting purposes based on the information provided in the WA-RFS account registration form.
- (F) For electric forklifts, eCHE, or eOGV, FSE refers to the facility or location where electricity is dispensed for fueling. If there are multiple FSEs capable of measuring the electricity dispensed at the facility or location, then an entity may provide the serial number assigned to each individual FSE by the OEM, along with the name of the OEM.
- (G) For eTRU, FSE refers to each eTRU. Fuel reporting entities for eTRU fueling must provide the serial number assigned to the unit by the OEM and the name of the OEM.
- (H) For hydrogen, FSE refers to a fueling station. A hydrogen station with multiple dispensers is considered a single FSE.
- (I) For transportation applications not covered in (g) (iii) (A) through (H) of this subsection, FSE refers to a fuel dispenser or a transportation equipment with the capability to measure the dispensed fuel in that equipment.
- (2) Registration in the Washington alternative fuel portal (AFP). AFP handles the registration of fuel production facilities. It also supports fuel pathway applications, certifications, and verifications.
- (a) **Eligibility**. A fuel producer who intends to be a fuel pathway applicant can apply to establish an account in the AFP in the WFRS.
- (b) Required information. To establish an account in AFP, an entity must submit account administrator designation application that includes the following information:
- (i) Organization identification, including federal employer identification number (FEIN), EPA RFS identification number (if available), physical and mailing addresses, state and county, names of organizational representatives.
- (ii) The applicant for registration must state the basis for qualifying for an account pursuant to (a) of this subsection. The letter:
  - (A) Must be on the organization letterhead;
- (B) Must be signed by the company owner, a president, a managing partner, or a corporate officer;
- (C) Must designate the primary account representative and alternative account representative, including their titles, relationship to the organization, phones, and email addresses;

- (D) Must be uploaded in the AFP to complete the registration application process;
- (E) Must retain the original document for the duration of an account representative.
- (c) **Account approval**. Ecology will review the registration application for completeness and validity.
- (d) **Establishing an account in AFP.** Upon registration approval by ecology, the fuel producer must establish an account in the AFP portion of the WFRS and comply with the requirements of this chapter and any conditions placed upon the fuel pathway codes that it holds.
  - (e) Account management roles and duties.
- (i) The account representative is responsible for making any changes to the company profile within AFP.
- (ii) The account representative may designate users within the company who can access and manage the account.
- (iii) If any information required in (b) of this subsection changes, the entity holding the account must update the account to reflect the changes within 30 calendar days.

#### PART 4 - RECORDKEEPING AND REPORTING

- WAC 173-424-400 Recordkeeping. (1) Fuel reporting entities, opt-in entities, and aggregators must retain the following records for at least 10 years:
- (a) Product transfer documents as described in subsection (2) of this section;
  - (b) Copies of all data and reports submitted to ecology;
  - (c) Records related to each fuel transaction;
  - (d) Records used for each credit transaction;
  - (e) Records used for compliance credit and deficit calculations;
- (f) Records related to obtaining a carbon intensity described in WAC 173-424-610;
- (g) Records used to establish that feedstocks are specified source feedstocks;
- (h) Records related to third-party verification, if required under WAC 173-424-800;
- (i) Records related to fuel supplying equipment registration including, but not limited to, copies of monthly utility bills, bills of lading, and other documents used as a proof at the time of fuel supplying equipment registration pursuant to this chapter;
- (j) Chain of custody evidence for produced fuel imported into Washington;
- $(\dot{k})$  Attestations regarding environmental attributes associated with book-and-claim accounting for renewable electricity or biomethane used as transportation fuel or for hydrogen production.

- (i) A registered party reporting any fuel claimed in the CFP using a book and claim accounting method as a fuel in the CFP must retire renewable thermal certificates or renewable energy certificates that embody the full environmental attributes of that fuel in an electronic tracking system approved by ecology in order to claim that fuel. The environmental attributes embodied by that REC or RTC must not have been used or claimed in any other program or jurisdictions with the exception of the federal FRS. To be validly used in compliance with this division, any such claims under the federal RFS must be made for the same use and volume of biomethane or its derivatives as it is being claimed for in the CFP.
- (ii) A fuel pathway holder using directly delivered renewable electricity, biogas, or biomethane as a process energy or feedstock, must obtain and keep attestations from each upstream party collectively demonstrating that they have exclusive right to use those environmental attributes.
- (2) Documenting fuel transfers reported in Washington fuel reporting system. A fuel transfer document must include the following information:
  - (a) Transferor company name, address, and contact information;
  - (b) Recipient company name, address, and contact information;
  - (c) Transaction date: Date of title transfer for fuel;
  - (d) Fuel pathway code (FPC);
  - (e) Carbon intensity (CI);
  - (f) Fuel quantity and units;
- (g) A statement identifying whether the CFP obligation to act as a credit or deficit generator is passed to the recipient;
- (h) Fuel production company identification number and facility identification number as registered with RFS program. This does not apply to gasoline, diesel fuel, or fossil natural gas; and
- (i) Destination of the fuel. If the fuel destination is not known or the transfer is not changing the location of the fuel, the PTD shall reflect this.
- (3) For transactions of clear and blended gasoline and diesel below the rack where the fuel is not destined for export, only the records described in subsection (2)(a), (b), (c), (f), and (g) of this section are required to be retained.
- (4) **Documenting credit transactions.** Regulated parties, credit generators, and aggregators must retain the following records related to all credit transactions for at least 10 years:
  - (a) The contract under which the credits were transferred;
- (b) Documentation on any other commodity trades or contracts between the two parties conducting the transfer that are related to the credit transfer in any way; and
- (c) Any other records relating to the credit transaction, including the records of all related financial transactions.
- (5) **Review**. All data, records, and calculations used by a regulated party, a credit generator, or an aggregator to comply with this chapter are subject to inspection and verification by ecology. Regulated parties, credit generators, and aggregators must provide records retained under this rule within 15 business days after the date ecology requests a review of the records, unless a different schedule is agreed to by ecology.
- (6) **Initial 2023 inventory.** All regulated fuels held in bulk storage in the state on January 1, 2023, are subject to the program and must be reported as the initial inventory of fuels by regulated parties.

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- (7) Information exempt from disclosure. Pursuant to the provisions of the Washington Public Records Act (chapter 42.56 RCW), all information submitted to ecology is subject to inspection upon request by any person unless such information is determined to be exempt from disclosure under the Washington public records law or other applicable Washington law.
- (8) Monitoring plan for entities required to validate or verify under WAC 173-424-800.
- (a) Each entity responsible for obtaining third-party verification of their data under the CFP must complete and retain a written monitoring plan for review by a verifier or ecology;
- (b) If a fuel production facility is required to complete and maintain a monitoring plan by the California LCFS or Oregon CFP, the same monitoring plan may be used to meet the requirements of this rule unless there are substantive differences between the two programs' treatment of the fuel production process;
- (c) A monitoring plan must include the following general items and associated references to more detailed information, as applicable:
- (i) Information to allow ecology and the verification team to develop a general understanding of boundaries and operations relevant to the entity, facility, or project, including participation in other markets and other third-party audit programs;
- (ii) Reference to management policies or practices applicable to reporting pursuant to this chapter, including recordkeeping;
- (iii) Explanation of the processes and methods used to collect necessary data for reporting pursuant to this chapter;
- (iv) Explanations and queries of source data to compile summary reports of intermediate and final data necessary for reporting pursuant to this chapter;
- (v) Reference to one or more simplified block diagrams that provide a clear visual representation of the relative locations and positions of measurement devices and sampling locations, as applicable, required for calculating reported data (e.g., temperature, total pressure, LHV or HHV, fuel consumption); the diagram(s) must include storage tanks for raw material, intermediate products, and finished products, fuel sources, combustion units, and production processes, as applicable;
- (vi) Clear identification of all measurement devices supplying data necessary for reporting pursuant to this chapter, including identification of low flow cutoffs as applicable, with descriptions of how data from measurement devices are incorporated into the submitted report;
- (vii) Descriptions of measurement devices used to report CFP data and how acceptable accuracy is demonstrated, e.g., installation, maintenance, and calibration method and frequency for internal meters and financial transaction meters; this provision does not apply to data reported in the WFRS for generating credits for EV charging;
- (viii) Description of the procedures and methods that are used for quality assurance, maintenance, and repair of all continuous monitoring systems, flow meters, and other instrumentation used to provide data for CFP reports;
- (ix) Original equipment manufacturer (OEM) documentation or other documentation that identifies instrument accuracy and required maintenance and calibration requirements for all measurement devices used to collect necessary data for reporting pursuant to this chapter;
- (x) The dates of measurement device calibration or inspection, and the dates of the next required calibration or inspection;

- (xi) Requests for postponement of calibrations or inspections of internal meters and subsequent approvals by ecology. The entity must demonstrate that the accuracy of the measured data will be maintained pursuant to the measurement accuracy requirements of WAC 173-424-610;
- (xii) A listing of the equation(s) used to calculate flows in mass, volume, or energy units of measurement, and equations from which any nonmeasured parameters are obtained, including meter software, and a description of the calculation of weighted average transport distance;
- (xiii) Identification of job titles and training practices for key personnel involved in CFP data acquisition, monitoring, reporting, and report attestation, including reference to documented training procedures and training materials;
- (xiv) Records of corrective and subsequent preventative actions taken to address verifier and ecology findings of past nonconformance and material misstatements;
- (xv) Log of modifications to a fuel pathway report conducted after attestation in response to review by third-party verifier or ecology staff;
- (xvi) Written description of an internal audit program that includes data report review and documents ongoing efforts to improve the entity's CFP reporting practices and procedures, if such an internal audit program exists; and
- (xvii) Methodology used to allocate the produced fuel quantity to each certified fuel pathway code;
- (d) The monitoring plan related to a fuel pathway carbon intensity or reporting quantities of fuels must also include the following elements specific to fuel pathway carbon intensity calculations and produced quantities of fuels per fuel pathway code:
- (i) Explanation of the processes and methods used to collect necessary data for fuel pathway application and annual fuel pathway reports and all site-specific WA-GREET 3.0 inputs, as well as references to source data;
- (ii) Description of steps taken and calculations made to aggregate data into reporting categories, for example aggregation of quarterly fuel transactions per fuel pathway code;
- (iii) Methodology for assigning fuel volumes by fuel pathway code, if not using a method prescribed by ecology. If using ecology prescribed methodology, the methodology should be referenced;
- (iv) Methodologies for testing conformance to specifications for feedstocks and produced fuels, particularly describing physical testing standards and processes;
- (v) Description of procedure taken to ensure measurement devices are performing in accordance with the measurement accuracy requirements of WAC 173-424-610;
- (vi) Methodology for monitoring and calculating weighted average feedstock transport distance and modes, including the specific documentation records that will be collected and retained on an ongoing basis;
- (vii) Methodology for monitoring and calculating fuel transport distance and modes, including the specific documentation records that will be collected and retained on an ongoing basis;
- (viii) References to contracts and accounting records that confirm fuel quantities were delivered into Washington for transportation use in carbon intensity determination, and confirm feedstock and finished fuel transportation distance; and

- (ix) All documentation required pursuant to WAC 173-424-600(6) for fuel pathways utilizing a specified source feedstock to qualify for a reduced carbon intensity; and
- (e) The monitoring plan must also include the following documentation that can be used to justify transaction types reported for fuel in the WFRS, including the production amount, sale/purchase agreements and final fuel dispensing records. Such documentation must be specific to quarterly fuel transactions reports for importers of blendstocks, importers of finished fuels, Washington producers, credit generators, aggregators, and out-of-state producers.

#### NEW SECTION

- WAC 173-424-410 Quarterly reports. (1) Reporting frequency and deadlines. Except for persons exempt from this requirement under WAC 173-424-130, regulated parties, credit generators, and aggregators must submit a quarterly report using the WFRS by:
  - (a) June 30th for January through March of each year;
  - (b) September 30th for April through June of each year;
  - (c) December 31st for July through September of each year; and
- (d) March 31st for October through December of each previous year.
  - (2) General reporting requirements for quarterly reports.
- (a) Reporters must upload the data for the quarterly reports in the WFRS within the first 45 days after the end of the quarter.
- (b) During the second 45 days, reporters must work with each other to resolve any fuel transaction discrepancies between different reporters' reported transactions.
- (c) In order to allow for carry-back credits to have been generated only in the applicable years, the Q1 report may not be submitted prior to May 1st.

- WAC 173-424-420 Specific reporting requirements. In addition to all the requirements in WAC 173-424-410 and 173-424-430.
- (1) Quarterly reports must contain the information specified in Table 9 under WAC 173-424-900 for each transportation fuel subject to the CFP.
- (2) Specific (quarterly) reporting parameters for natural gas (including CNG, LNG, and L-CNG) used as transportation fuel. Any registered party must report the following parameters for each fueling facility to which CNG, LNG, L-CNG, is supplied as a transportation fuel:
- (a) The amount of fuel dispensed must be reported per fuel dispensing equipment, as required for registration in WFRS, with a certified fuel pathway code and with transaction type "NGV fueling."
- (b) For CNG and L-CNG, the amount of fuel dispensed in therms at higher heating value per reporting period separately for all light/medium (LDV and MDV), heavy-duty vehicles with compression engines

(HDV-CIE), and heavy-duty vehicles with spark ignition engines (HDV-SIE).

- (c) For LNG, the amount of fuel dispensed in gallons per reporting period separately for all LDV/MDV, HDV-CIE, and HDV-SIE.
- (d) For CNG, L-CNG, and LNG, the carbon intensity as listed in Table 6, Washington Carbon Intensity Lookup Fuel Pathway WAC 173-424-900.
- (e) For biomethane-based CNG, LNG, and L-CNG, the carbon intensity as approved under WAC 173-424-610 and the EPA production company identification number and facility identification number. Additionally, if the biomethane-based volumes are being reported using a bookand-claim methodology, the registered party must submit records showing the retirement of renewable thermal certificates representing the biomethane environmental attributes from that facility in M-RETS renewable thermal system or another approved and recognized tracking system with the quarterly report. The retirement records must show enough renewable thermal certificates were retired to cover the volume of biomethane claimed as a fuel in the CFP and those certificates must be from the same biomethane production facility to which the fuel pathway code is assigned. If biogas or biomethane is being used that is directly delivered to a vehicle and not injected into a pipeline, the registered party must provide the following attestation when it files file 108 the quarterly report for the corresponding volume of biogas or biomethane claimed.

"I certify that to the extent that the gas used in the fuel pathway or supplied as transportation fuel is characterized as biomethane, (registered party name) owns the exclusive rights to the corresponding environmental attributes.

(registered party name) has not sold, transferred, or retired those environmental attributes in any program or jurisdiction other than the federal RFS.

Based on diligent inquiry and review of contracts and attestations from our business partners, I certify under penalty of perjury under the laws of the State of Washington that no other party has or will sell, transfer, or retire the environmental attributes corresponding to the biomethane for which \_\_\_\_\_\_ (registered party name) claims credit in the CFP program."

- (f) The total quantity of fuel, summed across all fuel pathway codes, dispensed for transportation purpose through the fuel supplying equipment during the reporting period.
- (g) When the vehicle application is unknown, for the purpose of reporting, a fueling event of less than 3,500 MJ (30 gasoline gallon equivalents) of fuel dispensed must be reported as NGV fueling of LDV/MDV. A fueling event of 3,500 MJ or more must be reported as NGV fueling of HDV.
- (3) Specific reporting parameters for electricity used as a transportation fuel. For electricity, any registered party must report the following as applicable:
- (a) To claim a carbon intensity other than a statewide or utility-specific mix (Table 10) for the purpose of claiming incremental credits, or to claim credits directly connected renewable power under the lookup table (Table 6) in WAC 173-424-900, a registered party must:
- (i) Submit documentation that qualifying RECs were retired in the WREGIS or a recognized renewable electricity tracking system for the

unique purpose of covering that specific charging at the same time as the submittal of the quarterly report; or

- (ii) Submit documentation at least annually that the electric vehicle chargers are covered by a utility renewable electricity product or a power purchase agreement that has been approved by ecology for a carbon intensity. The carbon intensity assigned to the product or agreement can only be used for reporting if the electric vehicle chargers are covered by that same product or agreement for the time period which is being reported;
  - (b) For nonmetered residential EV charging:
- (i) Within the first 45 days after the end of the quarter, the electric utility must provide to ecology the daily average EV electricity use data for the calculation of credits for nonmetered charging from the prior quarter. Ecology shall use the method established in WAC 173-424-540 to calculate any credits generated for the quarter and place them into the electric utility's account in WFRS;
- (ii) For claiming incremental credit for nonmetered residential charging, the electric utility must be able to provide, upon ecology's request: The VIN for each electric vehicle claimed and evidence of EV vehicle registration and low-carbon electricity supply at the same location;
- (iii) A nonutility credit generator must use credit revenues to increase consumer EV resources to promote transportation electrification. The credit generator must include, in their annual compliance report, an itemized summary of efforts and costs associated with meeting these requirements;
  - (c) For metered residential EV charging:
- (i) For generating base credits, the amount of electricity (in kWh) used for residential EV charging per FSE;
- (ii) For generating incremental credits for low-CI electricity, the amount of electricity (in kWh) used for residential EV charging per FSE using a certified FPC, and the following requirement must be met:
- (A) Upon ecology's request, records must be provided that demonstrate an EV is owned or leased by an individual dwelling at the claimed residence; and
- (B) Only a single entity can generate incremental credits using a low-CI pathway for the same FSE. If two or more entities report for the same FSE to generate incremental credits, no incremental credits will be issued for that FSE;
- (d) For nonresidential EV charging. For each public access charging facility, fleet charging facility, workplace private access charging facility, or multifamily dwelling, the amount of electricity dispensed in kilowatt hours to vehicles per FSE;
- (e) For each public transit agency, the amount of electricity dispensed to or consumed by vehicles used for public transportation in kilowatt-hours per FSE. The report must be:
- (i) Separated by use for light rail, streetcars, aerial trams, or electric transit buses; and
- (ii) Separated by electricity used in portions of their fixed guideway system placed in service before and after January 1, 2023;
- (f) For entities reporting forklift charging, the amount of electricity dispensed to or consumed by forklifts per FSE. The report must be separated by electricity used to charge forklifts built in or before model year 2022 and electricity used to charge forklifts built in model year 2023 and after. The reporting entity must provide the num-

ber of electric forklifts in the above model year groups (in and pre-2022 versus post-2023);

- (g) For eTRU, eCHE, or eOGV, the amount of electricity dispensed to or consumed by the equipment per FSE;
- (h) For other electric transportation applications, the amount of electricity dispensed to or consumed by the equipment per FSE with transaction type approved by ecology, as Tier-2 FPW.
- (4) Specific reporting parameters for hydrogen used as a transportation fuel.
- (a) The quantity (in kg) of hydrogen fuel dispensed per FSE, as required in WA-RFS, and by vehicle weight category: LDV & MDV and HDV.
- (b) For hydrogen fuel cell forklifts, the amount of hydrogen fuel dispensed (in kg) per FSE.
  - (5) Specific reporting parameters for propane.
  - (a) The quantity (in gallon) of propane dispensed per FSE.
- (b) For renewable propane, the production company ID and facility ID.
- (6) Specific reporting parameters for liquid fuels including gasoline, diesel, diesel fuel blends, alternative fuels, and alternative jet fuel.
- (a) The right transaction type for each fuel. The transaction type "production for import" is to be reported by out-of-state producers who choose to be the first fuel reporting entity for fuel imported into Washington. The transaction type "import" is to be reported by nonproducers who choose to be the first fuel reporting entity for out-of-state fuel imported into Washington. The following information are to be reported:
- (i) Except as provided in (a)(ii) of this subsection, the volume (in gallons) of each blendstock per reporting period aggregated for each distinct carbon intensity value (e.g., X gallons of blendstock with A  $gCO_2e/MJ$ , Y gallons of blendstock with B  $gCO_2e/MJ$ ).
- (ii) A producer of gasoline or diesel fuel must report, for each of its refineries, the MCON or other crude oil name designation, volume (in gallons), and country (or state) of origin for each crude supplied to the refinery during the quarter.
- (b) For renewable hydrocarbon diesel or gasoline co-processed at a petroleum refinery, any registered party must report the following information as applicable:
- (i) If the registered party is also the producer, then ecology may require the registered party to report the ongoing information required under WAC 173-424-610.
- (ii) If the registered party is not the producer, and the producer has not met its obligations under WAC 173-424-610, then ecology may require the registered party to report the volume of fuel under a temporary fuel pathway code or the fuel pathway code for clear gasoline or diesel, as applicable.
- (c) Temperature correction. All liquid fuel volumes reported in the WFRS must be adjusted to the standard temperature conditions of 60 degrees Fahrenheit as follows:
  - (i) For ethanol, using the formula:
- Standardized volume = Actual volume \* ((-0.0006301 \* T) + 1.0378), where standardized volume refers to the volume of ethanol in gallons at  $60^{\circ}F$ , actual volume refers to the measured volume in gallons, and T refers to the actual temperature of the batch in  $^{\circ}F$ .
- (ii) For biodiesel, one of the following two methodologies must be used:

- (A) Standardized volume = Actual volume \* ((-0.00045767 \* T) + 1.02746025), where standardized volume refers to the volume in gallons at 60°F, actual volume refers to the measured volume in gallons, and T refers to the actual temperature of the batch in °F; or
- (B) The standardized volume in gallons of biodiesel at  $60^{\circ}\text{F}$ , as calculated using the American Petroleum Institute Refined Products Table 6B, as referenced in ASTM 1250-08.
- (iii) For other liquid fuels, the volume correction to standard conditions must be calculated by the methods described in the American Petroleum Institute Manual of Petroleum Measurement Standards Chapter 11 Physical Properties Data (May 2004), the ASTM Standard Guide for the Use of Petroleum Measurement Tables (ASTM D1250-08) (Reapproved 2013), or the API Technical Data Book, Petroleum Refining Chapter 6 Density (April 1997).
- (iv) If a registered party believes the methods in (c)(i) through (iii) of this subsection are inappropriate, they may request to use a different method and ecology may approve that method if it finds that it is at least as accurate as the methods in (c)(i) through (iii) of this subsection.
- (d) Reporting exempt gallons. When a registered party is reporting that it sold gallons of fuel to exempt fuel users as defined in WAC 173-424-110, the registered party must designate in the transaction description field of the WFRS the categories of exempt fuel users to which the registered party delivered fuel and the number of gallons delivered. For blended fuels, all components must be reported as exempt.
- (e) Reporting "not for transportation" gallons. When reporting that fuel was sold as not for transportation in the WFRS, the registered party must report in the transaction description field of the WFRS which stationary source, or category of stationary fuel combustion, the fuel was sold to and the number of gallons sold. For blended fuels, all components must be reported as not being used for transportation.
  - (f) Reporting position holder transactions.
- (i) Registered parties that are position holders must report fuel sold below the rack.
- (ii) Registered parties that are position holders that sell fuel to entities not registered in the CFP may aggregate and report those sales in a single transaction using the "undefined" business partner descriptor.
- (iii) Registered parties that are position holders that sell fuel below the rack for export must identify each recipient of such fuel that is registered in the CFP.
- (g) Reporting below the rack exports. Purchasers of fuel from a position holder that is directly exported without modification must report such fuel using the "purchase below the rack for export" transaction category.
- (7) Annual reporting of electric utility credit revenue. All electric utilities that receive credits must annually report the following items to ecology no later than April 30th. Failure to file such a report will result in aggregator receiving credits for that utility until the utility files any past-due reports. Each utility must report the following information, for the prior calendar year:
- (a) Total revenue from the sale of base and incremental credits attributable to residential vehicle charging, if applicable in the prior year;
  - (b) Description of spending of the credit revenue, including:

- (i) A description of the programs or projects that were funded by CFP credit revenue;
- (ii) The amount spent in each program or project in the prior year;
- (iii) Description of the group of individuals or listing of organizations that benefited from the programs or projects;
- (iv) Description of the areas that benefited from the programs or projects;
- (v) Any other data elements that ecology may prescribe towards the implementation of RCW 70A.535.080.
- (8) The registered party must maintain a nonnegative value for each "fuel pathway code obligated amount" as summed across all quarterly data in the online system.
- (9) **Significant figures.** A regulated entity must report the following quantities as specific below:
- (a) Carbon intensity, expressed to the same number of significant figures in Carbon Intensity of Lookup Table, Table 6 under WAC 173-424-900.
- (b) Credits or deficits, expressed to the nearest whole metric ton  $\text{CO}_2$  equivalent;
- (c) Fuel amounts in units specified in quarterly and annual reports, expressed to the nearest whole unit applicable for that quantity; and
- (d) Any other quantity must be expressed to the nearest whole unit applicable for that quantity.
- (10) Correcting a previously submitted report. Upon discovery of an error, a fuel reporting entity may request to have previously submitted quarterly reports for the current compliance periods reopened for corrective edits and resubmittal by submitting a correction request form online in the WFRS. The fuel reporting entity is required to provide justification for the report corrections and indicate the specific corrections to be made to the report. Pursuant to WAC 173-424-510 (5)(c), no credits may be claimed, and no deficits may be eliminated, retroactively for a quarter for which the quarterly reporting deadline has passed. Each submitted request is subject to ecology review and approval. Permission to correct a report does not preclude enforcement based on misreporting.

#### NEW SECTION

# WAC 173-424-430 Annual compliance reports. (1) Annual compliance reporting deadline.

- (a) Except as provided in (b) of this subsection, regulated parties, credit generators, and aggregators must use the WA-RFS to submit an annual compliance report to ecology not later than April 30th for the compliance period ending on December 31st of the previous year.
- (b) Each regulated party must submit an annual compliance report for 2023 notwithstanding that the initial compliance period is for 2023 and 2024.
- (c) Small importers of finished fuels may submit a supplemental annual report using the WFRS, not later than April 30th for the compliance period ending on December 31st of the previous year.

- (2) General reporting requirements for annual compliance reports. Regulated parties, credit generators, and aggregators must submit annual compliance reports that meet, at minimum, the general and specific requirements for quarterly reports and include the following information:
- (a) The total credits and deficits generated by the regulated party, credit generator, or aggregator in the current compliance period, calculated in the WFRS as provided in the equations in WAC 173-424-540;
  - (b) Any credits carried over from the previous compliance period;
- (c) Any deficits carried over from the previous compliance period;
- (d) The total credits acquired from other regulated parties, credit generators, and aggregators;
  - (e) The total credits sold or transferred; and
- (f) The total credits retired within the WFRS to meet the compliance obligation per WAC 173-424-540.
- (3) All pending credit transfers must be completed prior to submittal of the annual compliance report.
- (4) Correcting a previously submitted report. A regulated party, credit generator, or aggregator may ask ecology to reopen a previously submitted quarterly or annual compliance report for corrective edits and resubmittal. The requestor must submit an "unlock report request form" within the WFRS. The requestor is required to provide justification for the report corrections and must indicate the specific corrections to be made to the report. Pursuant to WAC 173-424-510 (5)(c), no credits may be claimed, and no deficits may be eliminated, retroactively for a quarter for which the quarterly reporting deadline has passed. Each submitted request is subject to ecology review and approval. Ecology approval of a corrected report does not preclude enforcement based on misreporting.

## PART 5 - DEMONSTRATING COMPLIANCE

### NEW SECTION

- WAC 173-424-500 Demonstrating compliance. (1) Compliance demonstration. Each regulated party must meet its compliance obligation for the compliance period by demonstrating through submission of its annual compliance report that it possessed and has retired a number of credits from its account that is equal to its compliance obligation calculated under subsection (2) of this section.
- (2) Calculation of compliance obligation. Ecology calculates regulated party's compliance obligation as the sum of deficits generated in the compliance period plus deficits carried over from the prior compliance period, represented in the following equation:

Compliance Obligation = Deficits Generated + Deficits Carried Over

- (3) Calculation of credit balance.
- (a) Definitions. For the purpose of this section:
- (i) Deficits generated are the total deficits generated by the regulated party in the current compliance period;
- (ii) Deficits carried over are the total deficits carried over by the regulated party from the previous compliance period;
- (iii) Credits generated are the total credits generated by the regulated party in the current compliance period;
- (iv) Credits acquired are the total credits acquired by the regulated party in the current compliance period from other regulated parties, credit generators, and aggregators, including carryback credits;
- (v) Credits carried over are the total credits carried over by the regulated party from the previous compliance period;
- (vi) Credits retired are the total credits retired by the regulated party within the WFRS for the current compliance period;
- (vii) Credits sold are the total credits sold by, or otherwise transferred from, the regulated party in the current compliance period to other regulated parties, credit generators, and aggregators; and
- (viii) Credits on hold are the total credits placed on hold due to enforcement or an administrative action. While on hold, these credits cannot be used for meeting the regulated party's compliance obligation.
- (b) A regulated party's credit balance is calculated using the following equation:
- (4) **Small deficits**. At the end of a compliance period, a regulated party that has a net deficit balance may carry forward a small deficit to the next compliance period without penalty. A small deficit exists if the amount of credits the regulated party needs to meet its compliance obligation is five percent or less than the total amount of deficits the regulated party generated for the compliance period. This is not allowed for not more than two consecutive years.
- (5) Extended credit acquisition period. A regulated party may acquire carryback credits between January 1st and April 30th to be used for meeting its compliance obligation for the prior compliance period. A regulated party must complete all carryback credit transfers in the WFRS prior to submitting their annual report, but no later than April 30th, in order for them to be valid for meeting the compliance obligation for that annual report's compliance period.
- (6) **Nonsmall deficit.** Regulated parties who do not demonstrate compliance under subsection (1) of this section and whose deficit is not small as defined in subsection (4) of this section may demonstrate compliance through participation in the credit clearance market under WAC 173-424-570.

# NEW SECTION

- WAC 173-424-510 Credit and deficit basics. (1) Carbon intensities.
- (a) Except as provided in (b), (c), or (d) of this subsection, regulated parties, credit generators, and aggregators must use a car-

bon intensity approved by ecology under WAC 173-424-610 for calculating credits and/or deficits.

- (b) If a regulated party, credit generator, or aggregator has ecology approved provisional carbon intensity under WAC 173-424-610, the regulated party, credit generator, or aggregator must use the provisional carbon intensity in calculating credits and/or deficits.
- (c) If a regulated party, credit generator, or aggregator has ecology approved temporary carbon intensity under WAC 173-424-610, the regulated party, credit generator, or aggregator must use the temporary carbon intensity in calculating credits and/or deficits for the period which it has been approved, unless ecology has subsequently approved a permanent carbon intensity for that fuel.
- (d) If a registered party purchases a blended finished fuel and the seller does not provide carbon intensity information, then the registered party must:
- (i) Use the applicable substitute fuel pathway code in Table 7 under WAC 173-424-900 or otherwise ecology approved and posted on its website under WAC 173-424-610 (11) if the fuel is:
  - (A) Exported;
  - (B) Not used for transportation; or
  - (C) Used in an exempt fuel use; and
- (ii) Use the weighted average of the applicable substitute fuel pathway codes as described in (d)(i) of this subsection for the fossil fuel and biofuel or biofuels components, if the finished fuel blend is not listed.
- (2) **Fuel quantities**. Regulated parties, credit generators, and aggregators must express fuel quantities in the unit of fuel for each fuel.
- (3) **Compliance period.** The annual compliance period is January 1st through December 31st of each year, except the initial compliance period is January 1, 2023, through December 31, 2024; and
- (4) Metric tons of  $CO_2$  equivalent. Regulated parties, credit generators, and aggregators must express credits and deficits to the nearest whole metric ton of carbon dioxide equivalent.
  - (5) Deficit and credit generation.
  - (a) Credit generation. A clean fuel credit is generated when:
- (i) The fuel is produced, imported, or dispensed for use in Washington, as applicable, and the carbon intensity of the fuel approved for use under WAC 173-424-600 through 173-424-630 is less than the clean fuel standard for:
- (A) Gasoline and gasoline substitutes in Table 1 under WAC 173-424-900; or
- (B) Diesel fuel and diesel substitutes in Table 2 under WAC 173-424-900.
  - (ii) A valid and accurate quarterly report is issued in the WFRS.
  - (b) Deficit generation. A clean fuel deficit is generated when:
- (i) Fuel is produced, imported, or dispensed for use in Washington, as applicable, and the carbon intensity of the fuel approved for use under WAC 173-424-600 through 173-424-630 is more than the clean fuel standard for:
- (A) Gasoline and gasoline substitutes in Table 1 under WAC 173-424-900; or
- (B) Diesel fuel and diesel substitutes in Table 2 under WAC 173-424-900.
- (ii) Deficits are generated when a valid and accurate quarterly report is issued in the WFRS.

- (c) No credits may be generated or claimed for any transactions or activities occurring in a quarter for which the quarterly reporting deadline has passed, unless the credits are being generated for residential charging of electric vehicles.
- (6) Mandatory retirement of credits. When filing the annual report at the end of a compliance period, a registered party that possesses credits must retire a sufficient number of credits such that:
- (a) Enough credits are retired to completely meet the registered party's compliance obligation for that compliance period; or
- (b) If the total number of the registered party's credits is less than the total number of the regulated party's deficits, the registered party must retire all of its credits.
- (7) **Credit retirement hierarchy.** The WFRS will use the following default hierarchy to retire credits for the purposes of meeting a compliance obligation according to the following sequence:
- (a) Credits acquired or generated in a previous compliance period prior to credits generated or acquired in the current compliance period;
- (b) Credits generated in an earlier quarter before credits generated in a later quarter; and
- (c) Credits with an earlier completed transfer "recorded date" before credits with a later completed transfer "recorded date."

### NEW SECTION

- WAC 173-424-520 Fuels to include in credit and deficit calculation. (1) Fuels included. Credits and deficits must be calculated for all regulated fuels and clean fuels that are sold, supplied, or offered for sale in Washington.
- (2) **Fuels exempted.** Except as provided in subsections (3), (4), and (5) of this section, credits and deficits may not be calculated for fuels exempted under WAC 173-424-130.
- (3) **Voluntary inclusion**. A regulated party, credit generator, or aggregator may choose to include in its credits and deficits calculations fuel that is sold to an exempt fuel user in Washington under WAC 173-424-130 (2)(b), provided that the credit and deficit calculation includes all fuels listed on the same invoice.
  - (4) When fuels are exported from Washington:
- (a) Any bulk quantity of fuel that is exported must be reported by the person who holds title to the fuel when it is exported;
- (b) If the exporter purchased the fuel with the compliance obligation, the exported fuels will not generate deficits or credits;
- (c) If credits or deficits were generated and separated from the fuel through a transfer without obligation, the exporter will incur credits or deficits, as appropriate, to balance out the deficits or credits detached from the fuel; and
- (d) If the fuel was imported in one quarter and exported in another quarter, the exporter will incur credits or deficits, as appropriate, to balance out the deficits or credits, respectively, associated with the fuel when it was imported in the prior quarter.
- (5) **Alternative jet fuel.** Alternative jet fuel may be reported by the producer or importer of the fuel and any registered parties that hold title to it, so long as the fuel is loaded into airplanes in Washington. If a gallon of alternative jet fuel that has been reported

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to the clean fuels program as imported or produced is later exported, lost, or otherwise not used for transportation it must be reported as such.

# NEW SECTION

## WAC 173-424-530 Transacting credits. (1) General.

- (a) Credits are a regulatory instrument and do not constitute personal property, instruments, securities, or any other form of property.
  - (b) Regulated parties, credit generators, and aggregators may:
- (i) Retain credits without expiration within the CFP in compliance with this division; and
- (ii) Acquire or transfer credits from or to other regulated parties, credit generators, and aggregators that are registered under WAC 173-424-300.
- (c) Regulated parties, credit generators, and aggregators may not:
- (i) Use credits that have not been generated in compliance with this chapter; or
- (ii) Borrow or use anticipated credits from future projected or planned carbon intensity reductions, except as approved by ecology under WAC 173-424-550.
  - (2) Credit transfers between registered parties.
- (a) "Credit seller," as used in this rule, means a registered party that wishes to sell or transfer credits.
- (b) "Credit buyer," as used in this rule, means a registered party that wishes to acquire credits.
- (c) A credit seller and a credit buyer may enter into an agreement to transfer credits.
- (d) A credit seller may only transfer credits up to the number of credits in the credit seller's WFRS account on the date of the transfer.
- (3) Credit seller requirements. When parties wish to transfer credits, the credit seller must initiate an online "credit transfer form" provided in the WFRS and must include the following:
- (a) The date on which the credit buyer and credit seller reached their agreement;
  - (b) The names and FEINs of the credit seller and credit buyer;
- (c) The first and last names and contact information of the persons who performed the transaction on behalf of the credit seller and credit buyer;
  - (d) The number of credits proposed to be transferred; and
- (e) The price or equivalent value of the consideration (in U.S. dollars) to be paid per credit proposed for transfer, excluding any fees. If no clear dollar value can be easily arrived at for the transfer, a price of zero must be entered and a qualitative description of the transaction's valuation must be entered in the seller's notes field.
- (4) **Credit buyer requirements.** Within 10 days of receiving the "credit transfer form" from the credit seller in the WFRS, the credit buyer must confirm the accuracy of the information therein and may accept the credit transfer by signing and dating the form using the WFRS.

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- (5) **Voiding credits.** If the credit buyer and credit seller have not fulfilled the requirements of subsections (3) and (4) of this section within 20 days of the seller initiating the credit transfer, the transaction will be voided. If a transaction has been voided, the credit buyer and credit seller may initiate a new credit transfer.
- (6) **Aggregator**. An aggregator may only act as a credit seller or credit buyer if that aggregator:
- (a) Has an approved and active registration under WAC 173-424-300;
  - (b) Has an account in the WFRS; and
- (c) Has an approved aggregator designation form from a regulated party or credit generator for whom the aggregator is acting in any given transaction.

# (7) Illegitimate credits.

- (a) A registered party must report accurately when it submits information into the WFRS. If inaccurate information is submitted that results in the generation of one or more credits when such an assertion is inconsistent with the requirements of WAC 173-424-510 through 173-424-540, or a party's submission otherwise causes credits to be generated in violation of the requirements of this chapter, those credits are illegitimate and invalid. If ecology determines that one or more credits that a party has generated are illegitimate credits, then:
- (i) If the registered party that generated the illegitimate credits still holds them in its account, ecology will cancel those credits;
- (ii) If the registered party that generated the illegitimate credits has retired those credits to meet its own compliance requirement or if it has transferred them to another party, the party that generated the illegitimate credits must retire an approved credit to replace each illegitimate credit; and
- (iii) The party that generated the illegitimate credits is also subject to enforcement for the violation, as deemed appropriate in ecology's discretion.
- (b) A registered party that has acquired one or more illegitimate credits, but was not the party that generated the illegitimate credits:
- (i) When the initial generator of the illegitimate credits has not retired approved credits in place of the illegitimate credits and ecology determines that that initial generator is unlikely to be able to do so, then the party that has acquired such credits may have those credits canceled by ecology if the party still holds the credits in its account, or if the party has used such illegitimate credits to meet its own compliance requirement, then ecology may require the party to retire an approved credit to replace each such illegitimate credit that it retired to meet its compliance obligation;
- (ii) May be subject to enforcement at ecology's discretion, unless ecology determines that the party from whom the credits were acquired engaged in false, fraudulent, or deceptive trading practices.
- (8) **Prohibited credit transfers**. A credit transfer involving, related to, in service of, or associated with any of the following is prohibited:
- (a) Fraud, or an attempt to defraud or deceive using any device, scheme, or artifice;
- (b) Either party employed any unconscionable tactic in connection with the transfer;

- (c) Any false report, record, or untrue statement of material fact or omission of a material fact related to the transfer or conditions that would relate to the price of the credits being transferred. A fact is material if it is reasonably likely to influence a decision by another party or by the agency;
- (d) Where the intended effect of the activity is to lessen competition or tend to create a monopoly, or to injure, destroy, or prevent competition;
  - (e) A conspiracy in restraint of trade or commerce; or
- (f) An attempt to monopolize, or combine or conspire with any other person or persons to monopolize.

## NEW SECTION

- WAC 173-424-540 Calculating credits and deficits. (1) General credit or deficit calculation method. Except as provided in subsections (2) and (3) of this section, credit and deficit generation must be calculated for all fuels included in WAC 173-424-520:
- (a) Using credit and deficit basics as directed in WAC 173-424-510;
- (b) Calculating energy in mega joules by multiplying the amount of fuel by the energy density of the fuel in Table 3 under WAC 173-424-900;
- (c) Calculating the adjusted energy in mega joules by multiplying the energy in mega joules from (b) of this subsection by the energy economy ratio of the fuel listed in Table 4 under WAC 173-424-900 or as approved by ecology under WAC 173-424-620, as applicable;
- (d) Calculating the carbon intensity difference by subtracting the value in (d)(i) from (ii) of this subsection:
- (i) The fuel's carbon intensity as approved under WAC 173-424-600 through 173-424-630, adjusted for the fuel application's energy economy ratio as listed in Table 4 under WAC 173-424-900 or as approved under WAC 173-424-620 as applicable;
- (ii) The clean fuel standard for gasoline or gasoline substitutes listed in Table 1 under WAC 173-424-900 or diesel fuel and diesel substitutes listed in Table 2 under WAC 173-424-900, as applicable;
- (e) Calculating the grams of carbon dioxide equivalent by multiplying the adjusted energy in mega joules in (c) of this subsection by the carbon intensity difference in (d) of this subsection;
- (f) Calculating the metric tons of carbon dioxide equivalent by dividing the grams of carbon dioxide equivalent calculated in (e) of this subsection by 1,000,000; and
- (g) Determining under WAC 173-424-510(5) whether credits or deficits are generated.
- (2) Calculation method for fixed guideway vehicles and electric forklifts. For electricity used to power fixed guideway vehicles on track placed in service prior to 2023 and forklifts from model year 2023 and earlier, credit and deficit generation must be calculated by:
- (a) Using credit and deficit basics as directed in WAC 173-424-510;
- (b) Calculating energy in mega joules by multiplying the amount of fuel by the energy density of the fuel in Table 3 under WAC 173-424-900;

- (c) Calculating the carbon intensity difference by subtracting (c)(i) from (ii) of this subsection:
- (i) The fuel's carbon intensity as approved under WAC 173-424-600 through 173-424-630, adjusted for the fuel application's energy economy ratio listed in Table 4 under WAC 173-424-900 as applicable;
- (ii) The clean fuel standard for gasoline or gasoline substitutes listed in Table 1 under WAC 173-424-900 or diesel fuel and diesel substitutes listed in Table 2 under WAC 173-424-900, as applicable;
- (d) Calculating the grams of carbon dioxide equivalent by multiplying the adjusted energy in mega joules in (b) of this subsection by the carbon intensity difference in (c) of this subsection;
- (e) Calculating the metric tons of carbon dioxide equivalent by dividing the grams of carbon dioxide equivalent calculated in (d) of this subsection by 1,000,000; and
- (f) Determining under WAC 173-424-600(5) whether credits or deficits are generated.
- (3) **Residential electric vehicle charging.** For electricity used in residential charging of electric vehicles, credit calculations must be based on the total electricity dispensed (in kilowatt hours) to vehicles, measured by:
- (a) The use of direct metering (either submetering or separate metering) to measure the electricity directly dispensed to all vehicles at each residence; or
- (b) For residences where direct metering has not been installed, ecology will calculate the total electricity dispensed as a transportation fuel based on analysis of the total number of BEVs and PHEVs in a utility's service territory based on Washington state department of licensing records. Ecology will perform this analysis at least twice a year and issue credits based on it. Ecology will select one of the following methods for estimating the amount of electricity charged based on its analysis of which is more accurate and feasible at the time it is performing the analysis:
- (i) An average amount of electricity consumed by BEVs and PHEVs at residential chargers, based on regional or national data; or
- (ii) An analysis of the average electric vehicles miles traveled by vehicle type or make and model, which compares the total amount of estimated charging for those electric vehicle miles traveled with the total reported charging in those territories in order to determine the amount of unreported charging that can be attributed to residential charging. The analysis may be done on a utility territory specific or statewide basis.
- (c) If ecology determines after the issuance of residential electric vehicle credits that the estimate under (b) of this subsection contained a significant error that led to one or more credits being incorrectly generated, the error will be corrected by withholding an equal number of credits to the erroneous amount from the next generation of residential electric vehicle credits.
- (d) A credit generator or aggregator may propose an alternative method, subject to the approval of ecology upon its determination that the alternative method is more accurate than either of the methods described in (b) of this subsection.
- (e) Credits generated under this subsection will be calculated by ecology under subsection (1) of this section using the estimated amount of electricity under (b) of this subsection and issues at least twice per year into the WFRS account of the utility, its designated aggregator, or the backstop aggregator within three months of the close of that year.

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- (4) Incremental credits. In calculating incremental credits for actions that lower the carbon intensity of electricity, the credit calculations must be performed based on subsection (1) of this section, except that the carbon intensity difference is calculated based on the carbon intensity of the renewable power and the carbon intensity used to calculate the base credits for that electric vehicle or charging equipment, and consistent with the following requirements, as applicable:
- (a) Incremental credits for **nonresidential charging** are generated upon the retirement of RECs that qualify under WAC 173-424-630(5) by the credit generator, its aggregator, or the incremental aggregator, or by another entity on their behalf. For credit generators and their aggregators, RECs must be retired prior to or at the same time as the submittal as the quarterly report where the charging is being reported and REC retirement records must be submitted with the quarterly report as supplemental documentation. RECs may be retired by another entity on behalf of the credit generator or aggregator for their electric vehicle charging so long as it is clearly documented and that documentation is submitted with the quarterly report.
- (b) For incremental credits generated using a utility renewable electricity product or power purchase agreement, evidence that the chargers were covered by such a product must be submitted at least annually along with a quarterly report. Upon request by ecology, any entity using a power purchase agreement or a utility renewable electricity product must produce evidence that the charging equipment was covered by that agreement or product for all time periods when the entity was claiming incremental credits.
- (c) For the incremental aggregator, incremental credits are generated when it retires RECs on behalf of nonresidential electric vehicle charging.
- (d) Incremental credits for residential charging are generated by a utility or its aggregator when RECs are retired on behalf of that charging, or when a utility demonstrates to ecology that EVs are being charged by customers enrolled in its utility renewable electricity products.

# NEW SECTION

#### WAC 173-424-550 Advance crediting. (1) General provisions.

- (a) Advance credits are used to decarbonize the transportation sector pursuant to RCW 70A.535.050(3) through transportation electrification.
- (b) All advance credits represent actual reductions of greenhouse gas emissions against the clean fuel standards.
- (c) Vehicles must be registered in Washington to be eligible to earn advance credits.
  - (2) Eligibility to generate advance credits.
- (a) Washington state department of transportation or other public entities that are implementing state transportation investment projects and programs to be funded through an omnibus transportation appropriations act may apply for advance credit, provided that:
- (i) The projects and programs reduce greenhouse gas emissions and decarbonize the transportation sector.

- (ii) The projects and programs that are eligible to generate credits may apply for advance credits.
- (b) The entities identified in (a) of this subsection may apply to earn advance credits for the purchase and use of the following types of investments:
  - (i) Medium and heavy-duty vehicles; and
- (ii) Light-duty vehicles if they are part of an organization's plan to fully electrify its light-duty fleet within a 15-year time period.
  - (iii) Electrification of the state ferry fleet; and
- (iv) Other types of investments that ecology may identify to incentivize effective GHG emissions reduction activities that can normally generate credit through the clean fuels program.
- (3) Applications for advance credits. All of the following requirements apply to applications for advance credits:
- (a) Applications for advance crediting will be accepted by ecology at least once per year from entities eligible to apply under subsection (2) of this section. Ecology will notify stakeholders when applications will be accepted and will provide application materials and guidance about how it will process and consider applications.
  - (b) Applicants must supply the following information to ecology:
- (i) A letter describing the activities or purchases that they want to receive advance crediting for, and the estimated time frames for when those projects and programs will be put into useful service;
- (ii) A detailed estimate of the potential credit generation from the investment projects or programs that they want to receive advance crediting for;
- (iii) A detailed monitoring mechanism to ensure the accuracy of the credit generation from the investment projects or programs until it has retired the payback period;
- (iv) Information on the location of the investment projects and programs and all materials and energy inputs and emissions that is used to estimate the potential credit generation;
- (v) A proposed number of credits to be advanced for each vehicle; and
- (vi) An attestation that the applicant will remain the owner or lessee of the credit generating units through the implementation of the investment projects and programs until the vehicle has paid back the advance credits, or that, if the credit generating unit is sold prior to the end of the payback period, that the applicant will buy and retire credits against the remaining unearned amount.
- (c) Ecology may request additional documentation from an applicant prior to making a decision on the application. Not submitting the requested documentation can be reason to deny the application without prejudice.
- (4) Approval of advance credits. If ecology determines that an application for advance credits meets the requirements of subsections (2) and (3) of this section, then ecology will negotiate an agreement with the applicant to issue advance credits consistent with this rule and based on all of the following considerations and requirements:
- (a) A clear and objective milestone for issuing advance credits that represents when the credit generating unit implemented through the investment projects and programs covered by the application are placed into useful service to generate credits;
  - (b) The total number of credits being advanced;
- (c) The length of the payback period, which must be one year longer than the number of years of credits that will be advanced;

- (d) An attestation from the applicant that it understands that the advanced credits must represent real reductions and that if the activity covered by the agreement does not generate sufficient credits within the payback period that it is responsible for retiring a sufficient number of credits to make up the difference. The attestation must also include a statement that the applicant understands that it is responsible for making up the difference in credits if it sells or relocates covered credit generating units outside of Washington; and
- (e) An attestation from the applicant that it will ensure that actual credits from the investment project or program are not generated from other credit generating units until the credits have been paid back.
- (5) **Issuance of advance credits.** If ecology approves an application and has executed an agreement with the applicant under subsection (4) of this section, then:
- (a) Ecology will issue advance credits to the applicant only after the vehicles or equipment are placed into useful service as agreed to under subsection (4) of this section;
- (b) Credits will only be issued to the applicant named in the agreement; and
- (c) Ecology may advance no more than six years of credits for any single investment project or program.
- (6) **Payback period.** Advance credits issued under this rule are subject to the following requirements:
- (a) The payback period for the investment project or program will be specified in the agreement between ecology and the applicant, except that the payback period may not exceed nine years. The payback period must be at least one year longer than the number of years of credits advanced to the applicant.
- (b) In the event that the number of advance credits was not realized during the payback period, the recipient is responsible for acquiring and retiring sufficient credits to ensure the environmental integrity of the program.
- (c) If the ownership of an investment project or program is transferred to another entity prior to the close of the payback period, the applicant is responsible for purchasing and retiring credits against the volume of advanced credits that has not yet been covered by actual credit generation.
- (7) Reporting requirements. An applicant that has received advance credits under this rule:
- (a) Must file quarterly reports to ecology showing the amount of credit generating activities into the investment project or program covered by the agreement; and
- (b) May not generate additional credits until the advance credits are paid back. Ecology and the applicant will monitor the amount of credits that would have been generated to determine when an equal number of credits has been generated to the number of credits advanced.
- (8) Overall limitation on advance credits. Ecology may not issue more advance credits in any one calendar year than an amount equal to five percent of the total number of deficits generated in the prior compliance year. In considering applications under this section, ecology will process applications based on the criteria ecology develops in consultation with the Washington state department of transportation towards meeting the goals of the clean fuels program.

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# WAC 173-424-560 Generating and calculating credits for ZEV fueling infrastructure pathways. (1) Hydrogen refueling infrastructure (HRI) pathways.

- (a) HRI pathway eligibility. A hydrogen station owner may submit an application to certify an HRI pathway subject to the following eligibility conditions:
- (i) The proposed HRI must be located in Washington and open to the public.
- (ii) The HRI pathway application must be received on or before December  $31,\ 2030.$ 
  - (iii) The following stations are not eligible for HRI crediting:
- (A) Any station receiving or spending funds pursuant to any settlement related to any Washington or federal regulation enforcement; or
- (B) Any station built as a required mitigation measure pursuant to the State Environmental Policy Act.
- (b) HRI application requirements. For each hydrogen refueling station, the station owner must submit an application in the WFRS containing the following information:
  - (i) Name and address of the owner of the proposed station.
  - (ii) Contact person for the owner entity.
  - (A) Name;
  - (B) Title or position;
  - (C) Phone number;
  - (D) Mobile phone number;
  - (E) Email address.
- (iii) Name, street address, latitude, longitude, and a location description for the proposed station.
- (iv) Expected daily permitted hours of operation for the station. If the daily permitted hours are less than 24 hours, the applicant must provide documentation from a permitting authority demonstrating that daily permitted hours for the station are limited.
- (v) The station nameplate refueling capacity for the permitted hours of operation calculated using the HySCapE 1.0 model or an equivalent model or capacity estimation methodology approved by ecology. The applicant must submit a completed model with the application.
- (vi) The HRI refueling capacity for the station is the nameplate refueling capacity determined in (b)(v) of this subsection or the following, whichever is less:
- (A) For light-duty vehicle stations: 500 kg/day, out of which 250 kg/day is eligible for capacity crediting; or
- (B) For medium and heavy-duty vehicles station: 2300 kg/day, out of which 1150 kg/day is eligible for capacity crediting.
  - (vii) The number of dispensing units at the station.
- (viii) Expected source(s) of hydrogen, CI value(s), and method(s) used for delivery.
  - (ix) Expected date that the station will be operational.
- (x) Justification for the station location and how the proposed location contributes in developing a hydrogen refueling station network to support ZEV adoption. The justification must include:
- (A) The role(s) the station location will play in the developing hydrogen station network;
- (B) The means by which the station contributes to robust growth of the statewide hydrogen fueling network;

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- (C) Demonstration of potential for consistent and calculable hydrogen demand;
- (D) Demonstration that the proposed station capacity is an appropriate capacity based on documented, verifiable, and reproducible projections of daily hydrogen demand at the proposed location;
- (E) Calculation of the projected trajectory of annualized average station utilization (calculated as annual throughput divided by annual station capacity) at the proposed location; and
- (F) Demonstration that the proposed station location has been discussed with local authorities having jurisdiction and no early roadblocks have been identified.
- (xi) A signed attestation letter from the applicant attesting to the veracity of the information in the application packet. The attestation letter must be submitted as an electronic copy, be on company letterhead, be signed by an officer of the applicant with authority to attest to the veracity of the information in the application and to sign on behalf of the applicant, be from the applicant and not from an entity representing the applicant (such as a consultant or legal counsel), and include the following attestation:

I understand that the following information in the HRI application will be made available on the Washington CFP website: Name of the Applicant Entity, Station Name, Station Address, Number of Dispensing Units, HRI Refueling Capacity, and Effective Date Range for HRI Crediting.

Signature Print Name & Title Date

(xii) CBI must be designated and a redacted version of any submitted documents designated to include CBI must be provided according to the ecology process consistent with the Washington state Public Records Act (chapter  $42.56\ RCW$ ).

(xiii) An application and supporting documents must be submitted electronically via WFRS unless ecology has approved or requested in writing another format.

- (c) Application approval process.
- (i) The HRI application must be approved by ecology before the station owner may generate hydrogen refueling infrastructure credits.

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If estimated potential HRI credits from all approved stations exceed two and one-half percent of deficits in the most recent quarter, ecology will not approve additional HRI pathways and will not accept additional applications until estimated potential HRI credits are less than two and one-half percent of deficits. HRI applications will be evaluated for approval on a first-come first-served basis.

Estimated potential HRI credits will be calculated using the following equation:

$$Credits_{HRI}^{Potential} = Credits_{HRI}^{Prior\ Qtr} x \frac{Cap_{HRI}^{Approved}}{Cap_{HRI}^{Operational}}$$

Where:

Credits Potential means the estimated potential HRI credits from all approved HRI

stations;

Credits Prior qtr means the total HRI credits generated by operational stations in the

prior quarter;

 $Cap_{HRI}^{Operational}$  means the total HRI capacity of stations that were operational in the

prior quarter; and

 $Cap \frac{Approved}{HRI}$  means the total HRI capacity of all approved stations, both operational

and nonoperational.

(ii) After receipt of an application designated by the applicant as ready for formal evaluation, ecology will advise the applicant in writing either that:

- (A) The application is complete; or
- (B) The application is incomplete, in which case ecology will identify which requirements of (b) of this subsection have not been met.
- (I) The applicant may submit additional information to correct deficiencies identified by ecology.
- (II) If the applicant is unable to achieve a complete application within 180 days of ecology's receipt of the original application, the application will be denied on that basis, and the applicant will be informed in writing.
- (C) At any point during the application evaluation process, ecology may request in writing additional information or clarification from the applicant.
- (iii) Ecology will not approve an application if it determines, based upon the information submitted in the application and any other available information, that the application does not meet requirements in (a) and (b) of this subsection. Ecology may reject an application if satisfactory justification is not provided for station location pursuant to (b)(x) of this subsection. If ecology does not approve the application, the applicant will be notified in writing and the basis for the disapproval shall be identified.
- (iv) If ecology determines that the applicant and application have met all requirements for approval pursuant to (a) and (b) of this subsection, ecology will approve the application and provide an approval summary on ecology's CFP website including the station location and assigned identifier, number of dispensing units, HRI refueling capacity, and effective date range for HRI pathway crediting.
- (v) Crediting period. HRI crediting is limited to 15 years starting with the quarter following ecology approval of the application.
- (d) Requirements to generate HRI credits. To generate credits using HRI pathways the station must meet the following conditions. The

station owner must maintain, and submit to ecology upon request, records demonstrating adherence to these conditions.

- (i) The station owner must update the HRI refueling capacity if different from the design HRI refueling capacity provided in the application. Any station design or operational information that deviates from the original application must be declared to ecology, and a new attestation must be submitted pursuant to (b) of this subsection.
- (ii) The station must be open to the public, meaning that no obstructions or obstacles exist to preclude vehicle operators from entering the station premises, no access cards or personal identification (PIN) codes are required for the station to dispense fuel, and no formal or registered station training shall be required for individuals to use the hydrogen refueling station.
- (iii) The station uses a public point of sale terminal that accepts major credit and debit cards.
- (iv) The station uses a system that verifies the availability of the station for refueling, similar to being connected with the station operational status system (SOSS), and:
- (A) The station passed final inspection by the appropriate authority having jurisdiction and has a permit to operate.
- (B) The station owner has fully commissioned the station, and has declared it fit to service retail FCV drivers. This includes the station owner's declaration that the station meets an appropriate SAE fueling protocol.
- (C) At least three OEMs have confirmed that the station meets protocol expectations, and their customers can fuel at the station.
- (D) All dispensers installed in the hydrogen refueling station have undergone a review for suitability of the type of station by the Washington state department of agriculture weights and measures program and have either a temporary use permit or a certificate of approval issued by the Washington state department of agriculture.
- (v) The FSE registration must be completed pursuant to WAC 173-424-300 (1)(g) and the quantity of dispensed hydrogen must be reported as required in WAC 173-424-420.
- (vi) Dispensed hydrogen meets the following CI and renewable content requirements on a company-wide, weighted average basis. Ecology will consider all the stations registered by an entity with a unique FEIN in the WFRS for calculating the company-wide weighted average CI and renewable content.
  - (A) CI of 120  $gCO_2e/MJ$  or less; and
  - (B) Renewable content of 50 percent or greater.
- (vii) The station must be operational within 24 months of application approval. If the applicant fails to demonstrate the operability within 24 months of approval, then the application will be canceled. The applicant can reapply for the same station eligible only for eight years of crediting.
- (viii) The estimated cumulative value of HRI credits generated for the FSE in the prior quarter must be less than the difference between the total capital expenditure reported pursuant to (f)(iii)(A) of this subsection and the total grant revenue or other funding reported pursuant to (f)(iii)(E) of this subsection in the prior quarter.
- (A) The estimated value of FCI credits, for the purpose of this determination, shall be calculated using the number of FCI credits generated for the FSE in the quarter and the average CFP credit price for that quarter published on ecology's CFP website.

- (B) The cumulative credit value generated for each FSE will be tracked as the sum of all quarterly credit values in constant-dollar for the year in which the FCI application was approved using an annual discount rate of 10 percent.
- (C) The estimated value calculated under this provision will be made available only to the respective reporting entity in WFRS and will not be published on ecology's CFP website.
- (D) This will not affect the reporting entity's ability to generate non-FCI CFP credits for the electricity dispensed at the FSE.
- (e) Calculation of HRI credits. HRI credits will be calculated using the following equation:

$$Credits_{HRI}(MT) = (CI_{standard}^{XD} x EER - CI_{HRI})x E_{H2} x (Cap_{HRI} x N X UT - H2_{disp})x C$$

Where:

is the average carbon intensity standard of gasoline (XD = "gasoline") for a  $CI_{standard}^{XD}$  given year as provided in Table 1 of WAC 173-424-900;

*EER* is the dimensionless Energy Economy Ratio for H2/FCV relative to gasoline as listed in Table 4 of WAC 173-424-900;

CI<sub>HRI</sub> is the carbon intensity used for HRI crediting. Company-wide weighted average CI for dispensed hydrogen during the quarter or 0 g/MJ, whichever is greater;

 $E_{H2}$  is the energy density for hydrogen in MJ/kg as listed in Table 4 of WAC 173-424-900;

Cap<sub>HRI</sub> is the HRI refueling capacity for the station (kg/day);

UT is the uptime multiplier which is the percentage of time that the station is available to refuel a vehicle up to 90 percent of state of charge during the quarter, in a similar manner as reported in SOSS;

 $H2_{disp}$  is the quantity of hydrogen dispensed during the quarter (kg);

N is the number of days during the quarter;

C is a factor used to convert credits to units of metric tons from gCO<sub>2</sub>e and has the value of:

$$C = 1.0 \times 10^{-6} \frac{(MT)}{(gCO_2e)}$$

- (f) Reporting and recordkeeping requirements. The following must be reported to ecology each quarter as set forth in WAC 173-424-420 before credits will be issued to the WFRS account associated with an approved HRI pathway.
- (i) Station availability. This is the percentage of hours the station is available for fueling during the quarter relative to the permitted hours of operation for the station. Any period of time that a portion of the station capacity is not available will count as a prorated amount of station availability, proportional to the percentage of the station capacity that remains available for fueling for this period of time.
- (ii) Company-wide, weighted average renewable content (percent) for dispensed hydrogen.
- (iii) Cost and revenue data. Provide a quarterly account of the following costs borne and revenues received by the station owner up through the most recent reporting quarter per station.
  - (A) Total capital expenditures (\$)
- (B) Total delivered cost (\$) of hydrogen and average delivered cost (\$/kg) for hydrogen
  - (C) Total maintenance costs (\$)

- (D) Total land rental cost (\$)
- (E) Total grant revenue or other external funding received towards capital expenditures (\$)
- (F) Total grant revenue or other external funding received towards operational and maintenance expenditures (\$)
- (G) Total revenue (\$) received from sale of hydrogen and average retail price (\$/kg) for hydrogen sold
  - (H) Other operational expenditures (\$)
- (g) Applications for expanded HRI refueling capacity. Station owners who expand the capacity of a station and that is already generating HRI credits under the CFP must submit an application to ecology to generate additional credits based on the updated capacity. Applications for expanded station capacity must be received before December 31, 2030, and do not extend the effective date range for the HRI crediting specified upon initial project approval in (c)(iv) of this subsection. The application must include the following elements:
- (i) In order to be eligible to generate HRI credits for expanded capacity, the station owner must demonstrate that station throughput in a reporting quarter is greater than or equal to 50 percent of the original approved HRI refueling capacity multiplied by the number of days in the quarter, assuming 100 percent uptime.
- (ii) Updated nameplate refueling capacity and updated HRI refueling capacity.
- (iii) If the sources of hydrogen and delivery methods stated in the original HRI application will change as a result of the added capacity, the station owner must disclose the new hydrogen sources and delivery methods.
- (iv) The station owner must maintain records demonstrating that any new equipment added as a result of the expansion in capacity, including storage and fueling dispensers, meet the requirements in WAC 173-424-560(1).
  - (2) DC fast charging infrastructure (FCI) pathways.
- (a) FCI pathway eligibility. An FSE owner may submit an application to receive an FCI pathway subject to the following eligibility conditions:
- (i) The proposed FSE must be located in Washington and open to the public for charging.
- (ii) Upon an individual applicant's estimated potential FCI credits, calculated pursuant to (d)(ii) of this subsection, exceeding 0.5 percent of the deficits in the prior quarter, each additional site applied for by the applicant must meet the following requirements:
- (A) Charging equipment at the site must support at least two of the following three fast charging connectors: CHAdeMO, SAE CCS, and/or Tesla;
- (B) The site must have at least one FSE with a CHAdeMO connector protocol and at least one FSE with an SAE CCS connector protocol; and
- (C) No more than three-quarters of all FSE subject to this provision at the site can support only a single fast charging connector protocol.
- (iii) The FCI pathway application must be received on or before December 31, 2029.
  - (iv) The following FSE are not eligible for FCI crediting:
- (A) Any FSE that is permitted to operate prior to January 1, 2023; or
- (B) Any FSE built as a required mitigation measure pursuant to the State Environmental Policy Act (SEPA).
  - (v) Each FSE must have a minimum nameplate power rating of 50 kW.

(vi) Each FSE must be networked and capable of monitoring and reporting its availability for charging.

(b) FCI application requirements. The applicant must submit an application in the WFRS containing the following information:

(i) Name and address of the owner of the proposed FSE.

(ii) Contact person for the owner entity.

(A) Name;

(B) Title or position;

(C) Phone number;

(D) Mobile phone number;

(E) Email address.

(iii) Name, street address, latitude, longitude, and a location description for each proposed FSE site.

(iv) The number of FSEs.

(v) The nameplate power rating (kW), connector type(s), and model for each FSE.

(A) The total nameplate power rating for all FSE at a single site claiming FCI credit under this provision cannot exceed  $1,500\ \mathrm{kW}$ .

(B) Notwithstanding (b) (v) (A) of this subsection, upon request, ecology may approve an application with total nameplate power rating for all FSE at a single site up to 3,600 kW. The total number of FSE at sites with total nameplate power rating greater than 1,500 kW cannot exceed 10 percent of total FSE approved under FCI pathways. The applicant must provide justification for requesting a total power rating greater than 1,500 kW at the given site.

(vi) The effective simultaneous power rating (kW) for each FSE calculated using the equation below. The effective simultaneous power rating must be at least 50 percent of the nameplate power rating for each FSE.

$$P_{Sim}^{i} = P_{NP}^{i} x \frac{P_{Sim}^{Tot}}{\sum_{i=1}^{n} P_{NP}^{i}}$$

Where:

 $P_{Sim}^{i}$  is the simultaneous power rating (kW) for FSE i;

 $P_{NP}^{i}$  is the nameplate power rating (kW) for FSE i;

 $P_{Sim}^{Tot}$  is the maximum total power (kW) that can be delivered to all FSEs at a single site when they are operated simultaneously; and

*n* is the number of FSEs at a single site.

(vii) The FCI charging capacity for each FSE calculated using the following equation:

$$Cap_{FCI}^{i} = 43 \ x \ (P_{FCI}^{i})^{0.45}$$

Where:

Cap<sup>i</sup><sub>FCI</sub> is the FCI charging capacity (kWh/day) for the FSE i; and

*PFCI* is the nameplate power rating for the FSE or 350kW.

(viii) Expected date that the FSE will be operational.

(ix) Expected daily permitted hours of operation for the site. If the daily permitted hours are less than 24 hours, the applicant must

provide documentation from a permitting authority demonstrating that daily permitted hours for the FSE are limited.

(x) A signed attestation letter from the applicant attesting to the veracity of the information in the application packet. The attestation letter must be submitted as an electronic copy, be on company letterhead, be signed by an officer of the applicant with authority to attest to the veracity of the information in the application and to sign on behalf of the applicant, be from the applicant and not from an entity representing the applicant (such as a consultant or legal counsel), and include the following attestation:

I, an authorized representative of \_\_\_\_\_\_\_\_ (proposed FSE owner entity), attest to the veracity of the information submitted as part of the DC Fast Charging Infrastructure (FCI) application, and declare that the information submitted accurately represents the anticipated and intended design and operation of the charging infrastructure. Further, I understand and agree to each of the statements in the attached application. I am a duly authorized officer with authority to attest to the veracity of the information in the application and to sign on behalf of the respective applicant.

I understand that the following information in the FCI application will be made available on the Washington CFP website: Name of the Applicant Entity, Site Name, Site Address, Number and Type of Charging Units, Nameplate and Effective Simultaneous Power Rating for Each Unit, and Effective Date Range for FCI Crediting

(xi) CBI must be designated and a redacted version of any submitted documents designated to include CBI must be provided according to the ecology process consistent with the Washington state Public Records Act.

(xii) An application and supporting documents must be submitted electronically via the WFRS unless ecology has approved or requested in writing another format.

(c) Application approval process.

(i) The FCI application must be approved by ecology before the applicant may generate FCI credits. If estimated potential FCI credits from all approved FSEs exceed two and one-half percent of deficits in the most recent quarter, ecology will not approve additional FCI pathways and will not accept additional applications until FCI credits are less than two and one-half percent of deficits. FCI applications will be evaluated for approval on a first-come first-served basis.

Estimated potential FCI credits will be calculated using the following equation:

$$Credits_{FCI}^{Potential} = Credits_{FCI}^{Prior\ Qtr} x\ \frac{Cap_{FCI}^{Approved}}{Cap_{FCI}^{Operational}}$$

Where:

*Credits Potential* means the estimated potential FCI credits from all approved FSEs;

Credits Prior qtr means the total FCI credits generated by operational FSEs in the prior

quarter;

 $Cap_{FCI}^{Operational}$  means the total FCI charging capacity of FSEs that were operational

in the prior quarter; and

Cap Approved means the total FCI charging capacity of all approved FSEs, both

operational and nonoperational.

(ii) The estimated potential FCI credits for an individual applicant will be calculated using the same equation as above, where:

#### Where:

Credits Potential means the estimated potential FCI credits from applicant's approved

FSEs;

Credits Prior qtr means the total FCI credits generated by the applicant for operational

FSEs in the prior quarter;

Cap Operational means the total FCI charging capacity of the applicant's approved

FSEs that were operational in the prior quarter; and

Cap Approved means the total FCI charging capacity of all the applicant's approved

FSEs, both operational and nonoperational.

(iii) After receipt of an application designated by the applicant as ready for formal evaluation, ecology shall advise the applicant in writing either that:

- (A) The application is complete; or
- (B) The application is incomplete, in which case ecology will identify which requirements of (b) of this subsection have not been met.
- (I) The applicant may submit additional information to correct deficiencies identified by ecology.
- (II) If the applicant is unable to achieve a complete application within 180 days of ecology's receipt of the original application, the application will be denied on that basis, and the applicant will be informed in writing.
- (C) At any point during the application evaluation process, ecology may request in writing additional information or clarification from the applicant.
- (iv) Ecology shall not approve an application if it determines that the application does not meet requirements in (a) and (b) of this subsection, based upon the information submitted in the application and any other available information. If ecology does not approve the application, the applicant will be notified in writing and the basis for the disapproval shall be identified.
- (v) If ecology determines the application has met all requirements for approval pursuant to (a) and (b) of this subsection, ecology will approve the application and provide an approval summary on ecology's CFP website including the site location and FSE ID, number and type of FSE, nameplate and effective simultaneous power rating for each FSE, and effective date range for FCI pathway crediting.
- (vi) Crediting period. FCI crediting is limited to five years starting with the quarter following ecology approval of the application.
- (d) Requirements to generate FCI credits. To generate credits using FCI pathways the following conditions must be met. The applicant must maintain, and submit to ecology upon request, records demonstrating adherence to these conditions.
- (i) The applicant must update the nameplate and effective simultaneous power rating of FSE if different from the power rating provided in the application. Any FSE design or operational information that

deviates from the original application must be declared to ecology, and a new attestation must be submitted using the language in (b) in this subsection.

- (ii) The FSE must be open to the public, meaning that no obstructions or obstacles exist to preclude vehicle operators from entering the FSE premises, no access cards or personal identification (PIN) codes are required for the FSE to dispense fuel, and no formal or registered equipment training shall be required for individuals to use the FSE.
- (iii) The FSE that charges a fee for service must be capable of supporting a public point-of-sale method that accepts all major credit or debit cards.
- (iv) The FSE passed final inspection by the appropriate authority having jurisdiction and has a permit to operate.
- (v) The FSE owner has fully commissioned the FSE, and has declared it fit to service retail EV drivers.
- (vi) The FSE registration must be completed pursuant to WAC 173-424-300 (1)(g) and the quantity of dispensed electricity must be reported as required in WAC 173-424-420.
- (vii) The FSE must be operational within 12 months of application approval. If the applicant fails to demonstrate the operability within 12 months of approval, then the application will be canceled. The applicant can reapply for the same FSE site eligible only for two years of crediting.
- (viii) The estimated cumulative value of FCI credits generated for the FSE in the prior quarter must be less than the difference between the total capital expenditure reported pursuant to subsection (1)(f)(iii)(A) of this section and the total grant revenue or other funding reported pursuant to subsection (1)(f)(iii)(E) of this section in the prior quarter.
- (A) The estimated value of FCI credits, for the purpose of this determination, shall be calculated using the number of FCI credits generated for the FSE in the quarter and the average CFP credit price for that quarter published on ecology's CFP website.
- (B) The cumulative credit value generated for each FSE will be tracked as the sum of all quarterly credit values in constant-dollar for the year in which the FCI application was approved using an annual discount rate of 10 percent.
- (C) The estimated value calculated under this provision will be made available only to the respective reporting entity in WFRS and will not be published on ecology's CFP website.
- (D) This will not affect the reporting entity's ability to generate non-FCI CFP credits for the electricity dispensed at the FSE.
- (e) Calculation of FCI credits. FCI credits will be calculated using the following equation for each FSE approved under this provision:

$$Credits_{FCI}(MT) = (CI_{standard}^{XD} x EER - CI_{FCI})x C_{Elec} x (Cap_{FCI} x N X UT - Elec_{disp})x C$$

Where:

is the average carbon intensity standard of gasoline (XD = "gasoline") for a given year as provided in Table 1 of WAC 173-424-900;

*EER* is the dimensionless Energy Economy Ratio for Electricity/BEV or PHEV relative to gasoline as listed in Table 5 of WAC 173-424-900;

 $CI_{FCI}$  is the Washington annual utility-specific carbon intensity as listed in Table 10:

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 $C_{Elec}$  is the conversion factor for electricity as listed in Table 3 of WAC 173-424-900;

Cap<sub>FCI</sub> is the FC charging capacity (kWh/day) for the FSE;

N is the number of days during the quarter;

UT is the uptime multiplier which is the fraction of time that the FSE is available for charging a vehicle up to 90 percent of state of charge during the quarter;

*Elecdisp* is the quantity of electricity dispensed during the quarter (kWh);

C is a factor used to convert credits to units of metric tons from gCO<sub>2</sub>e and has the value of:

$$C = 1.0 \times 10^{-6} \frac{(MT)}{(gCO_2e)}$$

- (f) Reporting and recordkeeping requirements. The following must be reported to ecology each quarter as set forth in WAC 173-424-420 before credits will be issued to the WFRS account associated with an approved FCI pathway.
- (i) FSE availability. This is the percentage of hours the FSE is available for charging during the quarter relative to the permitted hours of operation for the site.
- (ii) Cost and revenue data. Provide a quarterly account of the following costs borne and revenues received by the FSE owner up through the most recent reporting quarter per site.
  - (A) Total capital expenditures (\$)
- (B) Total delivered cost (\$) of electricity, including demand charges, and average delivered cost (\$/kWh) for electricity
  - (C) Total maintenance costs (\$)
  - (D) Total land rental cost (\$)
- (E) Total grant revenue or other external funding received towards capital expenditures (\$)
- (F) Total grant revenue or other external funding received towards operational and maintenance expenditures (\$)
- (G) Total revenue (\$) received from sale of electricity and average retail price (\$/kWh) for electricity sold
  - (H) Other operational expenditures (\$)
- (g) Applications for expanded FCI capacity. Applicants who increase the power rating of an FSE or add an FSE to a site that is already generating FCI credits under the CFP must submit an application to ecology to generate additional credits based on the increased power or number of FSEs. Applications must be received before December 31, 2029, and do not extend the end date for the FCI crediting specified upon initial project approval in (c) of this subsection. The application must include the following elements.
  - (i) Updated number and type of FSE at the site.
- (ii) Updated FCI charging capacity, nameplate power rating and effective simultaneous power rating for each FSE at the site.
- (iii) The applicant must maintain records demonstrating that any new equipment added as a result of the expansion in capacity meet the requirements listed in this subsection.

- WAC 173-424-570 Credit clearance market. (1) General. If a regulated party owes more than the allowed small deficit under WAC 173-424-500(4), it must enter and purchase its pro-rata share of credits in the credit clearance market under subsection (5) of this section.
- (a) The credit clearance market is separate from the normal year-round market opportunities for parties to engage in credit transactions
- (b) Ecology will consider a regulated party in compliance with WAC 173-424-500 if it acquires its pro-rata obligation in the credit clearance market and retires that number of credits within 30 days of the end of the credit clearance market.
- (2) **Maximum price.** The maximum price for the credit clearance market must be:
- (a) Two hundred U.S. dollars in 2018 per credit for the markets held upon the submission of the annual reports for compliance year 2023.
- (b) For markets held upon submission of annual reports in 2023/2024 and thereafter ecology shall adjust the maximum price for the credit clearance market annually for inflation at the end of each January using the inflation rate as provided by the last 12 months of data from the U.S. Bureau of Labor Statistics West Region Consumer Price Index for All Urban Consumers for All Items. The formula for that adjustment is as follows:

maximum price = [Last year's maximum price] \* (1 + [CPI-U West])

Ecology will publish the new maximum price on its web page each year.

- (3) Acquisition of credits in the credit clearance market. The credit clearance market will operate from June 1st to July 31st.
- (a) Regulated parties subject to subsection (1) of this section must acquire their pro-rata share of the credits in the credit clearance market calculated in subsection (5) of this section.
- (b) A regulated party may only use credits acquired in the credit clearance market to retire them against its unmet compliance obligation from the prior year.
- (c) To qualify for compliance through the credit clearance market, the regulated party in question must have:
  - (i) Retired all credits in its possession; and
- (ii) Have an unmet compliance obligation for the prior year that has been reported to ecology through submission of its annual report in the WFRS.
  - (4) Selling credits in the clearance market.
- (a) On the first Monday in April each year, ecology shall issue a call to all eligible registered parties in the WFRS to pledge credits into the credit clearance market, or will issue a notification that it will not hold a credit clearance market that year. Registered parties are eligible to sell credits in the clearance market if they will have excess credits upon the submission of their annual report. Parties wanting to pledge credits into the credit clearance market will notify ecology by April 30th. Ecology will announce if a clearance market will occur by May 15th.
- (b) In order to participate in the credit clearance market, sellers must:

- (i) Agree that they will sell their credits for no higher than the maximum price as published by ecology for that year;
- (ii) Agree to withhold any pledged credits from sale in any transaction outside of the credit clearance market until the end of the credit clearance market on July 31st, or if no clearance market is held in a given year, then on the date which ecology announces it will not be held;
- (iii) Not reject an offer to purchase the credits at the maximum price for that year as published by ecology, unless the seller has already sold or agreed to sell those pledged credits to another regulated party participating in the credit clearance market; and
- (iv) Agree to replace any credits that the seller pledges into the clearance market if those credits are later found to be invalid by ecology due to fraud or noncompliance by the generator of the credit, unless the buyer of the credits was a party to that fraud or noncompliance.
- (5) **Operation of the credit clearance market.** Prior to June 1st, ecology will inform each regulated party that failed to meet its annual compliance obligation under WAC 173-424-500 of its pro-rata share of the credits pledged into the credit clearance market.
  - (a) Calculation of pro-rata shares.
- (i) Each regulated party's pro-rata share of the credits pledged into the credit clearance market will be calculated by the following formula:

Regulated Party A's pro-rata share =

# $\left[\frac{A's \ deficit}{All \ Parties' total \ deficit}\right] x \ [lesser \ of \ (pledged \ credits) \ or \ (total \ deficits) \ ]$

- (A) "Deficit" refers to the regulated party's total obligation for the prior compliance year that has not been met under WAC 173-424-500;
- (B) "All parties' total deficit" refers to the sum of all of the unmet compliance obligations of all regulated parties in the credit clearance market; and
- (C) "Pledged credits" refers to the sum of all credits pledged for sale into the credit clearance market.
- (ii) If there is at least one large producer or importer of finished fuels participating in the credit clearance market, ecology will determine the pro-rata share of the available credits in two phases.
- determine the pro-rata share of the available credits in two phases.

  (A) The first phase will begin with all of the credits pledged into the credit clearance market and the deficits from large producers or importers of finished fuels in place of "all parties' total deficit" in (a)(i)(B) of this subsection.
- (B) The second phase will begin with the remainder of the pledged credits into the credit clearance market in place of "pledged credits" in (a)(i)(C) of this subsection and the deficits from all other regulated parties in place of "all parties' total deficit" in (a)(i)(B) of this subsection.
- (C) The calculation for each phase will be done as in (a)(i) of this subsection.
- (b) On or before June 1st, ecology will post the name of each party that is participating in the credit clearance market as a buyer, and the name of each party that is participating as a seller in the market and the number of credits they have pledged into the market.

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- (c) Following the close of the credit clearance market, each regulated party that was required to purchase credits in the credit clearance market must submit an amended annual compliance report in the WFRS by August 31st which shows the acquisition and retirement of its pro-rata share of credits purchased in the credit clearance market, and any remaining unmet deficits.
- (6) If a regulated party has unmet deficits upon the submission of the amended annual compliance report, ecology will increase the regulated party's number of unmet deficits by five percent and the total unmet deficits will be carried over into the next compliance period for that regulated party.
- (7) If the same regulated party has been required to participate in two consecutive credit clearance markets and carries over deficits under subsection (6) of this section in both markets, ecology will conduct a root cause analysis into the inability of that regulated party to retire the remaining deficits.
- (a) If multiple regulated parties are subject to this section in a single year, ecology may produce a single root cause analysis for those regulated parties if it determines the same general set of causes contributed to those parties' inability to retire those deficits. Ecology will also analyze whether there were specific circumstances for the individual parties.
- (b) Based on the results of the root cause analysis, ecology may issue a deferral under WAC 173-424-720 or craft a remedy that addresses the root cause or causes. The remedy cannot:
- (i) Require a regulated party to purchase credits for an amount that exceeds the maximum price for credits in the most recent credit clearance market; or
  - (ii) Compel a registered party to sell credits.

# PART 6 - OBTAINING CARBON INTENSITY VALUES FOR FUEL PATHWAYS

### NEW SECTION

- WAC 173-424-600 Carbon intensities. (1) WA-GREET. Carbon intensities for fuels must be calculated using:
- (a) WA-GREET 3.0 (November 28, 2022) or another model that ecology determines to be equivalent or superior to WA-GREET 3.0. WA-GREET 3.0 was derived from CA-GREET 3.0 model (August 13, 2018), and will be posted on ecology's website https://www.ecology.wa.gov. CA-GREET 3.0 includes contributions from the oil production greenhouse gas estimator (OPGEE2.0) model (for emissions from crude extraction) and global trade analysis project (GTAP-BIO) model together with the agro-ecological zone emissions factor (AEZ-EF) model for land use change (LUC).
- (b) If a reporting entity wishes to use a modified or different life cycle carbon intensity model, it must be approved by ecology in advance of an application under WAC 173-424-610.

- (2) Ecology review of carbon intensities. Every three years, or sooner if ecology determines that new information becomes available that warrants an earlier review, ecology will review the carbon intensities used in the CFP and must consider, at a minimum, changes to:
- (a) The sources of crude and associated factors that affect emissions such as flaring rates, extraction technologies, capture of fugitive emissions, and energy sources;
- (b) The sources of natural gas and associated factors that affect emissions such as extraction technologies, capture of fugitive emissions, and energy sources;
  - (c) Fuel economy standards and energy economy ratios;
- (d) Methods to calculate lifecycle greenhouse gas emissions of transportation fuels including changes in:
  - (i) GREET, WA-GREET, CA-GREET; or
- (ii) Methods to quantify indirect land use change including CCLUB; or
  - (iii) Methods to quantify other indirect effects.
  - (3) Established carbon intensities.
- (a) Regulated parties, credit generators, and aggregators must use the statewide average carbon intensities listed in Table 6 under WAC 173-424-900 for the following fuels:
- (i) Clear gasoline or the gasoline blendstock of a blended gasoline fuel;
- (ii) Clear diesel or the diesel blendstock of a blended diesel fuel;
  - (iii) Fossil CNG;
  - (iv) Fossil LNG; and
  - (v) Fossil LPG.
- (b) A hydrogen supplier may use the applicable CI value in Table 6 under WAC 173-424-900, or apply for a specific carbon intensity under WAC 173-424-610.
  - (c) For electricity suppliers:
- (i) The utility-specific and statewide average electricity carbon intensity is calculated annually under WAC 173-424-630 and posted on ecology's website.
- (ii) Credit generators or aggregators may use a carbon intensity different from the utility-specific average under (c)(i) of this subsection if the party generates lower carbon electricity at the same location as it is dispensed into a motor vehicle consistent with the conditions of the approved fuel pathway code under WAC 173-424-630(3).
- (4) Carbon intensities for established fuel pathways. Except as provided in subsection (3) of this section, regulated parties, credit generators, and aggregators can use a carbon intensity that CARB or OR-DEQ certified for use in the California LCFS or Oregon CFP programs provided that:
- (a) The carbon intensity value for the fuel pathway is adjusted for consistency with WA-GREET 3.0 including the adjustment for fuel transportation distances and indirect land use change, as applicable. The adjusted carbon intensity for the established fuel pathway can be used after ecology has reviewed and approved it for consistency with WA-GREET; or
- (b) Matches the description of a fuel pathway listed in Table 6 under WAC 173-424-900. For hydrogen produced using biomethane or renewable power, the producer of the hydrogen must:
- (i) Demonstrate to ecology that the carbon intensity value in Table 6 is appropriate for its production facility; and

- (ii) Submit retirement records from an electronic tracking system recognized by ecology on an annual basis that the renewable electricity and biomethane attributes, as applicable, were not claimed in any other program except for the federal RFS. Any such claims under the federal RFS must be made for the same use and volume of biomethane or its derivatives as it is being claimed for in the CFP, or the claim under the CFP is invalid.
- (5) Primary alternative fuel pathway classifications. If it is not possible to identify an applicable carbon intensity under either subsection (3) or (4) of this section, then the regulated party, credit generator, or aggregator has the option to develop its own fuel pathway and apply for it to be certified under WAC 173-424-610. Fuel pathway applications fall into one of two tiers:
- (a) **Tier 1.** Conventionally-produced alternative fuels of a type that have been well-evaluated. Tier 1 fuels include:
  - (i) Starch-based and sugar-based ethanol;
- (ii) Biodiesel produced from conventional feedstocks (plant oils, tallow, and related animal wastes and used cooking oil);
- (iii) Renewable diesel produced from conventional feedstocks (plant oils, tallow, and related animal wastes and used cooking oil);
  - (iv) Natural gas; and
- (v) Biomethane from landfills; anaerobic digestion of dairy and swine manure or wastewater sludge; and food, vegetative, or other organic waste.
- (b) **Tier 2.** Except CARB or OR-DEQ certified fuel pathways as provided in subsection (3) of this section that, ecology will not start accepting Tier 2 applications until July 1, 2025. Tier 2 includes all fuels not included in Tier 1 including, but not limited to:
  - (i) Cellulosic alcohols;
  - (ii) Biomethane from other sources;
  - (iii) Hydrogen;
- (iv) Renewable hydrocarbons other than renewable diesel produced from conventional feedstocks;
  - (v) Biogenic feedstocks co-processed at a petroleum refinery;
  - (vi) Alternative jet fuel;
  - (vii) Renewable propane; and
- (viii) Tier 1 fuels using innovative methods including, but not limited to, carbon capture and sequestration or a process that cannot be accurately modeled using the simplified calculators.
- (6) **Specified source feedstocks.** Except as specified in subsection (4) of this section, fuels that are produced from a specified source feedstock may be eligible for a reduced carbon intensity value when applying under WAC 173-424-610 so long as they meet all of the following requirements:
- (a) Specified source feedstocks are nonprimary products of commercial or industrial processes for food, fuel, or other consumer products and include, but are not limited to, used cooking oil, animal fats, fish oil, yellow grease, distiller's corn oil, distiller's sorghum oil, brown grease, and other fats, oils, and greases;
- (b) The specified source feedstocks are used in pathways for biodiesel; renewable diesel; alternative jet fuel; co-processed refinery products; biomethane supplied using book and claim accounting and claimed as a feedstock for CNG, LNG, L-CNG; or steam-methane reformation produced hydrogen;
- (c) Under WAC 173-424-610 (9)(d), any feedstock can be designated as a specified source feedstock if requested by a supplier using site-

specific carbon intensity data or if it is specified in a pathway approval condition; and

- (d) Chain-of-custody evidence must be used to demonstrate the proper characterization and accuracy of the quantity of the specified source feedstocks going into a fuel production facility or claimed as biomethane, subject to all of the following provisions:
- (i) Chain-of-custody evidence must be provided to the verifier and to ecology upon request;
- (ii) Joint applicants may assume responsibility for different portions of the chain-of-custody evidence;
- (iii) Fuel pathway applicants using specified source feedstocks must maintain either:
- (A) Delivery records that show shipments of feedstock type and quantity directly from the point of origin to the fuel production facility; or
- (B) Information from material balance or energy balance systems that control and record the assignment of input characteristics to output quantities at relevant points along the feedstock supply chain between the point of origin and the fuel production facility;
- (e) In order to maintain the pathway, the fuel production and any joint applicant must meet the following requirements:
- (i) Maintain records of the type and quantity of feedstock obtained from each supplier, including feedstock transaction records, feedstock transfer documents pursuant to (f) of this subsection, weighbridge tickets, bills of lading or other documentation for all incoming and outgoing feedstocks;
- (ii) Maintain records used for material balance and energy balance calculations; and
- (iii) Ensure ecology staff and verifier access to audit feedstock suppliers to demonstrate proper accounting of attributes and conformance with certified CI data; and
- (f) A feedstock transfer document for specified source feedstocks must prominently state the following information:
  - (i) Transferor company name, address, and contact information;
  - (ii) Recipient company name, address, and contact information;
  - (iii) Type and amount of feedstock, including units; and
  - (iv) Transaction date.
- (7) The carbon intensity value certified under WAC 173-424-610, including any margin of safety requested by the fuel producer, is the maximum carbon intensity value that a fuel can be reported in the CFP. The actual operational carbon intensity of a fuel will be calculated from the most recent production data covering 24 months of the fuel production facility's operation. Registered parties shall not report fuel sales under any CFP carbon intensity unless the actual operational carbon intensity is equal to or less than the certified CI.
- (8) Fuel producers labeling fuel sold in Washington with a carbon intensity under the CFP and registered entities using those labeled carbon intensities to report in the WFRS, must ensure that the fuel so labeled and reported will be found to have an actual operational lifecycle carbon intensity equal to or below its certified carbon intensity.

- WAC 173-424-610 Obtaining a carbon intensity. (1) Fuel producers can apply to obtain a carbon intensity for their transportation fuels by following the process under this section.
- (2) Applicants seeking approval to use a carbon intensity that is currently approved by CARB or OR-DEQ must provide:
  - (a) The application package submitted to CARB or OR-DEQ;
- (b) The Tier 1 or Tier 2 CA-GREET or OR-GREET calculator approved by CARB or OR-DEQ, and the WA-GREET 3.0 equivalent with the fuel transportation and distribution cells modified for that fuel's pathway to Washington;
- (c) The CARB or OR-DEQ review report for the approved fuel pathway;
- (d) Any other supporting materials relating to the pathway, as requested by ecology; and
- (e) If the applicant is seeking to use a provisional pathway approved by CARB or OR-DEQ, then the applicant must submit to ecology the ongoing documentation it provides to CARB or OR-DEQ, and as required in subsection (6) of this section. The applicant must provide to ecology within 14 days:
- (i) Any additional documentation it has submitted to CARB or DEQ; and
- (ii) A notification of any changes to the status of its provisional pathway approved by CARB or OR-DEQ.
- (3) **General requirements.** Applicants seeking to obtain a carbon intensity using either the Tier 1 or Tier 2 calculator must submit the following information:
  - (a) Company name and full mailing address.
- (b) Company contact person's contact information including the name, title or position, phone number, mobile phone number, facsimile number, email address, and website address.
- (c) Facility name (or names if more than one facility is covered by the application).
- (d) Facility address (or addresses if more than one facility is covered by the application).
  - (e) Facility ID for facilities covered by the RFS program.
- (f) Facility geographical coordinates (for each facility covered by the application).
- (g) Facility contact person's contact information including the name, title or position, phone number, mobile phone number, facsimile number, and email address.
- (h) Facility nameplate production capacity in million gallons per year (for each facility covered by the application).
- (i) If applicable, consultant's contact information including the name, title or position, phone number, mobile phone number, facsimile number, email address, and website URL.
- (j) Declaration whether the applicant is applying for a carbon intensity for a Tier 1 or Tier 2 fuel.
- (4) **Tier 1.** In addition to the items in subsection (3) of this section, applicants seeking to obtain a carbon intensity for a Tier 1 fuel using one of the simplified calculators must submit the following:
- (a) The applicable simplified calculator with all necessary inputs completed, following the instructions in the applicable manual for that calculator;

- (b) All documentation related to the approval and verification of the fuel pathway application from the jurisdiction and from the third-party verifier. This includes a positive verification statement from CARB or OR-DEQ approved verification body, stating that it has reviewed and validated all of the data used to form the inputs for the Tier 1 calculator submitted under (a) of this subsection, or the invoices and receipts for all forms of energy consumed in the production process, all fuel sales, all feedstock purchases, and all coproducts sold for the most recent 24 months of full commercial production, along with a summary of those invoices and receipts; and
- (c) The most recent RFS third-party engineering report, if one has been conducted for the facility.
- (5) **Tier 2.** In addition to the items in subsection (3) of this section, applicants seeking to obtain a carbon intensity for a Tier 2 fuel using the full WA-GREET 3.0 model must submit the following:
- (a) A positive verification statement from CARB or OR-DEQ approved verification body, stating that it has reviewed and validated all of the data used to form the inputs for the Tier 2 calculator submitted under (c) of this subsection, or the invoices and receipts for all forms of energy consumed in the production process, all fuel sales, all feedstock purchases, and all coproducts sold for the most recent 24 months of full commercial production, and a summary of those invoices and receipts;
  - (b) The geographical coordinates of the fuel production facility;
  - (c) A completed Tier 2 model;
- (d) Process flow diagrams that depict the complete fuel production process;
  - (e) Applicable air permits issued for the facility;
- (f) A copy of the RFS third-party engineering report, if available;
  - (g) A copy of the RFS fuel producer coproducts report; and
- (h) A life cycle analysis report that describes the fuel pathway and describes in detail the calculation of carbon intensity for the fuel. The report shall contain sufficient detail to allow staff to replicate the carbon intensity the applicant calculated. The applicant must describe all inputs to, and outputs from, the fuel production process that are part of the fuel pathway.
- (6) Applicants seeking a provisional carbon intensity. If a fuel production facility has been in full commercial production for at least 90 days but less than 24 months, it can apply for a provisional carbon intensity.
- (a) The applicant shall submit operating records covering all periods of full commercial operation in accordance with subsections (2) through (5) of this section.
- (b) Ecology may approve the provisional carbon intensity under subsection (9) of this section.
- (c) At any time before the plant reaches a full 24 months of full commercial production, ecology may revise as appropriate the operational carbon intensity based on the required ongoing submittals or other information it learns.
- (d) If, after a plant has been in full commercial production for more than 24 months, the facility's operational carbon intensity is higher than the provisionally-certified carbon intensity, ecology will replace the certified carbon intensity with the operational carbon intensity in the WFRS and adjust the credit balance accordingly.
- (e) If the facility's operational carbon intensity appears to be lower than the certified carbon intensity, ecology will take no ac-

tion. The applicant may; however, petition ecology for a new carbon intensity that reflects the operational data. In support of such a petition, the applicant must submit a revised application packet that fully documents the requested reduction.

- (7) Applicants employing co-processing at a petroleum refinery.
- (a) Applicants employing co-processing of biogenic feedstocks at a petroleum refinery must submit all information required under subsections (3) and (5) of this section.
- (b) For the renewable diesel or other renewable refinery product of the fuel, the applicant must also submit:
- (i) The planned proportions of biogenic feedstocks to be processed;
- (ii) A detailed methodology for the allocation of biogenic feedstocks to the renewable products; and
- (iii) The corresponding carbon intensities from each biogenic feedstock.
- (c) The allocation methodology for associating amount of the biogenic feedstocks to the production a unit of fuel will be subject to ecology approval and may be modified at ecology's discretion based on ongoing quarterly reporting of production data at the refinery.
- (d) Ecology may adjust the carbon intensities applied for under this section as it determines is appropriate.

# $(\ensuremath{\aleph})$ Temporary fuel pathway codes for fuels with indeterminate carbon intensities.

- (a) A regulated party or credit generator that has purchased a fuel without a carbon intensity must submit a request to ecology for permission to use a temporary fuel pathway code:
  - (i) Already exist in Table 8 under WAC 173-424-900; or
- (ii) Ecology newly approved and posted on its website under subsection (11) of this section.
  - (b) The request must:
- (i) Be submitted within 45 days after the end of the calendar quarter for which the applicant is seeking to use a temporary fuel pathway code; and
- (ii) Explain and document that the production facility is unknown or that the production facility is known but there is no approved fuel pathway code.
- (c) Temporary fuel pathway codes may be used for up to two calendar quarters. If more time is needed to obtain a carbon intensity, the party that obtained the temporary fuel pathway must submit an additional request to ecology for an extension of the authorization to use a temporary fuel pathway code.
- (d) If ecology grants a request to use a temporary fuel pathway code, credits and deficits may be generated subject to the quarterly reporting provisions in WAC 173-424-410.

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

- (a) For applications proposing to use fuel pathways approved by CARB or OR-DEQ, including provisional pathways, ecology will:
- (i) Confirm that the proposed fuel pathway is consistent with WA-GREET 3.0; and
- (ii) Review the materials submitted under subsection (2) of this section.
- (b) For applications proposing to use the Tier 1 or Tier 2 calculators, ecology may approve the application if it can:
  - (i) Verify the energy consumption and other inputs.
  - (ii) Replicate the calculator outputs; and

- (c) If ecology has approved or denied the application for a carbon intensity, ecology will notify the applicant of its determination.
- (d) Ecology may impose conditions in its approval of the carbon intensity. Conditions may include specific limitations, recordkeeping or reporting requirements, adherence to protocols to assure carbon reduction or sequestration claims, or operational conditions that ecology determines should apply to assure the ongoing accuracy of the approved carbon intensity. Failure to meet those conditions may result in the carbon intensity approval being revoked.
- (e) For applicants seeking a provisional pathway, ecology will specify the conditions used to establish the pathway.
- (i) In order to maintain an active provisional pathway eligible to generate credits, the applicant must file the annual fuel pathway report and seek third-party verification if required under WAC 173-424-800.
- (ii) At any point during the 24 months following the certification of a provisional pathway, ecology may revise as appropriate the CI score for the provisional pathway, and adjust any credits in the fuel reporting entity based on new information or a better understanding of the pathway.
- (iii) Ecology may remove the provisional status of the pathway after the applicant provides 24 months of operational data with a positive or qualified positive verification status.
- (iv) For pathways that are not subject to verification, ecology may remove the provisional status upon review of 24 months of operational data demonstrating that the pathway data supports the provisional CI.
- (f) For a fuel pathway approved by CARB or OR-DEQ that ecology has approved for use in Washington, if at any time the pathway's approval is revoked by CARB or OR-DEQ then:
- (i) The fuel pathway holder must inform ecology within seven days of the revocation and provide ecology with the documentation related to that decision.
- (ii) Upon ecology request, the fuel pathway holder must provide to ecology additional documentation.
- (iii) Ecology may at its discretion revoke its approval of the pathway's use in Washington at any time.
- (iv) If CARB or OR-DEQ modifies its approval of the pathway, then the fuel pathway holder must notify ecology of the modification not later than 14 days after CARB's or OR-DEQ modification and must provide to ecology any accompanying documentation the fuel pathway holder received from CARB or OR-DEO.
- (v) Based on the underlying facts that led to CARB's and OR-DEQ's modification of the pathway's status, within 30 days ecology may modify its approval, take no action, or revoke its approval and will provide the fuel pathway holder with written notice of its decision.
- (g) In order to receive and maintain an active fuel pathway code, the producer of any fuel must:
  - (i) Maintain an active registration with the AFP;
- (ii) Provide proof of delivery to Washington through a physical pathway demonstration in the quarter in which the fuel is first reported in the WFRS;
- (iii) Each fuel pathway holder must submit an annual fuel pathway report into the AFP no later than March 31st of each calendar year. The annual fuel pathway report must include:

- (A) The certified version of the simplified WA-GREET or full WA-GREET calculator, as applicable, updated to include the most recent two calendar years of operational data;
- (B) The annual fuel pathway report for renewable electricity and hydrogen lookup table pathways, in lieu of the CI calculator, must include invoices or metering records substantiating the quantity of renewable or low-CI inputs procured from a qualifying source;
- (C) If the fuel or fuel production process involves biomethane or renewable electricity, the fuel producer must:
- (I) Provide the attestation regarding environmental attributes or proof of nongeneration or retirement of any RECs as required by WAC 173-424-420 (2) (e) or WAC 173-424-630 (4) (d); and
- (II) For biomethane injected into a natural gas common carrier pipeline, RTCs from a recognized renewable thermal tracking system are required to be retired and used instead of an attestation and the specific volume of biomethane claimed as being used in the fuel production process must have been injected into the pipeline in the current or prior quarter as the fuel is being produced. Biomethane can only be claimed in this manner in a fuel pathway application as the feedstock for CNG, LNG, L-CNG or hydrogen production, and cannot be claimed as an energy source for another fuel production process.
- (D) Any fuel pathway holder, including a joint applicant, who is not subject to site visits by a third-party verifier, whose pathway involves the use of renewable or low-CI process energy, must submit invoices for that energy to the AFP. Additionally, for any on-site or directly connected renewable electricity that is used to reduce the carbon intensity of electricity used as a transportation fuel or hydrogen production via electrolysis, the pathway holder must upload records demonstrating that any renewable energy certificates generated were retired in WREGIS or another comparable, recognized REC tracking system for the purpose of lowering the certified CI, or for credit generation;
- (E) Any temporally-variable information that was requested or required by ecology to be included in the initial application as supplemental information, or any required data or documentation listed in the pathway's operating conditions. The information required to be submitted under this subsection must cover the same time period as the updated WA-GREET model required under (g) (iii) (A) of this subsection;
- (F) If the verified operational CI as calculated from the operational data covering the prior two calendar years of production is found to be lower than the certified CI, and a positive verification statement is issued for this period, the fuel pathway holder may elect to keep the original certified CI, or may request to replace the certified CI with the verified operational CI. The pathway holder may elect to add a margin of safety to the new certified CI, and must submit an attestation that the new CI can be maintained through the next reporting period with the acknowledgment that exceeding the newly certified CI in subsequent annual reports or verifications is a violation of the requirements of this division; and
- (G) If the operational CI is found to be greater than the certified CI, the fuel pathway holder is out of compliance with this chapter and may be subject to investigation and enforcement by ecology;
- (iv) Comply with the requirements of this chapter. Failure to timely submit an annual fuel pathway report or a required verification statement for a facility's pathways will result in the deactivation of those pathways; and

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- (v) If a pathway employs carbon capture and sequestration, the fuel pathway holder or joint applicant must submit annual reports of greenhouse gas emissions reductions, project operations, and ongoing monitoring results. Reports must include measurements of relevant parameters sufficient to ensure that the quantification and documentation of  $\rm CO_2$  sequestered is replicable and verifiable. Ecology may specify a protocol for measuring and reporting such information in its approval of such an application.
- (h) If ecology determines the proposal for the carbon intensity has not met the criteria in (b) of this subsection, ecology will notify the applicant that the proposal is denied and identify the basis for the denial.
- (i) Ecology may modify an approved fuel pathway's CI or approval conditions upon receipt of a verification statement that shows that the verified operational CI is higher than the certified CI.
- (j) Any applicant may include a margin of safety in its application which will increase its certified CI in order to account for potential process variability and to reduce the risk that it will violate this division by having its operational CI exceed its certified CI.
  - (10) Completeness determination process.
- (a) Within one month after receiving a registration application using the Tier 1 or Tier 2 calculator, ecology will advise in writing whether:
  - (i) The proposal is complete; or
- (ii) The application is incomplete, in which case ecology identifies the deficiencies.
- (b) The applicant may submit supplemental information to correct the ecology identified deficiencies. Ecology has 30 calendar days to determine if the supplemental submittal is complete, or to notify the party and identify the continued deficiencies. If the applicant is unable to achieve a complete application within 180 days of ecology's receipt of the original application, the application will be denied on that basis, and the applicant will be informed in writing.
- (11) Issuing additional substitute and temporary fuel pathway codes.
- (a) For new fuels or new fuel blends being used in Washington state, registered parties may request ecology for an additional fuel pathway codes that can be used in the same manner as those in Table 7 or 8 (substitute or temporary pathway codes) under WAC 173-424-900.
- (b) Ecology may approve such substitute or temporary pathway codes if it concludes they are technically sound and supported by appropriate evidence. If any are approved, ecology will post these additional pathway codes in the WFRS and on its public website for the clean fuels program.
  - (c) All of the following requirements apply to such requests:
  - (i) Requests must be made in writing to ecology.
- (ii) If ecology concludes the proposed pathway may be technically sound and supported by appropriate evidence, then it will post the proposed new substitute or temporary pathway codes on its website and take comments for:
- (A) Fourteen calendar days in the case of a substitute fuel pathway code; or
- (B) Forty-five calendar days in the case of a temporary fuel pathway code.

- (iii) Ecology will consider any comments received, make any modifications, if necessary, and make a final decision on the proposed pathway.
- (iv) Ecology may approve the fuel pathway and publish it on its website, if ecology concludes the proposed pathway is technically sound and supported by appropriate evidence.
- (d) Any newly approved substitute or temporary fuel pathway code will be effective for use in the quarter in which it is approved.
  - (12) Measurement accuracy.
- (a) Calibration requirement. All measurement devices that log or record data for use in a fuel pathway application must comply with the manufacturer-recommended calibration frequency and precision requirements. If manufacturer recommendations are not provided, the measurement devices must be calibrated at least every six years.
- (b) Requests to postpone calibration. For units and processes that operate continuously with infrequent outages, it may not be possible to meet manufacturer-recommended calibration deadlines for measurement devices. In such cases, the owner or operator may submit a written request to ecology to postpone calibration or inspection until the next scheduled maintenance outage. Such postponements are subject to the procedures of (b)(ii)(A) and (B) of this subsection and must be documented in the monitoring plan required under WAC 173-424-400.
- (i) A written request for postponement must be submitted to ecology not less than 30 days before the required calibration, recalibration or inspection date. Ecology may request additional documentation to validate the operator's claim that the device meets the accuracy requirements of this section. The operator shall provide any additional documentation to ecology within 10 business days of a request for documentation.
  - (ii) The request must include:
- (A) The date of the required calibration, recalibration, or inspection;
  - (B) The date of the last calibration or inspection;
- (C) The date of the most recent field accuracy assessment, if applicable;
- (D) The results of the most recent field accuracy assessment, if applicable, clearly indicating a pass/fail status;
- (E) The proposed date for the next field accuracy assessment, if applicable;
- (F) The proposed date for calibration, recalibration, or inspection which must be during the time period of the next scheduled shutdown. If the next shutdown will not occur within three years, this must be noted and a new request must be received every three years until the shutdown occurs and the calibration, recalibration or inspection is completed; and
- (G) A description of the meter or other device including, at a minimum, the:
  - (I) Make and model;
  - (II) Installation date;
  - (III) Location;
- (IV) Parameter measured by the meter or other device, including the rate of data capture;
- (V) Description of how data from the meter or other device is used in a fuel pathway;
  - (VI) Calibration or inspection procedure;
  - (VII) Reason for delaying the calibration or inspection;

- (VIII) Proposed method to ensure that the precision requirements listed by the manufacturer are upheld; and
- (IX) The contact details for an individual at the fuel production facility who can answer questions about the meter or other device.
- (iii) Ecology will approve or deny the request at its discretion based on whether or not it concludes that the device's calibration is reasonably reliable.
  - (13) Missing data provisions.
- (a) Meter record, accuracy, or calibration requirements not met. If a measurement device is not functional, not calibrated within the time period recommended by the manufacturer, or fails a field accuracy assessment, the fuel production facility operator must otherwise demonstrate to a verifier or ecology that the reported data are accurate within +/- five percent. The following requirements apply to such demonstration:
- (i) If the operator can demonstrate to the verifier or ecology staff that reported data are accurate, the data are acceptable. The entity must then provide a detailed plan describing when the measurement device will be brought into calibration. This plan is subject to ecology approval; and
- (ii) If the operator cannot demonstrate to the verifier or ecology that reported data are accurate, the data is not acceptable and the missing data provisions in (b) of this subsection apply.
- (b) Missing data provisions. If missing data exists, the entity must submit for ecology approval an alternate method of reporting the missing data. Alternate methods shall be evaluated on a case-by-case basis for reasonableness and continuity with the rest of the dataset. Ecology may choose to require a more conservative approach to the missing data if it is concerned that the alternative method may understate actual life cycle emissions associated with the fuel or fuels produced by the facility.
- (c) Force majeure events. In the event of a facility shutdown or disruption drastically affecting production attributable to a force majeure event, the fuel pathway applicant or holder must notify ecology.

- WAC 173-424-620 Energy economy ratio-adjusted carbon intensity applications. (1) Energy economy ratio-adjusted CI applications. Applications submitted under this section are modified Tier 2 pathway applications under WAC 173-424-610.
- (2) **Eligibility.** The following persons are eligible to submit an application under this section:
- (a) Vehicle owners or operators that would be eligible to generate credits for their vehicles;
- (b) Manufacturers of vehicles that would be eligible to generate credits may make a joint application with an owner or operator of their vehicles based in Washington; and
- (c) A single, joint application may be submitted on behalf of, and combining data from, any combination of multiple vehicle owners, operators, and manufacturers.

- (3) Applications made under this rule must be for electric vehicles capable of full normal operation using energy from onboard batteries or fuel cells.
- (4) Application requirements for an energy economy ratio-adjusted CI. In addition to the application requirements for a Tier 2 pathway application under WAC 173-424-610, the applicant or applicants must include:
- (a) A letter of intent to request an energy economy ratio (EER) adjusted carbon intensity and why the EER values provided in Table 4 of WAC 173-424-900 are not applicable;
- (b) Supplemental information including a detailed description of the methodology used in its calculations, all assumptions made, and provide all data and references used for the calculation of the proposed EER-adjusted CI value. The methodology used must compare the useful output from the alternative fuel-vehicle technology under consideration to comparable conventional fuel-vehicle technology;
- (c) If the applicant or applicants plan to use a value in the lookup table in WAC 173-424-900 for the carbon intensity of the fuel, or an electricity fuel pathway code issued under WAC 173-424-630, to request an EER-adjusted carbon intensity then they do not need to provide the fuel facility information required under WAC 173-424-610 (3) (e) through (h) and (5).

# (5) Minimum data requirements to apply for an energy economy ratio-adjusted CI:

- (a) Any application made under this rule must include at least three months of operating data that represents typical usage for each individual vehicle included in the application, except that the application must cover at least 300 hours of operating data for each individual vehicle included in the application; and
- (b) Notwithstanding (a) of this subsection, an application from a manufacturer may provide data from duty-cycle testing. A manufacturer seeking to apply using duty-cycle testing data must consult with ecology prior to submitting an application and receive written, advanced approval from the agency for the duration and test cycles it is including in the application in addition to or in lieu of operational data.

# (6) Application review process to apply for an energy economy ratio-adjusted CI:

- (a) Ecology will review an application for completeness, soundness of the assumptions and comparison to the conventional fuel technology, and accuracy of the data. Ecology may deny an application without prejudice if it is incomplete. Ecology may deny any application that it believes is adequately covered by an existing EER value in Table 4 in WAC 173-424-900 or that it believes does not fit the intent and purpose of the clean fuels program;
- (b) Ecology may prioritize its review of applications under this provision to those that cover a greater number of entities or that the agency believes are critical to the state's transportation electrification goals;
- (c) If ecology intends to approve an application, it first must present a review report with a proposed EER value and pathway conditions to the applicant or applicants. If the applicant or applicants accept the proposed review report and EER value, ecology will post the review report and application on its website for a 30-day public comment period. Ecology staff will work with the applicant to aggregate and summarize any submitted data in order to ameliorate concerns regarding trade secrets included in the application. The aggregated data

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must still allow external stakeholders to understand and replicate the EER value that ecology is proposing to approve; and

- (d) Based on comments received during the public comment period, ecology may move forward with approving the application as provided in subsection (7) of this section, deny the application, request additional information from the applicant or applicants, or modify the review report. If ecology modifies the review report or receives additional information that has a material bearing on the proposed EER value, it will issue the modified review report and any affected supplemental materials for another round of public comment.
- (7) Based on its review of the application materials and any comments submitted upon the application under subsection (6) of this section, ecology may issue an EER-adjusted fuel pathway or issue a value that it would post on its website that could be used similarly to the EER values contained in Table 4 of WAC 173-424-900. Values issued under this rule can only be used by the applicant or applicants for that value.
- (8) Adding joint applicants after a value is approved. If ecology has issued a value under subsection (7) of this section as part of an application that includes the manufacturer of the vehicle(s), owners or operators who begin to operate the same vehicle(s) covered in that application in Washington may request to be added as a joint applicant. In order to do so they must provide the following:
- (a) A letter from the manufacturer stating that the manufacturer supports the addition of the joint applicant;
- (b) Any current operational data by the new joint applicant, or other data elements required to be reported under the value's pathway conditions; and
- (c) A statement by the new joint applicant that they understand and accept any and all pathway conditions associated with the value.
  - (9) Ongoing reporting requirements.
- (a) For any EER-adjusted fuel pathway approved by ecology under subsection (7) of this section, the applicant for such approval must annually submit vehicle usage and energy consumption data for each individual vehicle using the value approved by ecology to generate credits or deficits in the clean fuels program. Ecology may require additional data elements that must be reported annually as part of its pathway conditions for an application that is approved under this rule.
- (b) For any EER-adjusted fuel pathway approved by ecology under subsection (7) of this section, ecology may require third-party verification of the annual fuel pathway report submitted by the applicant or joint applicants for such approval in CARB or OR-DEQ. If ecology determines that third-party verification is required, ecology will include that as a pathway condition presented to the applicant or applicants under this section as part of its approval of such fuel pathway.
- (10) Modifications to values issued under this rule. Based on the ongoing reported data required under subsection (9) of this section or additional applications for vehicles that ecology determines to be in the same category, ecology may modify any value issued under this provision for reporting beginning with the next full calendar quarter following its notice that the agency is modifying the value. Ecology will provide notice to the applicant(s) for such fuel pathway prior to doing so, and may request comment from them and the public prior to modifying the value.

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- WAC 173-424-630 Determining the carbon intensity of electricity. (1) Utility-specific electricity mix. The carbon intensity of the electricity used in a utility service area is calculated based on the mix of resources the electricity used to generate the electricity used using the most recent year fuel-mix report published by the Washington department of commerce under RCW 19.29A.140. No later than December 31st of each year, except that ecology may revise the carbon intensity of electricity for 2023 no later than June 15, 2023, ecology will:
- (a) Post the updated utility-specific electricity carbon intensity for the next year on the ecology web page;
- (b) Post the updated utility-specific carbon intensities for the next year on the ecology web page; and
- (c) Add the new fuel pathway codes to the WFRS effective for Q1 reporting for the next year.
- (2) **Statewide electricity mix.** The carbon intensity for the statewide electricity mix will reflect the average carbon intensity of electricity served in Washington and be calculated by using the carbon-intensity of electricity from the most recent year as published by department of commerce under RCW 19.29A.140.
- (3) **Unspecified electricity.** The emissions associated with electricity generated from unspecified electricity is considered as generated using natural gas.
- (4) On-site renewable electricity generation. For on-site generation of electricity using renewable generation systems such as solar or wind, applicants must document that:
- (a) The renewable generation system is on-site or directly connected to the electric vehicle chargers;
- (b) The fuel pathway codes listed in Table 7 under WAC 173-424-900 for solar-generated or wind-generated electricity can only be used for the portion of the electricity dispensed from the charger that is generated by that dedicated renewable energy system;
- (c) Any grid electricity dispensed from the charger must be reported separately under the statewide electricity mix or utility-specific fuel pathway codes; and
- (d) RECs are not generated from the renewable generation system or, if they are, then an equal number of RECs generated from that facility to the number of MWh reported in the WFRS from that facility must be retired in the recognized REC tracking system.
- (5) Offsite renewable electricity. In order to lower the carbon intensity of electricity claimed as a vehicle fuel in the clean fuels program, credit generators and aggregators may retire renewable electricity certificates that meet the following qualifications:
- (a) Renewable energy certificates (RECs) retired in order to claim a carbon intensity other than the statewide mix or utility-specific mix must be certified by the WREGIS, or by a certification system approved by ecology as being substantially equivalent. Unbundled RECs being used to claim low-carbon electricity through book and claim accounting must be certified at the wholesale level, while RECs used in a power purchase agreement or utility renewable electricity product may be certified at the retail level;
- (b) RECs must be generated by an electric generator that was placed into service after 2023;
- (c) RECs must be generated from facilities located in the western electricity coordinating council; and

- (d) RECs must be recorded and retired in a recognized REC tracking system. In addition to recognizing the western renewable energy generation information system, ecology may recognize additional REC tracking systems upon a request from a registered party. In reviewing those requests, ecology will consider whether the tracking system is comparable to WREGIS and if it has systems in place to ensure accurate issuance and tracking of RECs.
- (6) Carbon intensity of renewable electricity. The carbon intensity of solar, wind, geothermal, hydropower, and ocean power renewable electricity is deemed to be zero. For renewable electricity generated from biomass, biogas, biodiesel, and hydrogen, the generator must file a Tier 1 or Tier 2 fuel pathway application to determine the carbon intensity of its electricity. Ecology may adopt an efficiency adjustment factor for biogas to electricity pathways that include emissions reduction credits in order to maintain the program's incentive for energy efficiency.
- (7) Utility renewable electricity products and power purchase agreements. Electric utilities may apply via a Tier 2 fuel pathway application for ecology to assign a carbon intensity to one or more of their renewable electricity products or a specific power purchase agreement, which may then be used to generate credits from charging electric vehicles attributable to the use of such products or agreements. All of the following requirements apply to such applications:
- (a) Notwithstanding WAC 173-424-610, Tier 2 applications made under this section must include:
- (i) A letter describing the power purchase agreement or utility renewable electricity product, the existing or planned source, or sources, of electricity and environmental attributes, and the terms by which it is being offered to customers;
- (ii) Samples or examples of bills, invoices, contracts, or other documentation that an entity claiming renewable energy under this product could provide to ecology to prove that their electric vehicle charging is covered by the product or agreement;
- (iii) In the case of a utility renewable electricity product, any filings with, and orders by, the Washington utilities and transportation commission, governing boards of consumer-owned utilities, or any other local governing board that approves the product; and
- (iv) An estimate of the amount of electric vehicle charging attributable to customers for the product or agreement.
- (b) Ecology will review pathway applications under this section to determine if they result in a substantially similar environmental outcome to the sources of renewable energy required under subsection (5) of this section. In reviewing a utility product or agreement that contains multiple sources of power, ecology may use the estimate under (a) (iii) of this subsection to determine if sufficient renewable energy that is substantially similar to the requirements of subsection (5) of this section is included in the product to cover transportation-related charging that may be claimed under the CFP. Ecology may revisit this determination annually using the annual fuel pathway report.
- (c) Annual fuel pathway report. The annual fuel pathway report for pathways covered by this section must include information to update the sources or sources of electricity or environmental attributes that were used in the prior year and are planned for use in the year in which the report is submitted. That documentation must include retirement records for any RECs used to lower the claimed carbon intensity of the electricity being used by customers of those products in the clean fuels program for the prior year. That documentation must

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also update the estimate of the amount of electric vehicle charging attributable to customers using the products or agreements. Fuel pathway reports required by this section are due by June 30th, notwithstanding WAC 173-424-610 (9)(g)(iii)(C).

### PART 7 - OTHERS

- WAC 173-424-700 Authority to suspend, revoke, or modify. (1) If ecology determines that any basis for invalidation set forth in subsection (2) of this section has occurred, in addition to taking any other authorized enforcement action, ecology may take any of the actions described in (a) through (d) of this subsection. For the purposes of this section an approved carbon intensity refers both to carbon intensities approved by ecology under WAC 173-424-610 and under WAC 173-424-600 (FPW).
- (a) Suspend, restrict, modify, or revoke an account in the WA-RFS, or take one combination of two or more such actions;
  - (b) Modify or delete an approved carbon intensity;
  - (c) Restrict, suspend, or invalidate credits; or
- (d) Recalculate the deficits in a regulated party's WA-RFS account.
- (2) Ecology may take any of the actions described in subsection (1) of this section based on any of the following:
- (a) Any of the information used to generate or support the approved carbon intensity was incorrect, including if material information was omitted or the process changed following the submission of the carbon intensity application;
- (b) Any material information submitted in connection with the approved carbon intensity or a credit transaction was incorrect;
- (c) Fuel reported under a given pathway was produced or transported in a manner that varies in any way from the methods set forth in any corresponding pathway application documents submitted under WAC 173-424-600 and 173-424-610 such that the variance would meet the threshold to be material information;
- (d) Fuel transaction data or other data reported into the WA-RFS and used to calculate credits and deficits was incorrect or omitted material information;
- (e) Credits or deficits were generated or transferred in violation of any provision of this chapter or in violation of other laws, statutes, or regulations;
- (f) A party obligated to provide records under this chapter refused to provide such records or failed to do so within the required time frame for documenting credit transactions under WAC 173-424-400;
- (g) Failure to submit a verification statement when it is required under WAC 173-424-800;

- (h) An adverse verification statement submitted under WAC 173-424-800; or
- (i) A party obligated to provide records associated with credit revenue spending under this chapter refused to provide such records or failed to do so within the required time frame.
  - (3) Providing notice of an initial determination.
- (a) Upon making an initial determination that a credit calculation, deficit calculation, or an approved carbon intensity may be subject to an action described in subsection (1) of this section, ecology will notify all potentially affected parties.
- (b) The notice shall state the reason for the initial determination and may also include a specific request from any party for information relevant to any of the bases described in subsection (2) of this section.
- (c) Within 20 days of the issuance of the notice, the affected parties shall make records and personnel available to ecology as it conducts its investigation.
- (d) Any party receiving the notice may submit any information it believes is relevant to the investigation and that it wants ecology to consider in its evaluation. Within 15 business days of any such request, unless a different schedule is agreed to by ecology, a regulated entity shall make records and personnel available to assist ecology in determining the validity of the credit, deficit calculation, or certified CI.
- (4) Interim account suspension. Once a notice has been issued based on initial determination under subsection (3) of this section, ecology may immediately take one or both of the following actions:
  - (a) Deactivate an approved carbon intensity in the AFP; or
- (b) Suspend an account in the WFRS. In cases where a discrete number of credits are being investigated, ecology may place an administrative hold on a specific number of credits rather than suspending an entire account.
- (5) **Final determination**. Within 50 days after making an initial determination under subsections (2) and (3) of this section, ecology shall make a final determination based on the available information. The final determination should include:
- (a) Whether any of the bases for invalidation in subsection (2) of this section exist;
  - (b) Identification of the affected parties; and
- (c) What actions in subsection (1) of this section ecology will impose and how many credits, deficits, or approved carbon intensities are affected. If the final determination invalidates credits or deficit calculations, the corresponding credits and deficits will be added or subtracted from the appropriate accounts in the WFRS.
- (6) Responsibility for invalidated credits or miscalculated deficits. Any party that generated, previously held, or holds invalidated credits or whose account reflects an invalid deficit calculation is responsible for returning its account to compliance without regard to its fault or role with respect to the invalidation of the credits or miscalculation of deficits. The deficit holder has 60 days from the date of the final determination to purchase sufficient credits to eliminate the entire deficit. A return to compliance does not preclude further enforcement actions.

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- WAC 173-424-710 Public disclosure. (1) List of ecology-approved registered parties. Ecology will maintain a current list of ecology-approved registered parties and will make that list publicly available on its website. The list will include, at a minimum, the name of the registered party and whether the registered party is an importer of blendstocks, a large importer of finished fuels, a small importer of finished fuels, a producer, a credit generator, or an aggregator.
- (2) All information submitted as application materials in the WARFS that are not identified as trade secrets or confidential business information are subject to public disclosure pursuant to Washington Public Records Act (chapter 42.56 RCW). If ecology approved the application, the carbon intensity value(s) and its associated fuel pathway code(s) will be posted publicly on the CFP website and incorporated into the WA-RFS for use by fuel reporting entities.
- (3) Monthly credit trading activity report. Ecology must post on its web page, by no later than the last day of the month immediately following the month for which the calculation is completed, a credit trading activity report that:
  - (a) Summarizes the aggregate credit transfer information for the:
  - (i) Most recent month;
  - (ii) Previous three months;
  - (iii) Previous three quarters; and
  - (iv) Previous compliance periods;
  - (b) Includes, at a minimum:
  - (i) The total number of credits transferred;
  - (ii) The number of transfers;
  - (iii) The number of parties making transfers; and
- (iv) The formula ecology used to calculate the volume-weighted average price of that month's transfers, exclusive of transactions that fall two standard deviations outside of the mean credit price for the month or that are transferred without a price;
  - (c) Is based on the information submitted into the WFRS; and
- (d) Presents aggregated information on all fuel transacted within the state and does not disclose individual parties' transactions.
- (4) **Quarterly data summary.** Ecology must post on its web page at least quarterly:
- (a) An aggregate data summary of credit and deficit generation for the most recent quarter and all prior quarters; and
- (b) Information on the contribution of credit generation by different fuel types.
- (5) **Clean fuels program annual report.** Ecology must post on its web page by April 15th of each year, the following information from the previous year:
- (a) The average cost or cost-savings per gallon of gasoline, per gallon of diesel, or any other fuel types, and the formulas used to calculate such costs or cost-savings; and
  - (b) The total greenhouse gas emissions reductions.
- (6) **Utility reports**. Ecology will post the utility reports it receives under WAC 173-424-420(7) to its website.

- WAC 173-424-720 Emergency deferral. (1) Emergency deferral due to fuels shortage. Ecology may issue an order declaring an emergency deferral of compliance with the carbon intensity standard during the effective compliance period:
- (a) After ecology determines, in consultation with the governor's office and the Washington department of commerce:
- (i) Extreme and unusual circumstances exist that prevent the distribution of an adequate supply of renewable fuels needed for regulated parties to comply with the clean fuels program taking into consideration all available methods of obtaining sufficient credits to comply with the standard;
- (ii) The extreme and unusual circumstances are the result of a natural disaster, an act of God, a significant supply chain disruption or production facility equipment failure, or another event that could not reasonably have been foreseen or prevented and not the lack of prudent planning on the part of the suppliers of the fuels to the state; and
- (iii) It is in the public interest to grant the deferral such as when a deferral is necessary to meet projected temporary shortfalls in the supply of the renewable fuel in the state and that other methods of obtaining compliance credits are unavailable to compensate for the shortage of renewable fuel supply.
- (b) To determine the extent of the fuel shortage and the amount of the fuel needed for regulated parties to comply with that year's standard, ecology will consider the following:
- (i) The volume and carbon intensity of the fuel determined to be not available under (a) of this subsection;
  - (ii) The estimated duration of the shortage; and
- (iii) Whether there are any options that could mitigate the shortage including, but not limited to:
  - (A) The same fuel from other sources;
- (B) Substitutes for the affected fuel and the carbon intensities of those substitutes are available; or
  - (C) Banked clean fuel credits are available.
- (c) In addition to the determination in (a) of this subsection, such a temporary and extremely unusual deferral is allowed only if:
- (i) The deferral applies only for the shortest time necessary to address the extreme and unusual circumstances;
- (ii) The deferral is effective for the shortest practicable time period ecology determines necessary to permit the correction of the extreme and unusual circumstances; and
  - (iii) Ecology has given public notice of a proposed deferral.
- (d) No later than 15 calendar days after the date that ecology determines to issue emergency deferral according to (a) of this subsection.
- (2) Content of an emergency deferral order. An order declaring an emergency deferral under this section must set forth:
  - (a) The duration of the emergency deferral;
  - (b) The types of fuel to which the emergency deferral applies;
- (c) Which of the following methods the department has selected for deferring compliance with the clean fuels program during the emergency deferral:
- (i) Temporarily adjusting the scheduled applicable carbon intensity standard to a standard identified in the order that better re-

flects the availability of credits during the emergency deferral and requiring regulated parties to comply with the temporary standard;

- (ii) Allowing for the carryover of deficits accrued during the emergency deferral into the next compliance period without penalty; or
- (iii) Suspending deficit accrual during the emergency deferral
- (3) Termination of emergency deferral. An emergency deferral may be terminated prior to the expiration date:
- (a) If new information becomes available indicating that the shortage that provided the basis for the emergency deferral has ended.
- (b) After ecology consults with the department of commerce and the governor's office in making an early termination decision.
- (c) Termination of an emergency deferral is effective 15 calendar days after the date that the order declaring the termination is adopted.
- (4) In addition to the emergency deferral specified in subsection (1) of this section, ecology may issue a full or partial deferral for one calendar quarter of a person's obligation to furnish credits for compliance under the following conditions.
- (a) If ecology finds that the person is unable to comply with the requirements of this chapter due to reasons beyond the person's reasonable control.
- (b) Such deferral may be initiated by ecology at its own discretion or at the request of a person regulated under this chapter.
- (c) In making decision to issue a deferral under this subsection, ecology may consider the results of the fuel supply forecast in WAC 173-424-730, but is not bound in its decision-making discretion by the results of the forecast.
- (d) Ecology may renew issued deferrals under this section.(e) If ecology issues a deferral pursuant to this subsection, it may require the person subject to the deferral to:
- (i) File a progress report on achieving full compliance with the requirements of this chapter within an amount of time determined to be reasonable by the department; and
- (ii) Take specific actions to achieve full compliance with the requirements of this chapter.
- (f) The issuance of a deferral under this subsection does not permanently relieve the deferral recipient of the obligation to comply with the requirements of this chapter.

- WAC 173-424-730 Forecast deferral. (1) Conditions and deadline for forecast deferral. No later than December 1st, ecology shall issue an order declaring a forecast deferral for the following compliance period if:
- (a) Ecology receives a fuel supply forecast for the following compliance period by October 2nd; and
- (b) The forecast projects that the amount of credits that will be available during the forecast compliance period will be less than 100 percent of the credits projected to be necessary for regulated parties to comply with the carbon intensity standard.
- (2) Forecast deferral content: The forecast deferral order that ecology issues must set forth:

- (a) The duration of the forecast deferral, which may not be less than one calendar quarter or longer than one compliance period;
  - (b) The types of fuel to which the forecast deferral applies; and
- (c) Methods for deferring compliance with the carbon intensity standard during the forecasted deferral out of the following:
- (i) Temporarily adjusting the scheduled applicable clean fuel standard to a standard identified that better reflects the forecast availability of credits during the forecast compliance period and requiring regulated parties to comply with the temporary standard;
- (ii) Requiring regulated parties to comply only with the clean fuel standard applicable during the compliance period prior to the forecast compliance period; or
- (iii) Suspending deficit accrual for part or all of the forecast deferral period.
- (3) Other or additional method of deferring compliance with the carbon intensity standard:
- (a) Ecology may take an action for deferring compliance other than, or in addition to, the method listed in subsection (2)(c) of this section provided that ecology determines that none of the methods under subsection (2)(c) of this section will provide a sufficient mechanism for containing the costs of compliance with the carbon intensity standard during the forecast deferral.
- (b) If ecology makes the determination specified in (a) of this subsection, ecology shall:
- (i) Include in such order ecology's determination and the action to be taken; and
- (ii) Provide written notification and justification of the determination and the action to:
  - (A) The governor;
  - (B) The president of the senate;
  - (C) The speaker of the house of representatives;
  - (D) The majority and minority leaders of the senate; and
- (E) The majority and minority leaders of the house of representatives.
- (4) **Terminating a forecast deferral.** Ecology may terminate, by order, a forecast deferral before the expiration date of the forecast deferral. Termination is effective on the first day of the next calendar quarter after the date that the order declaring the termination is adopted.

## PART 8 - VALIDATION AND VERIFICATION

## NEW SECTION

WAC 173-424-800 Validation and verification. (1) For fuel pathways that have been certified by CARB or OR-DEQ and approved by ecology, the regulated party must submit the periodic third-party verification reports submitted to and approved by CARB or OR-DEQ.

- (2) Ecology may require third-party verification, as necessary, to validate and verify the carbon intensity of fuel pathways, according to:
- (a) The principles, requirements, guidelines, and procedures in ISO 14067; or
- (b) The requirements California adopted in low carbon fuels standard program under 95500 through 95502.

# PART 9 - TABLES

WAC 173-424-900 Tables.

Table 1. Washington Carbon Intensity Standards for Gasoline and Gasoline Substitutes

Calendar Year	Washington Carbon Intensity Standard (gCO <sub>2</sub> e per MJ)	Percent Reduction
2023	98.36	0.50 percent
2024	97.86	1.00 percent
2025	96.87	2.00 percent
2026	95.88	3.00 percent
2027	94.90	4.00 percent
2028	93.41	5.50 percent
2029	91.93	7.00 percent
2030	90.45	8.50 percent
2031	88.97	10.00 percent
2032	88.97	10.00 percent
2033	88.97	10.00 percent
2034	79.08	20.00 percent
2035	79.08	20.00 percent
2036	79.08	20.00 percent
2027	79.08	20.00 percent
2038	79.08	20.00 percent

Table 2. Washington Carbon Intensity Standards for Diesel and Diesel Substitutes

Calendar Year	Washington Carbon Intensity Standard (gCO <sub>2</sub> e per MJ)	Percent Reduction
2023	99.52	0.50 percent
2024	99.02	1.00 percent
2025	98.02	2.00 percent

Calendar Year	Washington Carbon Intensity Standard (gCO <sub>2</sub> e per MJ)	Percent Reduction	
2026	97.02	3.00 percent	
2027	96.02	4.00 percent	
2028	94.52	5.50 percent	
2029	93.02	7.00 percent	
2030	91.52	8.50 percent	
2031	90.02	10.00 percent	
2032	90.02	10.00 percent	
2033	90.02	10.00 percent	
2034	80.02	20.00 percent	
2035	80.02	20.00 percent	
2036	80.02	20.00 percent	
2037	80.02	20.00 percent	
2038	80.02	20.00 percent	
Carbon intensity of diesel and diesel substitute for the baseline year (2017) is 100.02 gCO <sub>2</sub> per MJ			

Table 3. Washington Energy Densities and Conversion Factors for Fuels and Blendstocks

Fuel (unit)	MJ/unit
Gasoline blendstock (gallon)	122.48 (MJ/gallon)
Washington gasoline (gallon)	117.73 (MJ/gallon)
Diesel fuel (gallon)	134.48 (MJ/gallon)
Compressed natural gas (therm) <sup>1</sup>	105.5 (MJ/therm)
Electricity (kiloWatt hour)	3.60 (MJ/kiloWatt hour)
Denatured ethanol (gallon)	81.51 (MJ/gallon)
Clear biodiesel (gallon)	126.13 (MJ/gallon)
Liquefied natural gas (gallon)	78.83 (MJ/gallon)
Hydrogen (kilogram)	120.00 (MJ/kilogram)
Liquefied petroleum gas (gallon)	89.63 (MJ/gallon)
Renewable hydrocarbon diesel (gallon)	129.65 (MJ/gallon)
Undenatured anhydrous ethanol (gallon)	80.53 (MJ/gallon)
Alternative Jet Fuel (gallon)	126.37 (MJ/gallon)
Renewable naphtha (gallon)	117.66 (MJ/gallon)

 $<sup>^{\</sup>rm 1}$   $\,$  If therms are reported on a LHV basis. For therms reported on an HHV basis, this value must be converted to HHV basis.

Table 4. Washington Energy Economy Ratio Values for Fuels in Vehicles

Light/Medium Du (Fuels used replace	as gasoline	Heavy-Duty/Off-R (Fuels used as die	Road Applications sel replacements)		ions (Fuels used as blacements)
Fuel/Vehicle Combination	EER Value Relative to Gasoline	Fuel/Vehicle Combination	EER Value Relative to Diesel	Fuel/Vehicle Combination	EER Value Relative to conventional jet
Gasoline (including E10) or any other gasoline-ethanol blend	1	Diesel fuel (including B5) or any other blend of diesel and biodiesel or renewable hydrocarbon diesel	1	Alternative Jet Fuel+	1
CNG Internal Combustion Engine Vehicle (ICEV)	1	CNG, LNG, or LPG (Spark-Ignition Engines)	0.9		
Electricity/ Battery Electric Vehicle or Plug-In Hybrid Electric Vehicle	3.4	CNG, LNG, or LPG (Compression- Ignition Engines)	1		
Electricity/On- Road Electric Motorcycle	4.4	Electricity/ Battery Electric Vehicle or Plug-In Hybrid Electric Vehicle	5		
Propane/Propane Forklift	0.9	Electricity/ Battery Electric or Plug- in Hybrid Transit Bus	5		
Propane/Propane Forklift	0.9	Electricity/ Battery Electric or Plug- in Hybrid Transit Bus	5		
Hydrogen/Fuel Cell Vehicle	2.5	Electricity/Fixed Guideway Light Rail	3.3		
		Electricity/Fixed Guideway Streetcar	2.1		
		Electricity/Fixed Guideway Aerial Tram	2.6		
		Electricity/ Electric Forklift	3.8		
		Electricity/ Electric TRU (eTRU)	3.4		
		Hydrogen/Fuel Cell Vehicle	1.9		
		Hydrogen/Fuel Cell Forklift	2.1		

	uty Applications as gasoline ments)	Heavy-Duty/Off-F (Fuels used as die	Road Applications sel replacements)		ions (Fuels used as blacements)
Fuel/Vehicle Combination	EER Value Relative to Gasoline	Fuel/Vehicle Combination	EER Value Relative to Diesel	Fuel/Vehicle Combination	EER Value Relative to conventional jet
		Electricity/Cargo Handling Equipment	2.7		

Table 5. Washington Land Use Change CI Values for Biofuels CI Determination

Feedstock	LUC Value (gCO <sub>2</sub> e/MJ)
Corn Ethanol	19.80
Sorghum Ethanol	19.40
Sugarcane Ethanol	11.80
Soybean Biodiesel or Renewable Diesel	29.10
Canola Biodiesel or Renewable Diesel	14.50
Palm Biodiesel or Renewable Diesel	71.40

Table 6. Washington Carbon Intensity Lookup Fuel Pathway Table

Fuel	Pathway Code	Pathway Description	Carbon Intensity Values (gCO <sub>2</sub> e/MJ)
Gasoline	WAGAS001	Clear gasoline - based on a weighted average of gasoline supplied to Washington. The CI of the gasoline supply was based on average crude oil supplied to the states (WA, UT, and MT) and U.S. average refinery efficiency	100.37
	WAGAS002	Washington gasoline - blended with corn ethanol as supplied to Washington <sup>2</sup>	98.85
Diesel	WAULSD001	Clear diesel - based on a weighted average of diesel fuel supplied to Washington. The CI of the diesel supply was based on average crude oil supplied to the states (WA, UT, and MT) and U.S. average refinery efficiency	101.09
	WAULSD002	Washington diesel - blended with soy biodiesel as supplied to Washington <sup>3</sup>	100.02
Compressed Natural Gas	WACNG	Average North American natural gas delivered via pipeline; compressed in WA	77.98
Liquefied Natural Gas	WALNG	Average North American natural gas delivered via pipeline; liquefied in WA	86.76

Fuel	Pathway Code	Pathway Description	Carbon Intensity Values (gCO <sub>2</sub> e/MJ)
Liquefied Petroleum Gas	WALPG	Fossil Liquefied petroleum gas from crude oil and natural gas <sup>4</sup>	83.14
Electricity	WAELEC001	Washington average grid electricity used as transportation fuel in Washington	63.51 (subject to annual update)
	WAELEC002	Renewable power deemed to have a carbon intensity of zero	0
Hydrogen	WAHYF	Compressed H <sub>2</sub> produced in Washington from central steam methane reformation of North American fossilbased NG	124.86
	WAHYB	Compressed H <sub>2</sub> produced in WA from central steam methane reformation of biomethane (renewable feedstock) from North American landfills	104.88
	WAHYEG	Compressed H <sub>2</sub> produced in WA from electrolysis using WA average grid electricity	101.47
	WAHYER	Compressed H <sub>2</sub> produced in WA from electrolysis using solar- or wind-generated electricity <sup>5</sup>	6.48

Table 7. Washington Substitute Fuel Pathway Codes

Fuel	Fuel Pathway code	CI (gCO <sub>2</sub> e/MJ)
Substitute CI for Ethanol. This pathway may only be used to report transactions that are sales or purchases without obligation, exports, loss of inventory, not for transportation use, and exempt fuel use.	ETH0116	40
Substitute CI for Biodiesel. This pathway may only be used to report transactions that are sales or purchases without obligation, exports, loss of inventory, not for transportation use, and exempt fuel use.	BIOD0116	15
Substitute CI for Renewable Diesel. This pathway may only be used to report transactions that are sales or purchases without obligation, exports, loss of inventory, not for transportation use, and exempt fuel use.	RNWD0116	15

Based on 2017 WA blending level derived from EIA data, using standard corn ethanol pathway CI from WA-GREET.
 Based on 2017 WA blending level derived from EIA data, using standard soy biodiesel pathway CI from WA-GREET.

Based on CARB estimate of 25% NG and 75% petroleum for PADD5.
 Assumes WAMX grid electricity is used for compression and dispensing at refueling stations.

Fuel	Fuel Pathway code	CI (gCO <sub>2</sub> e/MJ)
Substitute CI for E10 Gasoline. This pathway may only be used to report transactions that are sales or purchases without obligation, exports, loss of inventory, not for transportation use, and exempt fuel use.	WAGAS0116	96.35 (subject to annual update)
Substitute CI for B2.5 Diesel <sup>6</sup> . This pathway may only be used to report transactions that are sales or purchases without obligation, exports, loss of inventory, not for transportation use, and exempt fuel use.	WAULSD0116	99.08 (subject to annual update)

<sup>&</sup>lt;sup>6</sup> Based on 2017 WA average diesel blending level derived from EIA data.

Table 8. Washington Temporary Fuel Pathway Codes

Fuel	Feedstock	Process Energy	FPC	CI (gCO <sub>2</sub> e/MJ)
Ethanol	Corn	Grid electricity, natural gas, and/or renewables	WAETH100T	907
	Sorghum	Grid electricity, natural gas, and/or renewables	WAETH101T	958
	Sugarcane and Molasses	Bagasse and straw only, no grid electricity	WAETH102T	55
	Any other starch or sugar feedstock	Any	WAETH103T	98.851
	Any cellulosic biomass including Corn Stover, Wheat Straw, or Sugarcane Straw	As specified in WA- GREET	WAETH104T	50
Biodiesel	Any feedstock derived from animal fats, corn oil, or a waste stream	Grid electricity, natural gas, and/or renewables	WABIOD200T	45
	Any feedstock derived from plant oils except for Palm- derived oils	Grid electricity, natural gas, and/or renewables	WABIOD201T	65
	Any feedstock	Any	WABIOD202T	100.022
Renewable Diesel	Any feedstock derived from animal fats, corn oil, or a waste stream	Grid electricity, natural gas, and/or renewables	WARNWD300T	45
	Any feedstock derived from plant oils except for Palm-derived oils	Grid electricity, natural gas, and/or renewables	WARNWD301T	65
	Any other feedstock	Any	WARNWD302T	100.02 <sup>3</sup>
Biomethane CNG	Landfill or Digester Gas	Grid electricity, natural gas, and/or renewables	WACNG500T	70
	Municipal Wastewater sludge, Food Waste, Green Waste, or Other Organic Waste	Grid electricity, natural gas, and/or parasitic load	WACNG501T	45

Fuel	Feedstock	Process Energy	FPC	CI (gCO <sub>2</sub> e/MJ)
Biomethane LNG	Landfill or Digester Gas	Grid electricity, natural gas, and/or renewables	WALNG501T	85
	Municipal Wastewater sludge, Food Waste, Green Waste, or Other Organic Waste	Grid electricity, natural gas, and/or parasitic load	WALNG502T	60
Biomethane L-CNG	Landfill or Digester Gas	Grid electricity, natural gas, and/or renewables	WALCNG502T	90
	Municipal Wastewater sludge, Food Waste, Green Waste, or Other Organic Waste	Grid electricity, natural gas, and/or parasitic load	WALCNG503T	65
Biomethane CNG, LNG, L-CNG	Dairy and Swine Manure	Grid electricity, natural gas, and/or parasitic load	WALCNG504T	-150
Hydrogen	Centralized SMR of fossil natural gas or LNG	Grid electricity, natural gas, and/or renewables	WAHYG601T	185
Renewable LPG	Fats, Oils, and Grease residues	Grid electricity, natural gas, and/or renewables	WARNWP400T	45
	Any feedstock derived from plant oils (excluding palm and palm derivatives)	Grid electricity, natural gas, and/or renewables	WARNWP401T	65
Any Gasoline Substitute Feedstock- Fuel Combination Not Included Above	Any	Any	WASG800T	98.85 <sup>4</sup>
Any Diesel Substitute Feedstock- Fuel Combination not Included Above	Any	Any	WASD801T	100.025

<sup>1 2017</sup> baseline carbon intensity for Washington gasoline is 98.85 gCO<sub>2</sub>e/MJ.

Table 9. Summary Checklist of Quarterly and Annual Reporting Requirements

Parameters to report	Gasoline & Diesel Fuel	Ethanol, Biomass based diesel, Renewable Diesel, Alternative Jet Fuel, Other alternative fuels	Natural Gas and Propane	Electricity	Hydrogen
For Quarterly Reporting					
Organization/Company	x	X	x	x	x
Organization FEIN	x	X	X	x	X
Fuel Pathway Code	х	X	х	x	X
Transaction Type	х	X	X	x	X
*Transaction Date	x	X	X	x	X

<sup>&</sup>lt;sup>2</sup> 2017 baseline carbon intensity for Washington diesel is 100.02 gCO<sub>2</sub>e/MJ.

 <sup>2017</sup> baseline carbon intensity for Washington diesel is 100.02 gCO<sub>2</sub>e/MJ.
 2017 baseline carbon intensity for Washington gasoline is 98.85 gCO<sub>2</sub>e/MJ.

 <sup>2017</sup> baseline carbon intensity for Washington diesel is 100.02 gCO<sub>2</sub>e/MJ.
 Reflects an iLUC value of 19.8. If iLUC value under WA CFS is modified, this may be adjusted accordingly.

<sup>8</sup> Reflects an iLUC value of 19.4. If iLUC value under WA CFS is modified, this may be adjusted accordingly.

Parameters to report	Gasoline & Diesel Fuel	Ethanol, Biomass based diesel, Renewable Diesel, Alternative Jet Fuel, Other alternative fuels	Natural Gas and Propane	Electricity	Hydrogen
Business Partner (if applicable)	X	X	X	х	х
Production Company ID and Facility ID	x**	x**	n/a	x	x**
Fuel Supplying Equipment ID	n/a	X	X	х	n/a
Vehicle Identifier (if applicable)	n/a	n/a	X	n/a	n/a
Physical Transport Mode Code (all)	x	x	x	x	x
Aggregated Transaction Indicator (T/F)	x	x	n/a	x	х
Fuel Application/EER	X	X	X	X	X
Amount of each gasoline and diesel blendstock	x	n/a	n/a	n/a	n/a
Amount of each fuel used as gasoline replacement	n/a	x	X	x	x
Amount of each fuel used as diesel fuel replacement	n/a	х	X	x	x
Amount of each fuel used as a jet fuel replacement	n/a	n/a	n/a	n/a	x
MCON or other crude oil name designation, volume (in gal), and country (or state) of origin for each crude supplied to the refinery	X	n/a	n/a	n/a	n/a
Credits/deficits generated per quarter (MT)	x	x	х	х	x
For Ann	ual Compliand	ce Reporting (in addition to the	e items above)	)	1
***Credits/deficits generated per year (MT)	x	x	x	x	x
***Credits/deficits carried over from the previous year (MT), if any	X	х	X	X	X
***Credits acquired from another entity (MT), if any	x	x	x	x	x
***Credits sold from another entity (MT), if any	X	X	X	X	X
***Credits pledged for sale into CCM from another entity (MT), if any	x	х	x	x	x
***Credits retired within CFP (MT) to meet compliance obligation, if any	X	х	X	X	X
MCON or other crude oil name designation, volume (in gal), and country (or state) of origin for each crude supplied to the refinery.	X	n/a	n/a	n/a	n/a

<sup>\*</sup> Same as Title Transfer Date; For Aggregated Transactions enter the last day of the reporting period.

\*\* Does not apply to CARBOB, Diesel Fuel, Fossil Propane, or Fossil NG.

\*\*\* Value will be calculated, stored and displayed in the WFRS.

Table 10. Utility Specific Carbon Intensity of Electricity

Fuel Mix Disclosure Claimant ID	Claimant Utility Name	2018 Carbon Intensity of electricity, gCO <sub>2</sub> e/MJ
1	Alder Mutual Light	7.06
4	Benton County PUD #1	6.43
5	Benton Rural Electric Assn.	7.07
6	Big Bend Electric Coop	16.19
12	City of Blaine	7.07
18	Centralia City Light	48.63
19	Chelan County PUD #1	0.00
20	Cheney Light Department	16.21
21	Chewelah Electric Department	7.07
22	Clallam County PUD #1	6.97
23	Clark County PUD #1	61.14
26	Clearwater Power (WA)	7.09
30	Columbia Rural Electric Assn. (WA)	20.01
32	Coulee Dam, Town of	7.06
33	Cowlitz County PUD #1	16.10
35	Douglas County PUD #1	41.01
38	Eatonville Electric Department	7.07
39	Elmhurst Mutual Power & Light	7.07
41	Ellensburg Electric Division	7.07
44	Ferry County PUD #1	7.07
46	Franklin County PUD #1	10.83
47	Grays Harbor County PUD #1	7.17
48	Inland Power & Light	14.19
51	Kittitas County PUD #1	7.31
52	Klickitat County PUD #1	25.18
53	Kootenai Electric Coop	0.00
54	Lakeview Light & Power	7.07
56	Lewis County PUD #1	6.59
59	McCleary Light & Power	7.06
63	Milton Electric Division	7.07
64	Modern Electric Water Company	7.07
66	Nespelem Valley Electric Coop	7.07
69	Northern Lights (WA)	6.61
71	Ohop Mutual Light	7.07
72	Okanogan County PUD #1	10.63
73	Okanogan County Electric Coop	0.00
75	Orcas Power & Light Coop	0.00
76	Pacific County PUD #2	14.65
81	Parkland Light & Water	7.07
82	Grant County PUD #2	118.63
83	Pend Oreille County PUD #1	11.73
84	Peninsula Light	6.27
85	Asotin County PUD #1	7.03
86	Port Angeles Light Operations	7.07

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Fuel Mix Disclosure Claimant ID	Claimant Utility Name	2018 Carbon Intensity of electricity, gCO <sub>2</sub> e/MJ
88	Wahkiakum County PUD #1	7.07
89	Mason County PUD #3	6.78
90	Puget Sound Energy	134.79
91	Richland Energy Services	18.21
92	Ruston, Town of	0.53
95	Seattle City Light	4.45
96	Skamania County PUD #1	7.07
97	Snohomish County PUD #1	6.22
99	Steilacoom Electric Utility	7.07
101	Sumas, City of	7.07
102	Tacoma Power	4.02
103	Tanner Electric Coop	7.07
106	Vera Water & Power	14.57
109	Avista (WA)	113.08
111	Mason County PUD #1	6.60
117	Whatcom County PUD #1	7.07
118	Jefferson County PUD #1	7.07
119	Port of Seattle	7.07
120	Yakama Power	7.07
124	Port Townsend	0.00
130	Pacific Power (WA)	178.47
143	Solar City (WA)	0.00
144	Kalispel Tribal Utility	7.07
157	Okanogan County Electric Coop	15.64
158	Orcas Power & Light Coop	7.07
160	Energy Northwest	7.06
161	Consolidated Irrigation District #19	7.11
162	Fairchild Airforce Base	7.07